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Periodic Table of the Elements

The elements which have a lighter background are available from Goodfellow as pure elements and/or compounds.

All data are given as a guide only and no responsibility can be accepted for completeness or accuracy.
Goodfellow is well known as a specialist supplier of small to medium size quantities of metals, alloys, ceramics, polymers and other materials to meet the research, development and specialist production requirements of science and industry worldwide. We realise that "small" means different things to different people, but we consider small to mean any quantity from a few grammes to a few kilos.

Goodfellow offers two distinct services to meet the requirements of our customers:

- The first meets the needs of our customers who need small quantities of products from our standard range of materials within 24-48 hours.
- The second service is for those who require larger quantities or further processing of our standard products or who need an item which falls within our general area of supply expertise.

The range of materials offered by Goodfellow is extensive, as are the forms in which the various products are available. This Catalog provides a detailed overview of our standard products which are available from stock. Full details of all of these items, including prices and technical information, can be found in our web Catalog at www.goodfellowusa.com.

Materials

Metals and Alloys

Goodfellow supplies virtually all of the pure metals from Aluminum to Zirconium as well as a comprehensive range of alloys. Most are available in a variety of forms, including rod, wire and foil. The Catalog details those materials which are available as standard products from stock. Custom-made items are also available, so please contact us if you are unable to identify the item you require.

Ceramics

The ceramic materials offered by Goodfellow have been carefully chosen and include both the established as well as more recently developed products. All are available as either standard or custom-made products in a variety of forms and sizes. The Catalog details those items which are available from stock. For ceramic components made to customer drawings, our Ceramic and Glass Division would be delighted to help. Please visit www.goodfellow-ceramics.com for further information.

Polymers

The range of polymers supplied by Goodfellow is broad and includes both the familiar as well as some of the more unusual or recently developed materials. The Catalog details those items which are available from stock; please contact us if you are unable to find the item you specifically require.

Compounds & Intermetallics

Goodfellow can supply aluminides, borides and silicides as well as other intermetallics and compounds. The majority of these items are made to order, and the Catalog details those which are available. Please contact us with details of your requirements.

Composites

Some examples of these materials are listed in the Catalog. As some of these are manufactured on a custom-made basis, please contact us with details of your requirements.

Glasses

Goodfellow offers two distinct types of glass products. The first are generally silica-based and transparent. Generally, these products are made to order for customers, so we do not list them in our Catalog, however, they are available through the Goodfellow Ceramic and Glass Division. Please contact us with your requirements.

The second type of glass product is commonly referred to as "metallic glasses" or "glassy metals". In contrast to crystalline metals and alloys with highly ordered atomic structures, these are non-crystalline (amorphous) metals or, more usually, alloys. Our Catalog details those glassy metals which are available from stock; please contact us if you are unable to find the item you specifically require.
Product Descriptions

**Bar**

A straight length of rectangular, square or oval section material.

**Tolerances**

Section dimensions:
- ≤ 10mm  ± 10%
- > 10mm  ± 1mm

Length:
- < 100mm  ± 1mm
- ≥ 100mm  + 5% / -1%

**Bolt**

A threaded pin that can be screwed into a nut or a tapped hole to fasten items together. Bolts are available with different head styles and also in metric and inch-threaded sizes.

**Tolerances**

Ceramics: ANSI B18.6.7M-1985

**Chopped Fiber**

Fibers cut into short lengths called cut, staple or chopped fiber.

**Tolerances**

Fiber diameter: ± 25%
Number of strands: ± 10%
Tex number: ± 10%
Length: +5% / -1%

**Crucible**

A vessel in which other materials may be heated or melted, usually at high temperatures.

**Tolerances**

Height: ± 10%
Inside Dimensions: ± 10%
Outside Dimensions: ± 10%

**Fabric**

Woven fabrics are made by the regular interlacing of two arrays of yarns at right angles to each other, these being referred to as the warp and weft (see also Non-woven fabric).

**Tolerances**

Fabric thickness: ± 25%
Number of yarns: ± 10%
Tex number: ± 10%
Size (linear dimension):
- < 100mm  ± 5mm
- ≥ 100mm  ± 5%

**Fiber**

Yarns or tows consisting of several approximately parallel individual filaments, each filament usually being smaller in diameter than a monofilament. Yarns contain a defined number of filaments, typically three to several hundred; tows contain thousands of filaments whose number is only defined approximately. Both are primarily specified by their linear density measured in "tex", the weight in grams of a 1km length of material.

**Tolerances**

Fiber diameter: ± 25%
Number of strands: ± 10%
Tex number: ± 10%
Length: +5% / -1%

**Film**

A non-metallic sheet material with a thickness < 0.5mm.

**Tolerances**

Thickness: ± 20%
Size (linear dimension):
- < 100mm  ± 1mm
- ≥ 100mm  + 2% / -1%

**Flake**

Flat, irregularly shaped pieces of material.
A maximum flake size is indicated but individual flakes may vary greatly in size.

**Tolerances**

Dimensions shown are nominal
Foam
A low density, permeable structure of cells and continuous ligaments offering a high surface area to volume ratio, and also a high strength to weight ratio.
Owing to the nature of this material, dimensions are nominal.

Foil
Thin sheets of pure metal and metal alloys.
Due to their fragile nature, some foils are coated on one side with an acrylic or polyester support. Where foils are supported they are indicated in the detailed item description.

Tolerances
Thickness:  
<0.010mm ± 25%
0.01-0.05mm ± 15%
>0.050mm ± 10%
Size (linear dimension):  
<100mm ± 1mm
≥100mm ± 2% / -1%

Granule
Pellets of an approximately regular shape.
Granules may vary in size and, therefore, the dimensions stated are nominal. In addition, the shape of a granule may vary from item to item.

Tolerances
Dimensions shown are nominal

Honeycomb
A cellular structure similar in appearance to natural honeycomb. Owing to the nature of this material, dimensions are nominal.

Insulated Wire
A single or multiple flexible strand of metal or alloy with an insulating sheath.

Tolerances
Wire diameter: ± 10%
Length: +5% / -1%
Insulation thickness: Nominal values only

Laminate
Layers of material which have been bonded together by the use of heat, pressure and, possibly, adhesive.

Tolerances
Thickness: ± 10%
Size (linear dimension):  
<100mm ± 1mm
≥100mm ± 2% / -1%

Liquid
A state of matter between a solid and a gas in which the shape of a given mass depends on the container, the volume being independent.

Lump
A solid piece of material with no defined shape.

Tolerances
Dimensions shown are nominal

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February 2017
Mesh

Mesh is available as either a woven wire or electroformed product; in all cases, the quoted aperture sizes are nominal. Wire mesh: a material which is woven from metal wires to provide a thin grid with a regular series of holes. Electroformed mesh: a product made by electroplating the mesh geometry through a mask onto a substrate which is subsequently etched away.

Tolerances

<table>
<thead>
<tr>
<th>Material</th>
<th>Thickness</th>
<th>Wire diameter</th>
<th>Size (linear dimension)</th>
</tr>
</thead>
<tbody>
<tr>
<td>woven</td>
<td>±10%</td>
<td>±10%</td>
<td>&lt;100mm: ±1mm, ≥100mm: +2%/-1%</td>
</tr>
<tr>
<td>electroformed</td>
<td>±20%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Monofilament

A single strand of a non-metallic material.

Tolerances

- Diameter: ±20%
- Length: +5% / -1%

Non-Woven Fabric

Non-woven fabrics are made by methods other than weaving or knitting, the yarns and fibers being held together, often quite loosely, by means other than geometric interlacing. Due to the open and porous nature of this material, all other dimensions are nominal.

Tolerances

- Size (linear dimension): <100mm: ±5mm, ≥100mm: ±5%

Nut

Generally a flat piece of material with a threaded hole which can be screwed onto a bolt to fasten items together. Nuts typically have a hexagonal external shape. Nuts are available in metric and inch-threaded sizes.

Tolerances

- Ceramics: ANSI B18.2.4.1M-1979 (R1995)

Powder

Small particles with an approximately defined size range. Those materials described as alloy precursors are not true alloys - they are made by sintering a blend of powders of the component metals to achieve alloying by diffusion. The resultant cake is ground and sieved to the required particle size range. Unless otherwise stated, the particle sizes shown are for guidance only. We do not guarantee either any particular size distribution between the quoted minimum and maximum sizes, or a specific particle shape.

Tolerances

- Dimensions shown are nominal
Rod
A straight length of circular section material.

Tolerances
Diameter:
- ≤10mm: +10%
- >10mm: +5%

Length:
- <100mm: +1mm
- ≥100mm: +5% / -1%

Sheet
Flat material with a thickness > 0.5mm.

Tolerances
Thickness:
- Ceramic: +20%
- Composite: +20%
- Polymer: +20%

Size (linear dimension):
- <100mm: +1mm
- ≥100mm: +2% / -1%

Single Crystal
A material grown as a monocrystal, generally to a specific orientation, dimension and surface finish. It may contain a dopant. Single crystals are usually made to order.

Tolerances
Orientation: ±3°
Size: Sizes shown are nominal

Sphere
A regular solid or hollow three-dimensional form in which every cross-section is a circle. Spheres are available with standard or precision tolerances, and can be supplied with different surface finishes depending on the material.

Tolerances
Diameter (standard): ±5%
Diameter (precision): see item

Sputtering Target
A high purity material used as a source for sputtering, a cold vaporization process in which atoms are physically removed from the target surface by ion bombardment.

Tolerances
Thickness: ±0.5mm
Size: ±0.5mm

Tube
A hollow length of material normally circular in section. Most tubes are straight except those made of flexible polymer.

Tolerances
Outside diameter:
- ≤2mm: +0.05mm
- ≥5mm: +0.1mm

Polymer: +10%
Ceramic: +10%

Wall thickness:
- Polymer: +20%
Ceramic: +20%

Length:
- <100mm: +1mm
- ≥100mm: +5% / -1%

Washer
A thin, flat piece of material with a hole in the middle, used in conjunction with bolts and nuts to distribute the load of a threaded fastener.

Tolerances
Ceramics: see item
Wire

A single or multiple flexible strand of pure metal or alloy.

Tolerances

<table>
<thead>
<tr>
<th>Description</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wire diameter</td>
<td>± 10%</td>
</tr>
<tr>
<td>Length</td>
<td>+5% / -1%</td>
</tr>
</tbody>
</table>

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Goodfellow Corporation

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Analyses

**Purity**

Purities listed are quoted with respect to total metallic impurities. Typical analyses may give additional information about likely non-metallic impurities.

**High Purity**

For materials described as High Purity, the actual analysis of metallic impurities will be supplied free of charge. For other items, an actual analysis can be supplied and a charge will be made for the analysis and for the sample used.

Supports

Some items from our range of foils need to be supported on one side of the foil to enable both you and us to handle these very delicate materials. Two types of support can be used, the choice being governed by the material. Wherever possible we use a temporary support, a permanent support only being used when the material is brittle (for example Chromium or Manganese).

The temporary support is Acrylic, approximately 0.2mm thick. This may be removed by dissolving in 2-Propanone (Acetone).

Our permanent support is Polyester, thickness 0.125mm, which is hot-press laminated to one face of the foil. It cannot be removed without destroying the foil.

Light Tight (LT) & Not Light Tested (NLT)

Light tight (LT) foils are supplied without visible pinholes after examination without magnification. Foils 0.025mm or more in thickness are supplied LT unless otherwise stated.

Foil less than 0.025mm thick are normally supplied Not-Light Tested (NLT), and will normally contain pinholes but may occasionally be free from pinholes. Foils less than 0.025mm in thickness can often be supplied LT but may incur additional charges. Please specify if you require LT foils.

Vacuum tight

Vacuum tight foils show no detectable leakage when tested with a helium mass spectrometer with a sensitivity of $10^{-9}$ atm-cm$^3$.s$^{-1}$.

Technical Data and Information

All information and technical data are given as a guide only. Although every effort has been made to ensure that the information is correct, no warranty is given as to its completeness or accuracy.

Tolerances

For details of our standard tolerances, please refer to the Product Description section. In many cases, closer tolerances are available but may be subject to an extra charge. If you have any special requirements it is important that you tell us at the time of ordering. This includes special tolerances, dimensional uniformity or any other special requirement which you may have (for example edge finish, packaging, labelling etc.).
Order information

General Information
There are over 70,000 stock packs listed and if you cannot find what you need amongst them, please ask for special sizes, thicknesses, tolerances, dimensions or larger quantities. We are also able to offer many other pure metals, alloys, polymers and ceramics to special order.

Method of shipment
The method of delivery is selected in order to give safe and rapid delivery; we normally use a door-to-door courier service although alternative methods may be used depending on the materials ordered.

Some of the materials supplied by Goodfellow are subject to special transport restrictions and are shipped accordingly. Any onward shipments should take account of these shipping requirements.

Despatch
We aim to have all of the items listed in this Catalog and on our website in stock in the sizes and quantities listed. Orders are usually shipped within 48 hours of receipt, but please contact your local office if a faster service is required.

Export Restrictions
A UK Government export licence may be required for some items to some destinations. If the item you require needs a special export licence or an end-use statement we will inform you at the time you order.

Materials Handling
Many of our materials are extremely delicate and it is essential every care is taken when handling them. Special attention is drawn to the extreme fragility of Microfoil, Microleaf and thinner and finer materials.

All materials are carefully packed to ensure safe transport of goods to your address. We do not accept responsibility for damage caused by mishandling once the outer transit packaging has been removed.

Exclusions
We supply materials according to our specification. All conditions warranties and representations regarding the quality, fitness for purpose or state, size, shape, capacity or color of goods supplied whether expressed or implied by common law or statute or otherwise are hereby expressly excluded. We shall not be liable for any damage direct or consequential arising from the use of goods supplied by us however such damage is caused, nor for delay in delivery.

Law
Customers in the USA: Contracts between Goodfellow Corporation and the customer shall be deemed to be subject in all respects to the laws of the Commonwealth of Pennsylvania, or the United States of America.

Customers in France: Contracts between Goodfellow SARL and the customer shall be deemed to be subject in all respects to French law unless otherwise agreed in writing

Customers in Germany: Contracts between Goodfellow GmbH and the customer shall be deemed to be subject in all respects to German law unless otherwise agreed in writing

Customers in the UK and all other countries: Contracts between Goodfellow Cambridge Limited and the customer shall be deemed to be subject in all respects to English law unless otherwise agreed in writing.

Copies of our General Terms and Conditions are available upon request or can be downloaded from our websites at www.goodfellow.com or www.goodfellowusa.com.

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Company Structure
The Goodfellow Group consists of five companies:

**Goodfellow Cambridge Limited**
Goodfellow was established in the City of London in 1946. The Company now has subsidiary operations in France, Germany and North America with the Group's research laboratories, workshop facilities & central administration located in Huntingdon, England.

**Goodfellow Corporation**
Established at the same time as our associate company in Germany, Goodfellow Corporation was set up to service the requirements of our customers in the USA.

**Goodfellow SARL**
Goodfellow established an operation in France in 1993 to meet the needs of our French-speaking customers in Europe.

**Goodfellow GmbH**
Since 1989, this member of the Goodfellow group of companies has been serving the needs of our German speaking customers within Europe.

**Goodfellow (Shanghai) Trading Co., Ltd**
Goodfellow established a representative office in Shanghai in 2006, and in 2012 followed this with the creation of a fully-fledged trading company, servicing the research and specialist manufacturing requirements of the Chinese market.

Company Details

Goodfellow Cambridge Limited
Ermine Business Park
HUNTINGDON
PE29 6WR
England
Registered in England and Wales no. 1188162
VAT registration GB 212 8527 79

Goodfellow Corporation
125 Hookstown Grade Road
Coraopolis, PA 15108-9302
USA
A Pennsylvania corporation
EIN 23-2557381

Goodfellow SARL
229, rue Solféerno
F-59000 Lille
France
Registered in Lille : RCS : B 381 486 836
Siren : 381486836
Numéro de TVA Intracommuniate : FR 06 381 486 836

Goodfellow GmbH
Postfach 13 43
D-61169 Friedberg
Germany
Registered in Friedberg (Hessen) No. HRB 1309
Import VAT number DE112610478

Goodfellow (Shanghai) Trading Co., Ltd
Fl. 23, 758 Nanjing Road West
SHANGHAI
200040
The People's Republic of China
## Metals

### Aluminum (Al)

<table>
<thead>
<tr>
<th>Microfoil</th>
<th>Thickness: 0.0075μm, Specific density: 1.84g.cm⁻², Purity: 99.999%, Support: Permanent Mylar 3.5μm, Diameter: 10 mm to 50 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL004075</td>
<td></td>
</tr>
</tbody>
</table>

| Thinnest: 0.1μm, Specific density: 25.6g.cm⁻², Purity: 99.999%, Support: Permanent Mylar 3.5μm, Diameter: 10 mm to 50 mm |
|-----------|-------------------------------------------------------------------------------------------------------------------------------|
| AL004500  |                                                                                                                                 |

| Thinnest: 0.25μm, Specific density: 68.8g.cm⁻², Purity: 99.999%, Support: Permanent Mylar 3.5μm, Diameter: 10 mm to 50 mm |
|-----------|-------------------------------------------------------------------------------------------------------------------------------|
| AL004600  |                                                                                                                                 |

| Thinnest: 0.5μm, Specific density: 120.6g.cm⁻², Purity: 99.999%, Support: Permanent Mylar 3.5μm, Diameter: 10 mm to 50 mm |
|-----------|-------------------------------------------------------------------------------------------------------------------------------|
| AL004700  |                                                                                                                                 |

| Thinnest: 1.0μm, Specific density: 269.9g.cm⁻², Purity: 99.999%, Support: Permanent Mylar 3.5μm, Diameter: 10 mm to 50 mm |
|-----------|-------------------------------------------------------------------------------------------------------------------------------|
| AL004850  |                                                                                                                                 |

<table>
<thead>
<tr>
<th>Microleaf</th>
<th>Thinnest: 0.15μm, Specific density: 41.28g.cm⁻², Purity: 99.999%, Support: Removable, Diameter: 10 mm to 25 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL004915</td>
<td></td>
</tr>
</tbody>
</table>

| Thinnest: 0.25μm, Specific density: 68.8g.cm⁻², Purity: 99.999%, Support: Removable, Diameter: 10 mm to 25 mm |
|-----------|-------------------------------------------------------------------------------------------------------------------------------|
| AL004925  |                                                                                                                                 |

| Thinnest: 0.5μm, Specific density: 120.6g.cm⁻², Purity: 99.999%, Support: Removable, Diameter: 10 mm to 25 mm |
|-----------|-------------------------------------------------------------------------------------------------------------------------------|
| AL004950  |                                                                                                                                 |

| Thinnest: 1.0μm, Specific density: 269.9g.cm⁻², Purity: 99.999%, Support: Removable, Diameter: 10 mm to 25 mm |
|-----------|-------------------------------------------------------------------------------------------------------------------------------|
| AL004990  |                                                                                                                                 |

<table>
<thead>
<tr>
<th>Foil</th>
<th>Thickness: 0.0008mm, Purity: 99.1%, Size: 30x30 mm to 160x160 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL000210</td>
<td></td>
</tr>
</tbody>
</table>

| Thickness: 0.0015mm, Purity: 99.0%, Temper: As rolled, Size: 25x25 mm to 50x50 mm |
|-----------|------------------------------------------------------------------|
| AL000271  |                                                                                                                                 |

| Thickness: 0.002mm, Purity: 99.1%, Size: 100x100 mm |
|-----------|------------------------------------------------------------------|
| AL000300  |                                                                                                                                 |

| Thickness: 0.003mm, Purity: 99.1%, Size: 100x100 mm |
|-----------|------------------------------------------------------------------|
| AL000320  |                                                                                                                                 |

| Thickness: 0.0045mm, Purity: 99.0%, Size: 25x25 mm to 300x300 mm |
|-----------|------------------------------------------------------------------|
| AL000345  |                                                                                                                                 |

| Thickness: 0.006mm, Purity: 99.0%, Size: 25x25 mm to 300x300 mm |
|-----------|------------------------------------------------------------------|
| AL000360  |                                                                                                                                 |

| Thickness: 0.008mm, Purity: 99.0%, Coil width 300 mm, Size: 25x25 mm to 300x300 mm |
|-----------|------------------------------------------------------------------|
| AL000365  |                                                                                                                                 |

| Thickness: 0.009mm, Purity: 99.0%, Size: 25x25 mm to 300x300 mm |
|-----------|------------------------------------------------------------------|
| AL000364  |                                                                                                                                 |

| Thickness: 0.010mm, High Purity: 99.999%, Temper: As rolled, Size: 25x25 mm to 100x100 mm |
|-----------|------------------------------------------------------------------|
| AL000375  |                                                                                                                                 |

| Thickness: 0.010mm, Purity: 99.0%, Coil width 300 mm, Size: 25x25 mm to 300x300 mm |
|-----------|------------------------------------------------------------------|
| AL000370  |                                                                                                                                 |

| Thickness: 0.0125mm, Purity: 99.0%, Size: 100x100 mm to 300x300 mm |
|-----------|------------------------------------------------------------------|
| AL000380  |                                                                                                                                 |

| Thickness: 0.015mm, High Purity: 99.999%, Size: 25x25 mm to 100x100 mm |
|-----------|------------------------------------------------------------------|
| AL000391  |                                                                                                                                 |

<p>| Thickness: 0.015mm, Purity: 99.0%, Temper: Annealed, Coil width 300 mm, Size: 300x300 mm |
|-----------|------------------------------------------------------------------|
| AL000392  |                                                                                                                                 |</p>
<table>
<thead>
<tr>
<th>Product Code</th>
<th>Thickness</th>
<th>Purity</th>
<th>Temper</th>
<th>Condition</th>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL000562</td>
<td>0.10 mm</td>
<td>99.0%</td>
<td>Annealed</td>
<td>1 to 20 m</td>
<td>152 mm</td>
<td>Width: 152 mm, Length: 1 m</td>
</tr>
<tr>
<td>AL000555</td>
<td>0.10 mm</td>
<td>99.0%</td>
<td>Hard</td>
<td>25 to 300 mm</td>
<td>300x300 mm</td>
<td></td>
</tr>
<tr>
<td>AL000557</td>
<td>0.10 mm</td>
<td>99.0%</td>
<td>Hard</td>
<td>25 to 300 mm</td>
<td>300x300 mm</td>
<td></td>
</tr>
<tr>
<td>AL000558</td>
<td>0.10 mm</td>
<td>99.5%</td>
<td>Annealed</td>
<td>50 to 500 mm</td>
<td>300x300 mm</td>
<td></td>
</tr>
<tr>
<td>AL000563</td>
<td>0.10 mm</td>
<td>99.0%</td>
<td>Annealed</td>
<td>1 m</td>
<td></td>
<td>Width: 150 mm, Length: 1 m</td>
</tr>
<tr>
<td>AL000560</td>
<td>0.116 mm</td>
<td>99.999%</td>
<td>As rolled</td>
<td>25 to 150 mm</td>
<td>150x150 mm</td>
<td></td>
</tr>
<tr>
<td>AL000581</td>
<td>0.125 mm</td>
<td>99.999%</td>
<td>Hard</td>
<td>25 to 100 mm</td>
<td>100x100 mm</td>
<td></td>
</tr>
<tr>
<td>AL000570</td>
<td>0.125 mm</td>
<td>99.99%</td>
<td>High</td>
<td>25 to 50 mm</td>
<td>50x50 mm</td>
<td></td>
</tr>
<tr>
<td>AL000580</td>
<td>0.125 mm</td>
<td>99.99%</td>
<td>High</td>
<td>25 to 300 mm</td>
<td>300x300 mm</td>
<td></td>
</tr>
<tr>
<td>AL000592</td>
<td>0.125 mm</td>
<td>99.0%</td>
<td>High</td>
<td>25 to 300 mm</td>
<td>300x300 mm</td>
<td></td>
</tr>
<tr>
<td>AL000594</td>
<td>0.125 mm</td>
<td>99.0%</td>
<td>High</td>
<td>25 to 300 mm</td>
<td>300x300 mm</td>
<td></td>
</tr>
<tr>
<td>AL000591</td>
<td>0.125 mm</td>
<td>99.0%</td>
<td>High</td>
<td>25 to 300 mm</td>
<td>300x300 mm</td>
<td></td>
</tr>
<tr>
<td>AL000601</td>
<td>0.15 mm</td>
<td>99.0%</td>
<td>High</td>
<td>25 to 300 mm</td>
<td>300x300 mm</td>
<td></td>
</tr>
<tr>
<td>AL000603</td>
<td>0.16 mm</td>
<td>99.999%</td>
<td>As rolled</td>
<td>7 to 19 mm</td>
<td></td>
<td>Width: 25 mm, Length: 7 mm</td>
</tr>
<tr>
<td>AL000614</td>
<td>0.20 mm</td>
<td>99.0%</td>
<td>Hard</td>
<td>25 to 200 mm</td>
<td>200x200 mm</td>
<td></td>
</tr>
<tr>
<td>AL000611</td>
<td>0.20 mm</td>
<td>99.0%</td>
<td>Hard</td>
<td>25 to 300 mm</td>
<td>300x300 mm</td>
<td></td>
</tr>
<tr>
<td>AL000612</td>
<td>0.20 mm</td>
<td>99.0%</td>
<td>High</td>
<td>25 to 300 mm</td>
<td>300x300 mm</td>
<td></td>
</tr>
<tr>
<td>AL000628</td>
<td>0.20 mm</td>
<td>99.999%</td>
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<td>300x300 mm</td>
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**Metals — Aluminum**

February 2017

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### Metals — Aluminum

<table>
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<tr>
<th>Thickness:</th>
<th>AL002510</th>
<th>AL002520</th>
<th>AL002655</th>
<th>AL002656</th>
<th>AL002540</th>
<th>AL002640</th>
<th>AL002940</th>
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<td>20mm</td>
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<td>26.5mm</td>
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<td>20mm</td>
<td>26.5mm</td>
<td>26.5mm</td>
<td>26.5mm</td>
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</tbody>
</table>

**Honeycomb**

- **AL002510**
  - Thickness: 5mm, Cell size: 3.2mm, Cell Wall: 0.025mm, Core Density: 0.072g.cm⁻³, Adhesive (Resin): Phenolic, Size: 300x300 mm to 600x600 mm
- **AL002520**
  - Thickness: 10mm, Cell size: 3.2mm, Cell Wall: 0.025mm, Core Density: 0g.cm⁻³, Adhesive (Resin): Phenolic, Size: 150x150 mm to 600x600 mm

**Sputtering Target**

- **AL009200**
  - Thickness: 2.0mm, High Purity: 99.999%, Size: 25 mm to 100 mm
- **AL009300**
  - Thickness: 3.0mm, High Purity: 99.999%, Size: 25 mm to 100 mm
- **AL009500**
  - Thickness: 5.0mm, High Purity: 99.999%, Size: 50 mm to 75 mm
- **AL009600**
  - Thickness: 6.0mm, High Purity: 99.999%, Size: 50 mm to 75 mm
- **AL009605**
  - Thickness: 6.35mm, High Purity: 99.999%, Size: 101.6 mm
- **AL009900**
  - Thickness: 10.0mm, High Purity: 99.999%, Size: 50 mm to 75 mm

**Foam**

- **AL003802**
  - Thickness: 3.2mm, Bulk density: 0.2g.cm⁻³, Porosity: 93%, Pores/cm: 16, Purity: 98.5%, Grade: Aluminum 6101, Size: 150x150 mm
- **AL003803**
  - Thickness: 3.2mm, Bulk density: 0.2g.cm⁻³, Porosity: 93%, Pores/cm: 16, Purity: 98.5%, Grade: Aluminum 6101, Size: 300x300 mm
- **AL003805**
  - Thickness: 6.35mm, Bulk density: 0.2g.cm⁻³, Porosity: 93%, Pores/cm: 2, Purity: 98.5%, Grade: Aluminum 6101, Size: 150x150 mm
- **AL003810**
  - Thickness: 6.35mm, Bulk density: 0.2g.cm⁻³, Porosity: 93%, Pores/cm: 4, Purity: 98.5%, Grade: Aluminum 6101, Size: 300x300 mm
- **AL003815**
  - Thickness: 6.35mm, Bulk density: 0.2g.cm⁻³, Porosity: 93%, Pores/cm: 8, Purity: 98.5%, Grade: Aluminum 6101, Size: 150x150 mm
- **AL003825**
  - Thickness: 6.35mm, Bulk density: 0.2g.cm⁻³, Porosity: 93%, Pores/cm: 16, Purity: 98.5%, Grade: Aluminum 6101, Size: 150x150 mm
- **AL003826**
  - Thickness: 6.35mm, Bulk density: 0.2g.cm⁻³, Porosity: 93%, Pores/cm: 16, Purity: 98.5%, Grade: Aluminum 6101, Size: 300x400 mm
- **AL003835**
  - Thickness: 10mm, Bulk density: 0.2g.cm⁻³, Porosity: 93%, Pores/cm: 16, Purity: 98.5%, Grade: Aluminum 6101, Size: 150x150 mm
- **AL003845**
  - Thickness: 20mm, Bulk density: 0.2g.cm⁻³, Porosity: 93%, Pores/cm: 2, Purity: 98.5%, Grade: Aluminum 6101, Size: 33x140 mm
- **AL003860**
  - Thickness: 30mm, Bulk density: 0.2g.cm⁻³, Porosity: 93%, Pores/cm: 16, Purity: 98.5%, Grade: Aluminum 6101, Size: 150x150 mm
- **AL003861**
  - Thickness: 30mm, Bulk density: 0.2g.cm⁻³, Porosity: 93%, Pores/cm: 16, Purity: 98.5%, Grade: Aluminum 6101, Size: 100x100 mm to 150x150 mm
- **AL003880**
  - Thickness: 46mm, Bulk density: 0.77g.cm⁻³, Purity: 99.5%, Condition: Stacked 10mm diameter cells on 5mm base, Size: 70x100 mm to 98x107 mm
### Mesh

**AL008722**
- Nominal Aperture: 0.11mm
- Wire diameter: 0.1mm, Wires/inch: 120x120, Open area: 27%
- Weave: Twill, Grade: Aluminium alloy 5056, Size: 100x100 mm to 500x500 mm

**AL008710**
- Nominal Aperture: 0.38mm
- Wire diameter: 0.25mm, Wires/inch: 40x40, Open area: 37%
- Type: Plain weave mesh, Condition: Aluminium alloy 5052, Size: 150x150 mm to 900x900 mm

### Wire

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<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
<th>Purity</th>
<th>Temper</th>
<th>Length</th>
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<tbody>
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<td>As drawn</td>
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<tr>
<td>AL005120</td>
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<td>As drawn</td>
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<tr>
<td>AL005130</td>
<td>0.02mm</td>
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<td>Hard</td>
<td>As drawn</td>
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<tr>
<td>AL005133</td>
<td>0.025mm</td>
<td>99.0%</td>
<td>As drawn</td>
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<tr>
<td>AL005134</td>
<td>0.025mm</td>
<td>99.99%</td>
<td>As drawn</td>
<td></td>
</tr>
<tr>
<td>AL005137</td>
<td>0.05mm</td>
<td>99.99%</td>
<td>As drawn</td>
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</tr>
<tr>
<td>AL005138</td>
<td>0.063mm</td>
<td>99.99%</td>
<td>Annealed</td>
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<tr>
<td>AL005140</td>
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<td>As drawn</td>
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<tr>
<td>AL005145</td>
<td>0.125mm</td>
<td>99.99%</td>
<td>As drawn</td>
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<td>AL005148</td>
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<tr>
<td>AL005176</td>
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<td>AL005180</td>
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### Insulated Wire

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### Rod

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### Tube

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<td>0.30mm</td>
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<td>99.5%</td>
<td>As drawn</td>
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<tr>
<td>AL007031</td>
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<td>0.05mm, Inside Diameter: 0.2mm</td>
<td>99.5%</td>
<td>As drawn</td>
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Metals — Aluminum

<table>
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<th>Dimensions</th>
<th>Purity</th>
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<td>Outside Diameter: 0.55mm, Wall Thickness: 0.075mm, Inside Diameter: 0.4mm, Purity: 99.5%, Temper: As drawn, Length: 100 mm to 1000 mm</td>
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<tr>
<td>AL007020</td>
<td>Outside Diameter: 0.6mm, Wall Thickness: 0.15mm, Inside Diameter: 0.3mm, Purity: 99.5%, Temper: As drawn, Length: 100 mm to 1000 mm</td>
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<td>AL007040</td>
<td>Outside Diameter: 0.86mm, Wall Thickness: 0.05mm, Inside Diameter: 0.76mm, Purity: 99.5%, Temper: As drawn, Length: 100 mm to 1000 mm</td>
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<td>AL007050</td>
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<td>AL007100</td>
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<td>AL007450</td>
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<td>AL007750</td>
<td>Outside Diameter: 25.4x25.4mm, Wall Thickness: 1.6mm, Inside Diameter: 22.2x22.2mm, Purity: 99.5%, Condition: Square section, Length: 100 mm to 1000 mm</td>
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**Powder**

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<td>Mean Particle size: 0.08 micron, Purity: 99.9%, Condition: Nanopowder</td>
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<tr>
<td>AL006038</td>
<td>Max. Particle size: 15 micron, Purity: 99%</td>
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<tr>
<td>AL006035</td>
<td>Max. Particle size: 25 micron, Purity: 99%</td>
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<td>AL006031</td>
<td>Max. Particle size: 60 micron, Purity: 99.9%</td>
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<td>AL006015</td>
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<tr>
<td>AL006010</td>
<td>Max. Particle size: 400 micron, Purity: 99.5%</td>
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**Lump**

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</tr>
</thead>
<tbody>
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<td>Max. Lump size: 6mm, High Purity: 99.999%, Condition: Pellets</td>
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<td>AL006106</td>
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**Sphere**

<table>
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<th>Code</th>
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<th>Purity</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL006820</td>
<td>Diameter: 2.0mm, Tolerance: ± 25.4 μm, Sphericity: 5.08μm, Purity: 95.2%, Grade: Aluminum alloy 2017, Grade: Precision Sphere, Condition: Grade 200</td>
<td></td>
</tr>
<tr>
<td>AL006825</td>
<td>Diameter: 2.5mm, Tolerance: ± 25.4 μm, Sphericity: 5.08μm, Purity: 95.2%, Grade: Aluminum alloy 2017, Grade: Precision Sphere, Condition: Grade 200</td>
<td></td>
</tr>
<tr>
<td>AL006830</td>
<td>Diameter: 3.0mm, Tolerance: ± 25.4 μm, Sphericity: 5.08μm, Purity: 95.2%, Grade: Aluminum alloy 2017, Grade: Precision Sphere, Condition: Grade 200</td>
<td></td>
</tr>
<tr>
<td>AL006860</td>
<td>Diameter: 6.0mm, Tolerance: ± 25.4 μm, Sphericity: 5.08μm, Purity: 99.0%</td>
<td></td>
</tr>
</tbody>
</table>

**Single Crystal**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Purity</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL002130</td>
<td>Oriented: (100), Diameter: 12mm, Length: 5mm, Purity: 99.999%</td>
<td></td>
</tr>
<tr>
<td>AL002102</td>
<td>Oriented: (100), Thickness: 1mm, Diameter: 10mm, Purity: 99.999%, Condition: Polished on 1 side to 1 micron</td>
<td></td>
</tr>
<tr>
<td>AL002101</td>
<td>Oriented: (100), Thickness: 1mm, Diameter: 10mm, Purity: 99.999%, Condition: Unpolished</td>
<td></td>
</tr>
<tr>
<td>AL002131</td>
<td>Oriented: (100), Diameter: 12mm, Length: 10mm, Purity: 99.999%</td>
<td></td>
</tr>
<tr>
<td>AL002111</td>
<td>Oriented: (100), Thickness: 2mm, Diameter: 12mm, Purity: 99.999%, Condition: Polished on 1 side to 1 micron</td>
<td></td>
</tr>
<tr>
<td>AL002110</td>
<td>Oriented: (100), Thickness: 2mm, Diameter: 12mm, Purity: 99.999%, Condition: Unpolished</td>
<td></td>
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<tr>
<td>AL002135</td>
<td>Oriented: (100), Diameter: 5mm, Length: 25mm, Purity: 99.999%</td>
<td></td>
</tr>
<tr>
<td>AL002134</td>
<td>Oriented: (100), Diameter: 10mm, Length: 25mm, Purity: 99.999%</td>
<td></td>
</tr>
<tr>
<td>AL002132</td>
<td>Oriented: (100), Diameter: 12mm, Length: 25mm, Purity: 99.999%</td>
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</tr>
<tr>
<td>AL002136</td>
<td>Oriented: (100), Diameter: 5mm, Length: 50mm, Purity: 99.999%</td>
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</tr>
<tr>
<td>AL002133</td>
<td>Oriented: (100), Diameter: 12mm, Length: 50mm, Purity: 99.999%</td>
<td></td>
</tr>
<tr>
<td>AL002104</td>
<td>Oriented: (110), Thickness: 1mm, Diameter: 10mm, Purity: 99.999%, Condition: Polished on 1 side to 1 micron</td>
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<tr>
<td>AL002103</td>
<td>Oriented: (110), Thickness: 1mm, Diameter: 10mm, Purity: 99.999%, Condition: Unpolished</td>
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<tr>
<td>AL002118</td>
<td>Oriented: (110), Diameter: 12mm, Length: 10mm, Purity: 99.999%</td>
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<tr>
<td>AL002113</td>
<td>Oriented: (110), Thickness: 2mm, Diameter: 12mm, Purity: 99.999%, Condition: Polished on 1 side to 1 micron</td>
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<tr>
<td>AL002112</td>
<td>Oriented: (110), Thickness: 2mm, Diameter: 12mm, Purity: 99.999%, Condition: Unpolished</td>
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<tr>
<td>AL002121</td>
<td>Oriented: (110), Diameter: 5mm, Length: 25mm, Purity: 99.999%</td>
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<tr>
<td>AL002119</td>
<td>Oriented: (110), Diameter: 12mm, Length: 25mm, Purity: 99.999%</td>
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<tr>
<td>AL002122</td>
<td>Oriented: (110), Diameter: 5mm, Length: 50mm, Purity: 99.999%</td>
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<tr>
<td>AL002120</td>
<td>Oriented: (110), Diameter: 12mm, Length: 50mm, Purity: 99.999%</td>
<td></td>
</tr>
<tr>
<td>AL002140</td>
<td>Oriented: (111), Diameter: 12mm, Length: 5mm, Purity: 99.999%</td>
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<tr>
<td>AL002106</td>
<td>Oriented: (111), Thickness: 1mm, Diameter: 10mm, Purity: 99.999%, Condition: Polished on 1 side to 1 micron</td>
<td></td>
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</tbody>
</table>
## Metals

### Antimony (Sb)

#### Microfoil

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Thickness</th>
<th>Diameter</th>
<th>Purity</th>
<th>Support</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>SB004700</td>
<td>Thickness: 0.5µm, Specific density: 334.5g/cm², Purity: 95+%</td>
<td>Permanent Polyester, Size: 25x25 mm to 50x50 mm</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

#### Foil

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Thickness</th>
<th>Diameter</th>
<th>Purity</th>
<th>Support</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>SB000300</td>
<td>Thickness: 0.002mm, Purity: 95%</td>
<td>Permanent Polyester, Size: 25x25 mm to 50x50 mm</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>SB000660</td>
<td>Thickness: 0.004mm, Purity: 95%</td>
<td>Permanent Polyester, Size: 25x25 mm</td>
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<td></td>
<td></td>
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<tr>
<td>SB000700</td>
<td>Thickness: 0.005mm, Purity: 95%</td>
<td>Permanent Polyester, Size: 25x25 mm to 50x50 mm</td>
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<tr>
<td>SB000800</td>
<td>Thickness: 0.006mm, Purity: 95%</td>
<td>Permanent Polyester, Size: 25x25 mm to 50x50 mm</td>
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<tr>
<td>SB000900</td>
<td>Thickness: 0.007mm, Purity: 95%</td>
<td>Permanent Polyester, Size: 25x25 mm</td>
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<tr>
<td>SB001000</td>
<td>Thickness: 0.008mm, Purity: 95%</td>
<td>Permanent Polyester, Size: 25x25 mm</td>
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<td></td>
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<tr>
<td>SB001100</td>
<td>Thickness: 0.009mm, Purity: 95%</td>
<td>Permanent Polyester, Size: 25x25 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SB001200</td>
<td>Thickness: 0.011mm, Purity: 95%</td>
<td>Permanent Polyester, Size: 25x25 mm to 100x100 mm</td>
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</tbody>
</table>

### Beryllium (Be)

#### Foil

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Thickness</th>
<th>Diameter</th>
<th>Purity</th>
<th>Support</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE000500</td>
<td>Thickness: 0.00025mm, Purity: 99.9%</td>
<td>Temporary Copper, Size: 12.5x12.5 mm to 25x25 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BE000151</td>
<td>Thickness: 0.005mm, Purity: 99.0%</td>
<td>Temporary Copper, Size: 12.5x12.5 mm to 25x25 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BE000200</td>
<td>Thickness: 0.01mm, Purity: 99.8%</td>
<td>Temporary Copper, Size: 12.5x12.5 mm to 50x50 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BE000210</td>
<td>Thickness: 0.015mm, Purity: 99.8%</td>
<td>Temporary Copper, Size: 10x10 mm to 50x50 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BE000220</td>
<td>Thickness: 0.025mm, Purity: 99.8%</td>
<td>Vacuum tight, Size: 25x25 mm to 50x50 mm</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BE000221</td>
<td>Thickness: 0.025mm, Tolerance: 20%, Purity: 99.8%</td>
<td>Vacuum tight, Diameter: 15 mm to 25.4 mm</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>BE000229</td>
<td>Thickness: 0.125mm, Purity: 99.0%</td>
<td>Vacuum tight, Diameter: 20 mm</td>
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</tbody>
</table>

### Arsenic (As)

#### Lump

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Diameter</th>
<th>Purity</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS006125</td>
<td>Max. Lump size: 4mm</td>
<td>Diameter: 12.5x12.5 mm to 25x25 mm</td>
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</tr>
<tr>
<td>AS006105</td>
<td>Max. Lump size: 20mm</td>
<td>Diameter: 12.5x12.5 mm to 50x50 mm</td>
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<td></td>
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</tbody>
</table>

### Barium (Ba)

#### Lump

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Diameter</th>
<th>Purity</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA006100</td>
<td>Max. Lump size: 25mm</td>
<td>Diameter: 20mm to 50.8mm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Sputtering Target

#### Rod

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Diameter</th>
<th>Purity</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>SB009300</td>
<td>Thickness: 3mm, Size: 25 mm to 50.8 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SB007902</td>
<td>Diameter: 2.0mm, Purity: 99.99%</td>
<td>Diameter: 15 mm to 50 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SB007906</td>
<td>Diameter: 4.7mm, Purity: 99.999%</td>
<td>Diameter: 20 mm to 50 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SB007910</td>
<td>Diameter: 6mm, High Purity: 99.999%</td>
<td>Diameter: 6 mm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Powder

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Particle size</th>
<th>Purity</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>SB006030</td>
<td>Max. Particle size: 45micron</td>
<td>Purity: 99.5%</td>
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</tr>
<tr>
<td>SB006021</td>
<td>Max. Particle size: 75micron</td>
<td>Purity: 99.2%</td>
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</tr>
<tr>
<td>SB006010</td>
<td>Max. Particle size: 150micron</td>
<td>Purity: 99.2%</td>
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</tr>
<tr>
<td>SB006015</td>
<td>Max. Particle size: 150micron</td>
<td>High Purity: 99.999%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please visit [www.goodfellow.com](http://www.goodfellow.com) or [www.goodfellowusa.com](http://www.goodfellowusa.com) for latest prices.
### Metals

#### Bismuth (Bi)

**Wire**

- **BE005100**
  - Diameter: 0.05mm, Purity: 99.7%, Condition: Annealed and Clean
- **BE005110**
  - Diameter: 0.125mm, Purity: 99.7%, Condition: Annealed and Clean
- **BE005115**
  - Diameter: 0.25mm, Purity: 99.7%, Condition: Annealed and Clean
- **BE005120**
  - Diameter: 0.35mm, Purity: 99.7%, Condition: Annealed and Clean
- **BE005125**
  - Diameter: 0.5mm, Purity: 99.0%, Condition: Annealed and Clean
- **BE005126**
  - Diameter: 0.6mm, Purity: 99.0%, Condition: Annealed and Clean
- **BE005128**
  - Diameter: 0.75mm, Purity: 99.0%, Condition: Annealed and Clean
- **BE005129**
  - Diameter: 0.85mm, Purity: 99.0%, Condition: Annealed and Clean
- **BE005131**
  - Diameter: 1.2mm, Purity: 99.7%

**Rod**

- **BE007930**
  - Diameter: 7.0mm, Purity: 99.0%, Length: 100 mm

**Flake**

- **BE006200**
  - Max. Flake size: 10mm, Purity: 99.5%, Condition: Electrolytic

**Foil**

- **BI00020**
  - Thickness: 0.001mm, Purity: 99.97%, Support: Permanent Polyester, Size: 25x25 mm to 50x50 mm
- **BI00030**
  - Thickness: 0.002mm, Purity: 99.97%, Support: Permanent Polyester, Size: 25x25 mm to 50x50 mm
- **BI00040**
  - Thickness: 0.0025mm, Purity: 99.97%, Support: Permanent Polyester, Size: 25x25 mm to 50x50 mm
- **BI00070**
  - Thickness: 0.005mm, Purity: 99.97%, Support: Permanent Polyester, Size: 25x25 mm to 50x50 mm
- **BI00120**
  - Thickness: 0.01mm, Purity: 99.97%, Support: Permanent Polyester, Size: 25x25 mm to 100x100 mm
- **BI00140**
  - Thickness: 0.015mm, Purity: 99.97%, Support: Permanent Polyester, Size: 25x25 mm to 100x100 mm
- **BI00150**
  - Thickness: 0.02mm, Purity: 99.97%, Support: Permanent Polyester, Size: 25x25 mm to 150x150 mm
- **BI00160**
  - Thickness: 0.025mm, Purity: 99.97%, Support: Permanent Polyester, Size: 25x25 mm to 150x150 mm
- **BI00185**
  - Thickness: 0.045mm, Purity: 99.97%, Support: Permanent Polyester, Size: 25x25 mm to 150x150 mm
- **BI00190**
  - Thickness: 0.05mm, Purity: 99.97%, Support: Permanent Polyester, Size: 25x25 mm to 150x150 mm
- **BI00220**
  - Thickness: 0.25mm, High Purity: 99.999%, Size: 25x25 mm to 50x50 mm
- **BI00240**
  - Thickness: 0.5mm, High Purity: 99.999%, Size: 25x25 mm to 50x50 mm
- **BI00251**
  - Thickness: 1.0mm, Purity: 99.97%, Size: 25x25 mm to 30x30 mm

**Sputtering Target**

- **BE009050**
  - Thickness: 0.5mm, Purity: 99.0%, Size: 25 mm to 50 mm
- **BE009100**
  - Thickness: 1.0mm, Purity: 99.0%, Size: 25 mm to 50 mm
- **BE009200**
  - Thickness: 2.0mm, Purity: 99.0%, Size: 25 mm to 50 mm
- **BE009300**
  - Thickness: 3.0mm, Purity: 99.0%, Size: 25 mm to 50 mm

**Mesh**

- **BE008710**
  - Nominal Aperture: 0.13mm, Thickness: 0.025mm, Wire diameter: 0.1mm, Wires/inch: 100, Open area: 50%, Type: Electro-formed mesh, Size: 5x5 mm
## Metals

### Boron (B)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Diameter</th>
<th>Purity</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI002212</td>
<td>Oriented: (111), Thickness: 2mm, Diameter: 12mm, Purity: 99.99%, Condition: Polished on 1 side to 1 micron</td>
<td>50x50 mm</td>
<td>99.99%</td>
<td></td>
</tr>
<tr>
<td>BI002211</td>
<td>Oriented: (111), Thickness: 2mm, Diameter: 12mm, Purity: 99.99%, Condition: Unpolished</td>
<td>50x50 mm</td>
<td>99.99%</td>
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</tr>
</tbody>
</table>

### Microfoil

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Thickness</th>
<th>Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI009500</td>
<td>Thickness: 0.1µm, Specific density: 23.5µg.cm², Purity: 99.6%, Support: Permanent Mylar 3.5µm, Diameter: 10 mm to 25 mm</td>
<td>10 mm to 25 mm</td>
<td>23.5 µg.cm²</td>
</tr>
</tbody>
</table>

### Monofilament

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Diameter</th>
<th>Purity</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>B 005908</td>
<td>Diameter: 0.080mm</td>
<td></td>
<td>99.9%</td>
<td></td>
</tr>
<tr>
<td>B 005910</td>
<td>Diameter: 0.1mm</td>
<td></td>
<td>99.9%</td>
<td></td>
</tr>
<tr>
<td>B 005915</td>
<td>Diameter: 0.2mm</td>
<td></td>
<td>99.9%</td>
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</tr>
</tbody>
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### Rod

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Diameter</th>
<th>Purity</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>B 007905</td>
<td>Diameter: 5mm, Purity: 99.6%, Condition: Cast, Length: 12 mm to 18 mm</td>
<td>10 mm to 25 mm</td>
<td>99.6%</td>
<td></td>
</tr>
<tr>
<td>B 007910</td>
<td>Diameter: 10mm, Purity: 99.6%, Condition: Cast, Length: 15 mm to 39 mm</td>
<td>10 mm to 25 mm</td>
<td>99.6%</td>
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</tbody>
</table>

### Powder

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Particle size</th>
<th>Purity</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>B 006041</td>
<td>Mean Particle size (FSSS): 0.9µm, Purity: 95%, Condition: Amorphous</td>
<td>10 mm to 25 mm</td>
<td>95.0%</td>
<td></td>
</tr>
<tr>
<td>B 006020</td>
<td>Mean Particle size (FSSS): 1µm, Purity: 92.1%, Condition: Amorphous</td>
<td>10 mm to 25 mm</td>
<td>92.1%</td>
<td></td>
</tr>
<tr>
<td>B 006012</td>
<td>Max. Particle size: 45µm, Purity: 98%, Condition: Crystalline</td>
<td>10 mm to 25 mm</td>
<td>98.0%</td>
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</tr>
</tbody>
</table>

### Granule

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Particle size</th>
<th>Purity</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>B 006300</td>
<td>Nominal Granule Size: 15mm, Purity: 99%</td>
<td>10 mm to 25 mm</td>
<td>99.0%</td>
<td></td>
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</tbody>
</table>

### Cadmium (Cd)

#### Foil

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Thickness</th>
<th>Purity</th>
<th>Temper</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD000221</td>
<td>Thickness: 0.001mm, Purity: 99.7 %, Size: 25x25 mm to 50x50 mm</td>
<td>0.001mm</td>
<td>99.7%</td>
<td>As rolled, Size: 25x25 mm to 100x100 mm</td>
</tr>
<tr>
<td>CD000230</td>
<td>Thickness: 0.012mm, Purity: 99.95%, Temper: As rolled, Size: 50x50 mm to 100x300 mm</td>
<td>0.012mm</td>
<td>99.95%</td>
<td>As rolled, Size: 25x25 mm to 100x100 mm</td>
</tr>
<tr>
<td>CD000240</td>
<td>Thickness: 0.25mm, Purity: 99.9%, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
<td>0.25mm</td>
<td>99.9%</td>
<td>As rolled, Size: 25x25 mm to 100x100 mm</td>
</tr>
</tbody>
</table>

#### Monofilament

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Diameter</th>
<th>Purity</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>B 005908</td>
<td>Diameter: 0.080mm</td>
<td></td>
<td>99.9%</td>
<td></td>
</tr>
<tr>
<td>B 005910</td>
<td>Diameter: 0.1mm</td>
<td></td>
<td>99.9%</td>
<td></td>
</tr>
<tr>
<td>B 005915</td>
<td>Diameter: 0.2mm</td>
<td></td>
<td>99.9%</td>
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</tbody>
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#### Rod

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Diameter</th>
<th>Purity</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>B 007905</td>
<td>Diameter: 5mm, Purity: 99.6%, Condition: Cast, Length: 12 mm to 18 mm</td>
<td>10 mm to 25 mm</td>
<td>99.6%</td>
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</tr>
<tr>
<td>B 007910</td>
<td>Diameter: 10mm, Purity: 99.6%, Condition: Cast, Length: 15 mm to 39 mm</td>
<td>10 mm to 25 mm</td>
<td>99.6%</td>
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#### Powder

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Particle size</th>
<th>Purity</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>B 006041</td>
<td>Mean Particle size (FSSS): 0.9µm, Purity: 95%, Condition: Amorphous</td>
<td>10 mm to 25 mm</td>
<td>95.0%</td>
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</tr>
<tr>
<td>B 006020</td>
<td>Mean Particle size (FSSS): 1µm, Purity: 92.1%, Condition: Amorphous</td>
<td>10 mm to 25 mm</td>
<td>92.1%</td>
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<tr>
<td>B 006012</td>
<td>Max. Particle size: 45µm, Purity: 98%, Condition: Crystalline</td>
<td>10 mm to 25 mm</td>
<td>98.0%</td>
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#### Granule

<table>
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<th>Code</th>
<th>Description</th>
<th>Particle size</th>
<th>Purity</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>B 006300</td>
<td>Nominal Granule Size: 15mm, Purity: 99%</td>
<td>10 mm to 25 mm</td>
<td>99.0%</td>
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</table>

### Single Crystal

#### As rolled

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Diameter</th>
<th>Purity</th>
<th>Condition</th>
</tr>
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<tbody>
<tr>
<td>CD000221</td>
<td>Thickness: 0.125mm, Purity: 99.95%, Temper: As rolled, Size: 50x50 mm to 100x300 mm</td>
<td>0.125mm</td>
<td>99.95%</td>
<td>As rolled, Size: 25x25 mm to 100x100 mm</td>
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<tr>
<td>CD000230</td>
<td>Thickness: 0.125mm, High Purity: 99.99%, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
<td>0.125mm</td>
<td>99.99%</td>
<td>As rolled, Size: 25x25 mm to 100x100 mm</td>
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<tr>
<td>CD000239</td>
<td>Thickness: 0.25mm, Purity: 99.9%, Temer: As rolled, Size: 25x25 mm to 50x50 mm</td>
<td>0.25mm</td>
<td>99.9%</td>
<td>As rolled, Size: 25x25 mm to 100x100 mm</td>
</tr>
<tr>
<td>CD000240</td>
<td>Thickness: 0.25mm, High Purity: 99.99 %, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
<td>0.25mm</td>
<td>99.99 %</td>
<td>As rolled, Size: 25x25 mm to 100x100 mm</td>
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<tr>
<td>CD000250</td>
<td>Thickness: 0.25mm, Purity: 99.99%, Temer: As rolled, Size: 100x100 mm</td>
<td>0.25mm</td>
<td>99.99%</td>
<td>As rolled, Size: 25x25 mm to 100x100 mm</td>
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<tr>
<td>CD000251</td>
<td>Thickness: 0.25mm, Purity: 99.95%, Temer: As rolled, Size: 150x150 mm to 300x300 mm</td>
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<td>99.95%</td>
<td>As rolled, Size: 25x25 mm to 100x100 mm</td>
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<tr>
<td>CD000262</td>
<td>Thickness: 0.5mm, High Purity: 99.999%, Temer: As rolled, Coil width 30 mm, Size: 25x25 mm to 30x150 mm</td>
<td>0.5mm</td>
<td>99.999%</td>
<td>As rolled, Size: 25x25 mm to 30x150 mm</td>
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<tr>
<td>CD000260</td>
<td>Thickness: 0.5mm, Purity: 99.9%, Temer: As rolled, Size: 95x100 mm to 300x300 mm</td>
<td>0.5mm</td>
<td>99.9%</td>
<td>As rolled, Size: 25x25 mm to 30x150 mm</td>
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<tr>
<td>CD000263</td>
<td>Thickness: 0.5mm, Purity: 99.9%, Temer: As rolled, Size: 500x500 mm to 950x1000 mm</td>
<td>0.5mm</td>
<td>99.9%</td>
<td>As rolled, Size: 25x25 mm to 30x150 mm</td>
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<tr>
<td>CD000261</td>
<td>Thickness: 0.5mm, Purity: 99.9%, Temer: As rolled, Size: 75x100 mm to 200x200 mm</td>
<td>0.5mm</td>
<td>99.9%</td>
<td>As rolled, Size: 25x25 mm to 30x150 mm</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
<td>Purity</td>
<td>Condition</td>
<td>Source</td>
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<tr>
<td>CD000265</td>
<td>Thickness: 0.75mm, Purity: 99.99%</td>
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<tr>
<td>CD000280</td>
<td>Thickness: 1.0mm, High Purity: 99.999%</td>
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<tr>
<td>CD000273</td>
<td>Thickness: 1.0mm, Purity: 99.95%</td>
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<tr>
<td>CD000272</td>
<td>Thickness: 1.0mm, Purity: 99.95%</td>
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<td>CD000270</td>
<td>Thickness: 1.0mm, Purity: 99.99%</td>
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<tr>
<td>CD000300</td>
<td>Thickness: 2.0mm, Purity: 99.99%</td>
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<tr>
<td>CD000301</td>
<td>Thickness: 2.0mm, Purity: 99.95%</td>
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<tr>
<td>CD000350</td>
<td>Thickness: 3.0mm, Purity: 99.9%</td>
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<tr>
<td>CD009200</td>
<td>Thickness: 2.0mm, Purity: 99.99%, Size: 50 mm</td>
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<tr>
<td>CD005090</td>
<td>Diameter: 0.125mm, Purity: 99.9%, Temper:</td>
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<tr>
<td>CD005100</td>
<td>Diameter: 0.25mm, High Purity: 99.99%</td>
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<tr>
<td>CD005104</td>
<td>Diameter: 0.4mm, Purity: 99.95%</td>
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<tr>
<td>CD005105</td>
<td>Diameter: 0.5mm, Purity: 99.95%</td>
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<td>CD005110</td>
<td>Diameter: 0.5mm, High Purity: 99.99%</td>
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<td>CD005114</td>
<td>Diameter: 0.70mm, High Purity: 99.99%</td>
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<td>CD005125</td>
<td>Diameter: 1.0mm, High Purity: 99.99%</td>
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<td>CD005127</td>
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<td>CD005130</td>
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<td>CD007905</td>
<td>Diameter: 3.0mm, Purity: 99.99%</td>
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<td>CD007900</td>
<td>Diameter: 5.0mm, High Purity: 99.99%</td>
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<td>CD007925</td>
<td>Diameter: 10.0mm, High Purity: 99.99%</td>
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<tr>
<td>CD007920</td>
<td>Diameter: 10.0mm, High Purity: 99.99%</td>
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<tr>
<td>CD007940</td>
<td>Diameter: 40mm, Purity: 99.9%, Length: 25 mm</td>
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<td>CD007200</td>
<td>Outside Diameter: 2.29mm, Wall Thickness:</td>
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<td>CD006020</td>
<td>Max. Particle size: 60micron, Purity: 99.9%</td>
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<tr>
<td>CD006110</td>
<td>Max. Lump size: 5mm, Purity: 99.99%</td>
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<td>CD006100</td>
<td>Max. Lump size: 100mm, Purity: 99.99%,</td>
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<td>CD002110</td>
<td>Oriented: (0001), Diameter: 12mm, Length:</td>
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<td>CD002120</td>
<td>Oriented: (0001), Diameter: 12mm, Length:</td>
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<tr>
<td>CD002100</td>
<td>Oriented: (0001), Diameter: 12mm, Length:</td>
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<tr>
<td>CD006110</td>
<td>Max. Lump size: 10mm, Purity: 99.0%</td>
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<tr>
<td>CD004905</td>
<td>Thinness: 0.0025µm, Specific density: 0.5µg.cm⁻², Purity: 99.997%, Support: Temporary Glass, Size: 25x70 mm</td>
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<tr>
<td>CD004910</td>
<td>Thinness: 0.025µm, Specific density: 5µg.cm⁻², Purity: 99.997%, Support: Temporary Glass, Size: 25x70 mm</td>
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<td>CD004920</td>
<td>Thinness: 0.050µm, Specific density: 10µg.cm⁻², Purity: 99.997%, Support: Temporary Glass, Size: 25x70 mm</td>
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<td>CD004940</td>
<td>Thinness: 0.25µm, Specific density: 50µg.cm⁻², Purity: 99.997%, Support: Temporary Glass, Size: 25x70 mm</td>
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<tr>
<td>CD004960</td>
<td>Thinness: 0.50µm, Specific density: 100µg.cm⁻², Purity: 99.997%, Support: Temporary Glass, Size: 25x70 mm</td>
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<td>CD004961</td>
<td>Thinness: 0.50µm, Specific density: 100µg.cm⁻², Purity: 99.997%, Support: Temporary Glass, Temper: Annealed, Size: 25x70 mm</td>
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<td>CD004980</td>
<td>Thinness: 1.25µm, Specific density: 250µg.cm⁻², Purity: 99.997%, Size: 25x70 mm to 50x70 mm</td>
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<td>CD004990</td>
<td>Thinness: 2.5µm, Specific density: 500µg.cm⁻², Purity: 99.997%, Size: 25x70 mm to 50x70 mm</td>
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<td>CD004995</td>
<td>Thinness: 5.0µm, Specific density: 1000µg.cm⁻², Purity: 99.997%, Size: 24x70 mm</td>
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<td>CD002025</td>
<td>Thickness: 0.075mm, Purity: 99.8%, Condition: Flexible graphite, Size: 100x100 mm to 300x300 mm</td>
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<td>CD007200</td>
<td>Thickness: 0.1mm, Purity: 99.99%, Condition: Pyrolytic Graphite, Size: 25x25 mm</td>
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<tr>
<td>CD007210</td>
<td>Thickness: 0.1mm, Purity: 99.99%, Condition: Pyrolytic Graphite, Size: 50x50 mm</td>
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<td>CD004000</td>
<td>Thickness: 0.125mm, Purity: 99.95%, Condition: Rigid graphite, Grain size: Fine, Size: 12.5x12.5 mm to 150x150 mm</td>
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<td>CD002020</td>
<td>Thickness: 0.125mm, Purity: 99.8%, Condition: Flexible graphite, Size: 150x150 mm to 300x300 mm</td>
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<td>CD00405</td>
<td>Thickness: 0.15mm, Purity: 99.95%, Condition: Rigid graphite, Grain size: Fine, Size: 25x25 mm</td>
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<tr>
<td>CD00731</td>
<td>Thickness: 0.2mm, Purity: 99.99%, Condition: Pyrolytic Graphite, Size: 50x50 mm</td>
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<tr>
<td>CD00305</td>
<td>Thickness: 0.2mm, Purity: 99.8%, Condition: Flexible graphite, Size: 25x25 mm to 500x500 mm</td>
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<tr>
<td>CD00411</td>
<td>Thickness: 0.25mm, Purity: 99.997%, Condition: Rigid graphite, Grain size: Fine, Size: 25x25 mm to 100x100 mm</td>
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<tr>
<td><strong>Metals</strong></td>
<td><strong>Sputtering Target</strong></td>
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<tr>
<td>C 000410 Thickness: 0.25mm, Purity: 99.95%, Condition: Rigid graphite, Grain size: Fine, Size: 25x25 mm to 150x150 mm</td>
<td>C 009025 Thickness: 0.25mm, Purity: 99.997%, Size: 50 mm</td>
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<tr>
<td>C 000315 Thickness: 0.35mm, Purity: 99.8%, Condition: Flexible graphite, Size: 50x50 mm to 500x500 mm</td>
<td>C 009050 Thickness: 0.5mm, Purity: 99.997%, Size: 40 mm to 50 mm</td>
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<tr>
<td>C 000423 Thickness: 0.5mm, Purity: 99.95%, Condition: Rigid graphite, Grain size: Fine, Condition: Polished on 1 side, Size: 10x10 mm</td>
<td>C 009100 Thickness: 1.0mm, Purity: 99.997%, Size: 50.8 mm to 57 mm</td>
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<tr>
<td>C 000422 Thickness: 0.5mm, Purity: 99.95%, Condition: Rigid graphite, Grain size: Fine, Diameter: 12 mm</td>
<td>C 009300 Thickness: 3.0mm, Purity: 99.997%, Size: 25 mm to 100 mm</td>
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<tr>
<td>C 000735 Thickness: 0.5mm, Purity: 99.99%, Condition: Pyrolytic Graphite, Size: 25x25 mm</td>
<td>C 009400 Thickness: 4.0mm, Purity: 99.997%, Size: 25 mm</td>
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<tr>
<td>C 000421 Thickness: 0.5mm, Purity: 99.97%, Condition: Flexible graphite, Grain size: Fine, Size: 25x25 mm to 100x100 mm</td>
<td>C 009600 Thickness: 6.0mm, Purity: 99.997%, Size: 25 mm to 100 mm</td>
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<tr>
<td>C 000420 Thickness: 0.5mm, Purity: 99.95%, Condition: Rigid graphite, Grain size: Fine, Size: 25x25 mm to 150x150 mm</td>
<td><strong>Fabric</strong></td>
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<tr>
<td>C 000321 Thickness: 0.5mm, Purity: 99.8%, Condition: Flexible graphite, Size: 50x50 mm to 500x500 mm</td>
<td>C 003510 Weight.m$^2$: 92g, Thickness: 0.15mm, Warp Yarn: 66Tex, Weft Yarn: 66Tex, Ends x Picks/10cm: 69x89, Weave: Plain, Size: 250x250 mm to 1000x1000 mm</td>
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<tr>
<td>C 000432 Thickness: 1.0mm, Purity: 99.95%, Condition: Rigid graphite, Grain size: Fine, Diameter: 12 mm</td>
<td>C 003550 Weight.m$^2$: 110g, Thickness: 0.5mm, Ends x Picks/10cm: 130x130, Weave: Plain, Coil width 1140 mm, Size: 300x300 mm</td>
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<td>C 000740 Thickness: 1.0mm, Purity: 99.99%, Condition: Pyrolytic Graphite, Diameter: 25 mm</td>
<td>C 003531 Weight.m$^2$: 200g, Thickness: 0.3mm, Warp Yarn: 200Tex, Weft Yarn: 200Tex, Ends x Picks/10cm: 50x50, Weave: Plain, Size: 150x150 mm to 1000x1000 mm</td>
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<tr>
<td>C 000745 Thickness: 1.0mm, Purity: 99.99%, Condition: Pyrolytic Graphite, Size: 100x100 mm</td>
<td>C 003581 Weight.m$^2$: 375g, Thickness: 0.4mm, Warp Yarn: 400(T)Tex, Weft Yarn: 400(T)Tex, Ends x Picks/10cm: 47x47, Weave: 2x2 Twill, Size: 150x150 mm to 1000x1000 mm</td>
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<tr>
<td>C 000430 Thickness: 1.0mm, Purity: 99.95%, Condition: Rigid graphite, Grain size: Fine, Size: 25x25 mm to 150x150 mm</td>
<td>C 003580 Weight.m$^2$: 406g, Thickness: 0.4mm, Warp Yarn: 400(T)Tex, Weft Yarn: 400(T)Tex, Ends x Picks/10cm: 50x50, Weave: 2x2 Twill, Size: 150x150 mm</td>
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<tr>
<td>C 000431 Thickness: 1.0mm, Purity: 99.95%, Condition: Rigid graphite, Grain size: Fine, Size: 200x200 mm</td>
<td><strong>Fiber</strong></td>
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<tr>
<td>C 000433 Thickness: 1.0mm, Purity: 99.95%, Condition: Rigid graphite, Grain size: Fine, Size: 305x305 mm</td>
<td>C 005780 Tex Number: 280, Filament diameter: 0.009mm, Number of filaments: 2000, Grade: F500, Condition: Epoxy sized (1.0%)</td>
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<tr>
<td>C 000330 Thickness: 1.0mm, Purity: 99.8%, Condition: Flexible graphite, Size: 50x50 mm to 500x500 mm</td>
<td>C 005785 Tex Number: 320, Filament diameter: 0.01mm, Number of filaments: 2000, Grade: P100, Condition: Epoxy sized</td>
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<tr>
<td>C 000620 Thickness: 2.0mm, Condition: HOPG, Size: 5x5 mm to 15x15 mm</td>
<td>C 005711 Tex Number: 400, Filament diameter: 0.007mm, Number of filaments: 6000, Grade: Tenax HTA, Condition: Epoxy sized (1.2%)</td>
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<tr>
<td>C 000438 Thickness: 2.0mm, Purity: 99.95%, Condition: Rigid graphite, Grain size: Fine, Size: 305x305 mm</td>
<td>C 005731 Tex Number: 400, Filament diameter: 0.0048mm, Number of filaments: 12000, Condition: Continuous multi-filament TOW.</td>
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<tr>
<td>C 000440 Thickness: 2.5mm, Purity: 99.95%, Condition: Rigid graphite, Grain size: Fine, Size: 25x25 mm to 100x100 mm</td>
<td>C 005732 Tex Number: 430, Number of filaments: 12000</td>
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<tr>
<td>C 000460 Thickness: 3.0mm, Purity: 99.95%, Condition: Rigid graphite, Grain size: Fine, Size: 50x250 mm</td>
<td>C 005725 Tex Number: 795, Filament diameter: 0.007mm, Number of filaments: 12000, Grade: XAS, Condition: Epoxy sized (1.6%)</td>
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<tr>
<td>C 000470 Thickness: 5.0mm, Purity: 99.95%, Condition: Rigid graphite, Grain size: Fine, Diameter: 30 mm</td>
<td>C 005722 Tex Number: 795, Filament diameter: 0.007mm, Number of filaments: 12000, Grade: 34-700, Condition: Unsized</td>
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<tr>
<td>C 000350 Thickness: 5.0mm, Purity: 99.5%, Condition: Rigid graphite, Grain size: Medium, Size: 50x50 mm to 150x150 mm</td>
<td>C 005730 Tex Number: 900, Filament diameter: 0.008mm, Number of filaments: 10000, Grade: HM, Condition: Epoxy sized (0.7%)</td>
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</tr>
<tr>
<td>C 000480 Thickness: 7.8mm, Purity: 99.95%, Condition: Rigid graphite, Grain size: Fine, Size: 52x78 mm to 100x105 mm</td>
<td><strong>Chopped Fiber</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>C 000490 Thickness: 10.0mm, Purity: 99.95%, Condition: Rigid graphite, Grain size: Fine, Size: 48.5x110 mm</td>
<td>C 006510 Nominal Diameter: 0.007mm, Fiber length: 1mm, Condition: Epoxy sized (1.2%), Grade: 34-700</td>
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<tr>
<td>C 000360 Thickness: 10.0mm, Purity: 99.5%, Condition: Rigid graphite, Grain size: Medium, Size: 48x150 mm to 150x150 mm</td>
<td>C 006560 Nominal Diameter: 0.007mm, Fiber length: 6mm, Condition: Epoxy sized (1.2%), Grade: 34-700</td>
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<td></td>
</tr>
</tbody>
</table>

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## Metals

### Rod

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
<th>Purity</th>
<th>Condition</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>C 007905</td>
<td>0.5mm</td>
<td>99.95%</td>
<td>Graphite, Particle size: Ultrafine 1-5 microns</td>
<td>2 mm</td>
</tr>
<tr>
<td>C 007906</td>
<td>0.5mm</td>
<td>99.95%</td>
<td>Graphite, Particle size: Ultrafine 1-5 microns</td>
<td>50 mm</td>
</tr>
<tr>
<td>C 007908</td>
<td>1.0mm</td>
<td>99.95%</td>
<td>Graphite, Particle size: Ultrafine 1-5 microns</td>
<td>50 mm to 100 mm</td>
</tr>
<tr>
<td>C 007909</td>
<td>1.5mm</td>
<td>99.997%</td>
<td>Graphite, Particle size: Ultrafine 1-5 microns</td>
<td>50 mm</td>
</tr>
<tr>
<td>C 007911</td>
<td>2.0mm</td>
<td>99.997%</td>
<td>Graphite, Particle size: Ultrafine 1-5 microns</td>
<td>100 mm to 300 mm</td>
</tr>
<tr>
<td>C 007910</td>
<td>3.0mm</td>
<td>99.997%</td>
<td>Graphite, Particle size: Medium 21-100 microns</td>
<td>100 mm to 300 mm</td>
</tr>
<tr>
<td>C 007912</td>
<td>3.0mm</td>
<td>99.997%</td>
<td>Graphite, Particle size: Medium 21-100 microns</td>
<td>100 mm to 300 mm</td>
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<tr>
<td>C 007920</td>
<td>5.0mm</td>
<td>99.997%</td>
<td>Graphite, Particle size: Ultrafine 1-5 microns</td>
<td>100 mm to 300 mm</td>
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<tr>
<td>C 007921</td>
<td>6.35mm</td>
<td>99.997%</td>
<td>Graphite, Particle size: Medium 21-100 microns</td>
<td>100 mm to 300 mm</td>
</tr>
<tr>
<td>C 007930</td>
<td>10.0mm</td>
<td>99.997%</td>
<td>Graphite, Particle size: Medium 21-100 microns</td>
<td>100 mm to 300 mm</td>
</tr>
<tr>
<td>C 007935</td>
<td>12.5mm</td>
<td>99.997%</td>
<td>Graphite, Particle size: Medium 21-100 microns</td>
<td>308 mm</td>
</tr>
<tr>
<td>C 007940</td>
<td>13.0mm</td>
<td>99.997%</td>
<td>Graphite, Particle size: Medium 21-100 microns</td>
<td>100 mm to 300 mm</td>
</tr>
<tr>
<td>C 007950</td>
<td>25mm</td>
<td>99.95%</td>
<td>Graphite, Particle size: Ultrafine 1-5 microns</td>
<td>50 mm to 300 mm</td>
</tr>
<tr>
<td>C 007955</td>
<td>25mm</td>
<td>99.997%</td>
<td>Graphite, Particle size: Ultrafine 1-5 microns</td>
<td>50 mm to 150 mm</td>
</tr>
<tr>
<td>C 007975</td>
<td>50mm</td>
<td>99.95%</td>
<td>Graphite, Particle size: Ultrafine 1-5 microns</td>
<td>50 mm to 150 mm</td>
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<tr>
<td>C 007980</td>
<td>70mm</td>
<td>99.95%</td>
<td>Graphite, Particle size: Ultrafine 1-5 microns</td>
<td>150 mm</td>
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### Tube

<table>
<thead>
<tr>
<th>Code</th>
<th>Outside Diameter</th>
<th>Wall Thickness</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>C 007200</td>
<td>3.18mm</td>
<td>1.0mm</td>
<td>Inside Diameter: 1.18mm, Purity: 99.95%, Condition: Graphite, Length: 50 mm to 150 mm</td>
</tr>
<tr>
<td>C 007201</td>
<td>3.18mm</td>
<td>0.8mm</td>
<td>Inside Diameter: 1.58mm, Purity: 99.95%, Condition: Graphite, Length: 50 mm to 150 mm</td>
</tr>
<tr>
<td>C 007300</td>
<td>6.35mm</td>
<td>1.0mm</td>
<td>Inside Diameter: 3.15mm, Purity: 99.95%, Condition: Graphite, Length: 50 mm to 150 mm</td>
</tr>
<tr>
<td>C 007400</td>
<td>12.7mm</td>
<td>1.6mm</td>
<td>Inside Diameter: 9.5mm, Purity: 99.99%, Condition: Graphite, Length: 50 mm to 150 mm</td>
</tr>
</tbody>
</table>

### Powder

<table>
<thead>
<tr>
<th>Code</th>
<th>Max. Particle size</th>
<th>High Purity</th>
<th>Condition</th>
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</thead>
<tbody>
<tr>
<td>C 006011</td>
<td>75micron</td>
<td>99.997%</td>
<td>Graphite</td>
</tr>
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### Lump

<table>
<thead>
<tr>
<th>Code</th>
<th>Max. Lump size</th>
<th>Purity</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>C 006101</td>
<td>1.5mm</td>
<td>99.9%</td>
<td></td>
</tr>
<tr>
<td>C 006100</td>
<td>1.5mm</td>
<td>99.8%</td>
<td></td>
</tr>
</tbody>
</table>

## Carbon - Diamond (C )

### Film

<table>
<thead>
<tr>
<th>Code</th>
<th>Thickness</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1001075</td>
<td>0.001 mm</td>
<td>Ultrananocrystalline diamond (UNCD), Grade: AQUA 100, Size: 25x25 mm</td>
</tr>
<tr>
<td>D1001076</td>
<td>0.001 mm</td>
<td>Ultrananocrystalline diamond (UNCD), Grade: AQUA 100, Diameter: 100 mm</td>
</tr>
<tr>
<td>D1001040</td>
<td>0.002 mm</td>
<td>Ultrananocrystalline diamond (UNCD), Condition: Lightning 25, Dopant: Boron, Substrate: Niobium, Size: 25x25 mm</td>
</tr>
<tr>
<td>D1001060</td>
<td>0.002 mm</td>
<td>Ultrananocrystalline diamond (UNCD), Grade: AQUA 25, Size: 25x25 mm</td>
</tr>
<tr>
<td>D1001065</td>
<td>0.002 mm</td>
<td>Ultrananocrystalline diamond (UNCD), Grade: AQUA 40, Size: 25x25 mm</td>
</tr>
<tr>
<td>D1001070</td>
<td>0.002 mm</td>
<td>Ultrananocrystalline diamond (UNCD), Grade: AQUA 50, Size: 25x25 mm</td>
</tr>
<tr>
<td>D1001061</td>
<td>0.002 mm</td>
<td>Ultrananocrystalline diamond (UNCD), Grade: AQUA 25, Diameter: 100 mm</td>
</tr>
<tr>
<td>D1001091</td>
<td>0.25mm</td>
<td>Synthetic, Condition: Single crystal, Size: 3x3 mm</td>
</tr>
<tr>
<td>D1001080</td>
<td>0.30mm</td>
<td>CVD, Polycrystalline, Diameter: 5 mm</td>
</tr>
<tr>
<td>D1001082</td>
<td>0.30mm</td>
<td>CVD, Polycrystalline, Diameter: 10 mm</td>
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## Carbon - Vitreous - 3000C (C)

### Foil

<table>
<thead>
<tr>
<th>Code</th>
<th>Thickness</th>
<th>Tolerance</th>
<th>Condition</th>
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</thead>
<tbody>
<tr>
<td>VC000250</td>
<td>0.2mm</td>
<td>±0.04mm</td>
<td>Glassy Carbon, Maximum temperature: 3000C in vacuum or inert gas (500-600C in air), Diameter: 10 mm</td>
</tr>
<tr>
<td>VC000395</td>
<td>0.5mm</td>
<td></td>
<td>Glassy Carbon, Maximum temperature: 3000C in vacuum or inert gas (500-600C in air), Size: 6x8 mm</td>
</tr>
<tr>
<td>VC000400</td>
<td>0.5mm</td>
<td></td>
<td>Glassy Carbon, Maximum temperature: 3000C in vacuum or inert gas (500-600C in air), Size: 12.5x12.5 mm to 25x25 mm</td>
</tr>
<tr>
<td>VC000503</td>
<td>1.0mm</td>
<td></td>
<td>Glassy Carbon, Maximum temperature: 3000C in vacuum or inert gas (500-600C in air), Diameter: 8 mm to 10 mm</td>
</tr>
<tr>
<td>VC000502</td>
<td>1.0mm</td>
<td></td>
<td>Glassy Carbon, Maximum temperature: 3000C in vacuum or inert gas (500-600C in air), Size: 10x10 mm</td>
</tr>
<tr>
<td>VC000500</td>
<td>1.0mm</td>
<td></td>
<td>Glassy Carbon, Maximum temperature: 3000C in vacuum or inert gas (500-600C in air), Size: 50x50 mm to 100x100 mm</td>
</tr>
</tbody>
</table>

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## Metals

<table>
<thead>
<tr>
<th>Code</th>
<th>Thickness</th>
<th>Condition</th>
<th>Maximum temperature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>VC00501</td>
<td>1.0mm</td>
<td>Glassy Carbon</td>
<td>3000°C in vacuum</td>
<td>200x200 mm</td>
</tr>
<tr>
<td>VC00551</td>
<td>2.0mm</td>
<td>Glassy Carbon</td>
<td>3000°C in vacuum</td>
<td>10x10 mm</td>
</tr>
<tr>
<td>VC00550</td>
<td>2.0mm</td>
<td>Glassy Carbon</td>
<td>3000°C in vacuum</td>
<td>100x100 mm</td>
</tr>
<tr>
<td>VC00601</td>
<td>4.0mm</td>
<td>Glassy Carbon</td>
<td>3000°C in vacuum</td>
<td>10x10 mm</td>
</tr>
<tr>
<td>VC00600</td>
<td>4.0mm</td>
<td>Glassy Carbon</td>
<td>3000°C in vacuum</td>
<td>25x25 mm to 50x50 mm</td>
</tr>
<tr>
<td>VC00650</td>
<td>6.0mm</td>
<td>Glassy Carbon</td>
<td>3000°C in vacuum</td>
<td>100x100 mm</td>
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### Foam

<table>
<thead>
<tr>
<th>Code</th>
<th>Thickness</th>
<th>Pore Size</th>
<th>Density</th>
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<tbody>
<tr>
<td>VC003810</td>
<td>2.5mm</td>
<td>0.05g/cm³</td>
<td>96.5%</td>
</tr>
<tr>
<td>VC003821</td>
<td>3.2mm</td>
<td>0.05g/cm³</td>
<td>96.5%</td>
</tr>
<tr>
<td>VC003823</td>
<td>3.2mm</td>
<td>0.05g/cm³</td>
<td>96.5%</td>
</tr>
<tr>
<td>VC003825</td>
<td>6.35mm</td>
<td>0.05g/cm³</td>
<td>96.5%</td>
</tr>
<tr>
<td>VC003827</td>
<td>6.35mm</td>
<td>0.05g/cm³</td>
<td>96.5%</td>
</tr>
<tr>
<td>VC003829</td>
<td>10.0mm</td>
<td>0.05g/cm³</td>
<td>96.5%</td>
</tr>
<tr>
<td>VC003830</td>
<td>12.7mm</td>
<td>0.05g/cm³</td>
<td>96.5%</td>
</tr>
<tr>
<td>VC003837</td>
<td>20mm</td>
<td>0.05g/cm³</td>
<td>96.5%</td>
</tr>
<tr>
<td>VC003840</td>
<td>30mm</td>
<td>0.05g/cm³</td>
<td>96.5%</td>
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### Rod

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
<th>Condition</th>
<th>Maximum temperature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>VC007905</td>
<td>1.0mm</td>
<td>Glassy Carbon</td>
<td>3000°C in vacuum</td>
<td>50 mm to 200 mm</td>
</tr>
<tr>
<td>VC007916</td>
<td>3.0mm</td>
<td>Glassy Carbon</td>
<td>3000°C in vacuum</td>
<td>5 mm</td>
</tr>
<tr>
<td>VC007915</td>
<td>3.0mm</td>
<td>Glassy Carbon</td>
<td>3000°C in vacuum</td>
<td>100 mm to 200 mm</td>
</tr>
<tr>
<td>VC007925</td>
<td>5.0mm</td>
<td>Glassy Carbon</td>
<td>3000°C in vacuum</td>
<td>100 mm to 200 mm</td>
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</tbody>
</table>

### Tube

<table>
<thead>
<tr>
<th>Code</th>
<th>Outside Diameter</th>
<th>Wall Thickness</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>VC007500</td>
<td>10mm</td>
<td>1.5mm</td>
<td>50 mm to 100 mm</td>
</tr>
<tr>
<td>VC007800</td>
<td>3.46mm</td>
<td>0.005mm</td>
<td>50 mm to 100 mm</td>
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### Powder

<table>
<thead>
<tr>
<th>Code</th>
<th>Particle size</th>
<th>Details</th>
</tr>
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<tbody>
<tr>
<td>VC006010</td>
<td>12 micron</td>
<td>0.4micron</td>
</tr>
<tr>
<td>VC006015</td>
<td>50 micron</td>
<td>2micron</td>
</tr>
<tr>
<td>VC006021</td>
<td>300micron</td>
<td>0.1micron</td>
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### Granule

<table>
<thead>
<tr>
<th>Code</th>
<th>Nominal Granule Size</th>
<th>Maximum temperature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>VC006303</td>
<td>2-3mm</td>
<td>3000°C in vacuum</td>
<td>60x60 mm</td>
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<tr>
<td>VC006304</td>
<td>3-4mm</td>
<td>3000°C in vacuum</td>
<td>100x100 mm</td>
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</table>

### Cerium (Ce)

<table>
<thead>
<tr>
<th>Code</th>
<th>Thickness</th>
<th>Purity</th>
<th>Temper</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE000205</td>
<td>0.005mm</td>
<td>99.9%</td>
<td>As rolled</td>
<td>25x25 mm</td>
</tr>
<tr>
<td>CE000200</td>
<td>0.025mm</td>
<td>99.9%</td>
<td>As rolled</td>
<td>25x25 mm to 50x50 mm</td>
</tr>
<tr>
<td>CE000210</td>
<td>0.1mm</td>
<td>99.9%</td>
<td>As rolled</td>
<td>25x25 mm to 100x100 mm</td>
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</tbody>
</table>
### Metals

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Dimensions</th>
<th>Purity</th>
<th>Support</th>
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</thead>
<tbody>
<tr>
<td>CR000050</td>
<td>0.003mm, Purity: 99.99%, Support: Permanent Polyester, Size: 25x25 mm to 50x50 mm</td>
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<tr>
<td>CR000060</td>
<td>0.004mm, Purity: 99.99%, Support: Permanent Polyester, Size: 25x25 mm to 50x50 mm</td>
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<tr>
<td>CR000070</td>
<td>0.005mm, Purity: 99.99%, Support: Permanent Polyester, Size: 25x25 mm to 50x50 mm</td>
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<tr>
<td>CR000080</td>
<td>0.006mm, Purity: 99.99%, Support: Permanent Polyester, Size: 25x25 mm to 50x50 mm</td>
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<td>CR000100</td>
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<tr>
<td>CR000120</td>
<td>0.01mm, Purity: 99.99%, Support: Permanent Polyester, Size: 25x25 mm to 100x100 mm</td>
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<tr>
<td>CR000130</td>
<td>0.0125mm, Purity: 99.99%, Support: Permanent Polyester, Size: 25x25 mm to 100x100 mm</td>
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<tr>
<td>CR000140</td>
<td>0.015mm, Purity: 99.99%, Support: Permanent Polyester, Size: 25x25 mm to 100x100 mm</td>
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<tr>
<td>CR000150</td>
<td>0.02mm, Purity: 99.99%, Support: Permanent Polyester, Size: 25x25 mm to 100x100 mm</td>
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<td></td>
</tr>
<tr>
<td>CR000160</td>
<td>0.025mm, Purity: 99.99%, Support: Permanent Polyester, Size: 25x25 mm to 100x100 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR000170</td>
<td>0.03mm, Purity: 99.99%, Support: Permanent Polyester, Size: 25x25 mm to 100x100 mm</td>
<td></td>
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<tr>
<td>CR000180</td>
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<tr>
<td>CR000190</td>
<td>0.05mm, Purity: 99.99%, Support: Permanent Polyester, Size: 25x25 mm to 50x50 mm</td>
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<tr>
<td>CR000191</td>
<td>0.075mm, Purity: 99.99%, Support: Permanent Polyester, Size: 25x25 mm to 100x100 mm</td>
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<tr>
<td>CR000310</td>
<td>0.5mm, Purity: 99.7+% , Temper: Hard, Size: 10x10 mm</td>
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<tr>
<td>CR000210</td>
<td>0.5mm, Purity: 99.99%, Size: 12.5x12.5 mm to 100x100 mm</td>
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<tr>
<td>CR000215</td>
<td>0.75mm, Tolerance: 20 %, Purity: 99.99%, Size: 25x25 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR000220</td>
<td>1.0mm, Purity: 99.99%, Size: 12.5x12.5 mm to 100x100 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR000230</td>
<td>1.5mm, Purity: 99.99%, Size: 25x25 mm to 100x100 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR000340</td>
<td>2.0mm, Purity: 99.7+, Temper: Hard, Size: 25x25 mm to 100x100 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR000240</td>
<td>2.0mm, Purity: 99.99%, Size: 25x25 mm to 100x100 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR000360</td>
<td>3.0mm, Purity: 99.95%, Temper: Hard, Size: 50x50 mm to 100x100 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR000400</td>
<td>6mm, Purity: 99.95%, Condition: Hot isostatic pressed, Size: 150x150 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Cesium (Cs)

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Dimensions</th>
<th>Purity</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE000200</td>
<td>Thickness: 0.25mm, Purity: 99.99%, Temper: As rolled, Size: 50x50 mm to 100x100 mm</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>CE000250</td>
<td>Thickness: 2.0mm, Purity: 99.99%, Temper: As rolled, Size: 50x50 mm to 100x100 mm</td>
<td></td>
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</table>

### Chromium (Cr)

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Dimensions</th>
<th>Purity</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE009100</td>
<td>Thickness: 1.0mm, Purity: 99.99%, Size: 50 mm to 75 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CE009300</td>
<td>Thickness: 3.0mm, Purity: 99.99%, Size: 50 mm to 75 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Wire

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Diameter</th>
<th>Purity</th>
<th>Temper</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE05110</td>
<td>1.0mm</td>
<td>99.99%</td>
<td>Hard</td>
</tr>
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</table>

### Rod

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Diameter</th>
<th>Purity</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE07910</td>
<td>6.35mm</td>
<td>99.9%</td>
<td>Cast, Length: 50 mm to 100 mm</td>
</tr>
<tr>
<td>CE07950</td>
<td>12.7mm</td>
<td>99.9%</td>
<td>Cast, Length: 50 mm to 100 mm</td>
</tr>
</tbody>
</table>

### Powder

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Max. Particle size</th>
<th>Purity</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE06011</td>
<td>45micron</td>
<td>99.9%</td>
</tr>
</tbody>
</table>

### Lump

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Max. Lump size</th>
<th>Purity</th>
<th>Melting Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE06100</td>
<td>25mm</td>
<td>99.9%</td>
<td>28.5°C</td>
</tr>
</tbody>
</table>

### Microfoil

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Thickness</th>
<th>Specific density</th>
<th>Purity</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR004020</td>
<td>0.025µm</td>
<td>18.21µg.cm^-2</td>
<td>99.99%</td>
<td>Permanent Mylar 3.5µm, Diameter: 10 mm</td>
</tr>
<tr>
<td>CR004300</td>
<td>0.05µm</td>
<td>37.27µg.cm^-2</td>
<td>99.99%</td>
<td>Permanent Mylar 3.5µm, Diameter: 10 mm to 25 mm</td>
</tr>
<tr>
<td>CR004600</td>
<td>0.25µm</td>
<td>178.7µg.cm^-2</td>
<td>99.99%</td>
<td>Permanent Mylar 3.5µm, Diameter: 10 mm to 25 mm</td>
</tr>
<tr>
<td>CR004700</td>
<td>0.5µm</td>
<td>355µg.cm^-2</td>
<td>99.99%</td>
<td>Permanent Mylar 3.5µm, Diameter: 10 mm to 25 mm</td>
</tr>
<tr>
<td>CR004850</td>
<td>1.0µm</td>
<td>719µg.cm^-2</td>
<td>99.99%</td>
<td>Permanent Mylar 3.5µm, Diameter: 10 mm to 25 mm</td>
</tr>
</tbody>
</table>

### Foil

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Thickness</th>
<th>Purity</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR000020</td>
<td>0.001mm</td>
<td>99.99%</td>
<td>Permanent Polyester, Size: 25x25 mm to 50x50 mm</td>
</tr>
<tr>
<td>CR000025</td>
<td>0.0015mm</td>
<td>99.99%</td>
<td>Permanent Polyester, Size: 25x25 mm to 50x50 mm</td>
</tr>
<tr>
<td>CR000030</td>
<td>0.002mm</td>
<td>99.99%</td>
<td>Permanent Polyester, Size: 25x25 mm to 50x50 mm</td>
</tr>
<tr>
<td>CR000040</td>
<td>0.0025mm</td>
<td>99.99%</td>
<td>Permanent Polyester, Size: 25x25 mm to 50x50 mm</td>
</tr>
</tbody>
</table>

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**Goodfellow Cambridge Limited**

**Goodfellow Corporation**

**Tel 1-800-821-2870**

**Fax 1-800-283-2020**

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February 2017
<table>
<thead>
<tr>
<th><strong>Sputtering Target</strong></th>
<th><strong>Foil</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>CR009301 Thickness: 3.0mm, Purity: 99.9%, Size: 25 mm to 75 mm</td>
<td>CO004600 Thinness: 0.25µm, Specific density: 222µg.cm⁻², Purity: 99.9%, Support: Permanent Mylar 3.5µm, Diameter: 10 mm to 25 mm</td>
</tr>
<tr>
<td>CR009302 Thickness: 3.0mm, Purity: 99.99%, Size: 25 mm to 75 mm</td>
<td>CO004700 Thinness: 0.5µm, Specific density: 434µg.cm⁻², Purity: 99.9%, Support: Permanent Mylar 3.5µm, Diameter: 10 mm to 25 mm</td>
</tr>
<tr>
<td>CR009300 Thickness: 3.0mm, Purity: 99.95%, Size: 25 mm to 76.2 mm</td>
<td>CO004850 Thinness: 1.0µm, Specific density: 890µg.cm⁻², Purity: 99.9%, Support: Permanent Mylar 3.5µm, Diameter: 10 mm to 25 mm</td>
</tr>
<tr>
<td>CR009601 Thickness: 6.0mm, Purity: 99.9%, Size: 50 mm to 75 mm</td>
<td><strong>Cobalt (Co)</strong></td>
</tr>
<tr>
<td>CR009600 Thickness: 6.0mm, Purity: 99.95%, Size: 50 mm to 75 mm</td>
<td><strong>Microfoil</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Bar</strong></th>
<th><strong>Single Crystal</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>CR008010 Side Length: 2mm, Side Length (of longer side): 2mm, Purity: 99.7 +%, Length: 100 mm</td>
<td>CR002111 Oriented: (100), Thickness: 2mm, Diameter: 10mm, Purity: 99.999%, Condition: Polished on 1 side to 1 micron</td>
</tr>
<tr>
<td><strong>Powder</strong></td>
<td><strong>Cobalt (Co)</strong></td>
</tr>
<tr>
<td>CR006031 Mean Particle size: &lt;10micron, Purity: 99.0%</td>
<td>Co004500 Thinness: 0.1µm, Specific density: 94.6µg.cm⁻², Purity: 99.9%, Support: Permanent Mylar 3.5µm, Diameter: 10 mm to 25 mm</td>
</tr>
<tr>
<td>CR006021 Max. Particle size: 38micron, Purity: 99.0 +%</td>
<td><strong>Cobalt (Co)</strong></td>
</tr>
<tr>
<td>CR006025 Max. Particle size: 45micron, Min. Particle size: 38micron, Purity: 99.0 +%</td>
<td><strong>Microfoil</strong></td>
</tr>
<tr>
<td>CR006020 Max. Particle size: 200micron, Purity: 99.0 +%</td>
<td>Co004500 Thinness: 0.1µm, Specific density: 94.6µg.cm⁻², Purity: 99.9%, Support: Permanent Mylar 3.5µm, Diameter: 10 mm to 25 mm</td>
</tr>
<tr>
<td><strong>Lump</strong></td>
<td><strong>Foil</strong></td>
</tr>
<tr>
<td>CR006115 Max. Lump size: 10mm, Purity: 99.95%, Condition: Pellets</td>
<td>CO00050 Thinness: 0.001mm, Purity: 99.9%, Support: Temporary Acrylic, Size: 25x25 mm to 50x50 mm</td>
</tr>
<tr>
<td>CR006100 Max. Lump size: 10mm, Purity: 99.99%</td>
<td>CO00060 Thinness: 0.002mm, Purity: 99.9%, Support: Temporary Acrylic, Size: 25x25 mm to 50x50 mm</td>
</tr>
<tr>
<td>CR006110 Max. Lump size: 25mm, Purity: 99.95%</td>
<td>CO00070 Thinness: 0.0025mm, Purity: 99.9%, Size: 25x25 mm to 50x50 mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Metal Shapes</strong></th>
<th><strong>Thickness</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Foil</strong></td>
<td><strong>Thickness</strong></td>
</tr>
<tr>
<td>Co004600 Thinness: 0.25µm, Specific density: 222µg.cm⁻², Purity: 99.9%, Support: Permanent Mylar 3.5µm, Diameter: 10 mm to 25 mm</td>
<td><strong>Cobalt (Co)</strong></td>
</tr>
<tr>
<td>Co004700 Thinness: 0.5µm, Specific density: 434µg.cm⁻², Purity: 99.9%, Support: Permanent Mylar 3.5µm, Diameter: 10 mm to 25 mm</td>
<td><strong>Microfoil</strong></td>
</tr>
<tr>
<td>Co004850 Thinness: 1.0µm, Specific density: 890µg.cm⁻², Purity: 99.9%, Support: Permanent Mylar 3.5µm, Diameter: 10 mm to 25 mm</td>
<td>Co004500 Thinness: 0.1µm, Specific density: 94.6µg.cm⁻², Purity: 99.9%, Support: Permanent Mylar 3.5µm, Diameter: 10 mm to 25 mm</td>
</tr>
</tbody>
</table>

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Metals — Copper

**Metals**

**Metals**

<table>
<thead>
<tr>
<th>Code</th>
<th>Thickness</th>
<th>Purity</th>
<th>Temper</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO000282</td>
<td>0.50mm</td>
<td>99.9%</td>
<td>Annealed</td>
<td>Size: 50x50 mm to 250x250 mm</td>
</tr>
<tr>
<td>CO000285</td>
<td>0.7mm</td>
<td>99.9%</td>
<td>Tempered</td>
<td>As rolled, Size: 25x25 mm to 100x100 mm</td>
</tr>
<tr>
<td>CO000290</td>
<td>1.0mm</td>
<td>99.9%</td>
<td>Tempered</td>
<td>As rolled, Size: 25x25 mm to 50x50 mm</td>
</tr>
<tr>
<td>CO000291</td>
<td>1.0mm</td>
<td>High Purity: 99.99%</td>
<td>Tempered</td>
<td>As rolled, Size: 25x25 mm to 50x50 mm</td>
</tr>
<tr>
<td>CO000292</td>
<td>1.0mm</td>
<td>99.9%</td>
<td>Tempered</td>
<td>Annealed, Size: 50x50 mm to 250x250 mm</td>
</tr>
<tr>
<td>CO000295</td>
<td>2.0mm</td>
<td>99.9%</td>
<td>Tempered</td>
<td>As rolled, Size: 25x25 mm to 100x100 mm</td>
</tr>
<tr>
<td>CO000296</td>
<td>2.0mm</td>
<td>99.9%</td>
<td>Tempered</td>
<td>As rolled, Size: 150x150 mm</td>
</tr>
<tr>
<td>CO000300</td>
<td>3.0mm</td>
<td>99.9%</td>
<td>Tempered</td>
<td>As rolled, Size: 50x50 mm to 100x100 mm</td>
</tr>
<tr>
<td>CO000320</td>
<td>6.0mm</td>
<td>99.9%</td>
<td>Tempered</td>
<td>As rolled, Size: 70x90 mm to 79x158 mm</td>
</tr>
</tbody>
</table>

**Sputtering Target**

<table>
<thead>
<tr>
<th>Code</th>
<th>Thickness</th>
<th>Purity</th>
<th>Size</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO009100</td>
<td>1.0mm</td>
<td>99.9%</td>
<td>25 mm to 33 mm</td>
<td></td>
</tr>
<tr>
<td>CO009301</td>
<td>3.0mm</td>
<td>High Purity: 99.99%</td>
<td>25.4 mm to 50.8 mm</td>
<td></td>
</tr>
<tr>
<td>CO009300</td>
<td>3.0mm</td>
<td>99.9%</td>
<td>25 mm to 75 mm</td>
<td></td>
</tr>
<tr>
<td>CO009400</td>
<td>4.0mm</td>
<td>99.9%</td>
<td>76 mm</td>
<td></td>
</tr>
<tr>
<td>CO009600</td>
<td>6.0mm</td>
<td>99.9%</td>
<td>25 mm to 75 mm</td>
<td></td>
</tr>
</tbody>
</table>

**Wire**

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
<th>Purity</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO005080</td>
<td>0.05mm</td>
<td>99.9%</td>
<td>Tempered: Hard</td>
</tr>
<tr>
<td>CO005085</td>
<td>0.1mm</td>
<td>High Purity: 99.99%</td>
<td>Tempered: Hard</td>
</tr>
<tr>
<td>CO005090</td>
<td>0.125mm</td>
<td>High Purity: 99.99%</td>
<td>Tempered: Hard</td>
</tr>
<tr>
<td>CO005100</td>
<td>0.25mm</td>
<td>High Purity: 99.99%</td>
<td>Tempered: Hard</td>
</tr>
<tr>
<td>CO005110</td>
<td>0.5mm</td>
<td>High Purity: 99.99%</td>
<td>Tempered: Hard</td>
</tr>
<tr>
<td>CO005120</td>
<td>1.0mm</td>
<td>High Purity: 99.99%</td>
<td>Tempered: Hard</td>
</tr>
<tr>
<td>CO005130</td>
<td>2.0mm</td>
<td>High Purity: 99.99%</td>
<td>Tempered: Hard</td>
</tr>
</tbody>
</table>

**Rod**

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
<th>Purity</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO007901</td>
<td>1.5mm</td>
<td>High Purity: 99.99%</td>
<td>Tempered: Hard, Length: 25 mm to 200 mm</td>
</tr>
<tr>
<td>CO007903</td>
<td>2.0mm</td>
<td>High Purity: 99.99%</td>
<td>Tempered: Hard, Length: 2 mm</td>
</tr>
<tr>
<td>CO007902</td>
<td>2.0mm</td>
<td>High Purity: 99.99%</td>
<td>Tempered: Hard, Length: 25 mm to 200 mm</td>
</tr>
<tr>
<td>CO007905</td>
<td>3.0mm</td>
<td>High Purity: 99.99%</td>
<td>Tempered: Hard, Length: 25 mm to 500 mm</td>
</tr>
<tr>
<td>CO007907</td>
<td>4.0mm</td>
<td>High Purity: 99.9%</td>
<td>As drawn, Length: 50 mm to 500 mm</td>
</tr>
<tr>
<td>CO007910</td>
<td>5.0mm</td>
<td>High Purity: 99.99%</td>
<td>Tempered: Hard, Length: 25 mm to 50 mm</td>
</tr>
<tr>
<td>CO007915</td>
<td>6.35mm</td>
<td>High Purity: 99.9%</td>
<td>As drawn, Length: 25 mm to 200 mm</td>
</tr>
<tr>
<td>CO007925</td>
<td>10mm</td>
<td>High Purity: 99.9%</td>
<td>As drawn, Length: 25 mm to 200 mm</td>
</tr>
<tr>
<td>CO007930</td>
<td>12mm</td>
<td>High Purity: 99.9%</td>
<td>As drawn, Length: 25 mm to 200 mm</td>
</tr>
</tbody>
</table>

**Powder**

<table>
<thead>
<tr>
<th>Code</th>
<th>Mean Particle Size</th>
<th>Purity</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO006050</td>
<td>0.02micron</td>
<td>99.9%</td>
<td></td>
</tr>
<tr>
<td>CO006041</td>
<td>7.5micron</td>
<td>99.6%</td>
<td></td>
</tr>
<tr>
<td>CO006040</td>
<td>45micron</td>
<td>99.8%</td>
<td></td>
</tr>
<tr>
<td>CO006012</td>
<td>150micron, Min. Particle Size: 50micron</td>
<td>99.9%</td>
<td></td>
</tr>
</tbody>
</table>

**Lump**

<table>
<thead>
<tr>
<th>Code</th>
<th>Max. Lump Size</th>
<th>Purity</th>
<th>Condition</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO006100</td>
<td>10mm</td>
<td>99.9%</td>
<td>Pellets</td>
<td></td>
</tr>
<tr>
<td>CO006110</td>
<td>10mm, High Purity: 99.99+</td>
<td>99.99+</td>
<td>Pellets</td>
<td></td>
</tr>
<tr>
<td>CO006120</td>
<td>40mm</td>
<td>99.8%</td>
<td>Nominal 30mm rounds</td>
<td></td>
</tr>
</tbody>
</table>

**Single Crystal**

<table>
<thead>
<tr>
<th>Code</th>
<th>Oriented</th>
<th>Diameter</th>
<th>Purity</th>
<th>Condition</th>
<th>Specific Density</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO002085</td>
<td>(0001)</td>
<td>10mm</td>
<td>99.9%</td>
<td>Pellets</td>
<td>Permanent Mylar: 3.5 microns</td>
<td></td>
</tr>
<tr>
<td>CO002112</td>
<td>(0001)</td>
<td>2mm</td>
<td>99.99%</td>
<td>Polished on 1 side to 1 micron</td>
<td>Permanent Mylar: 3.5 microns</td>
<td></td>
</tr>
<tr>
<td>CO002111</td>
<td>(0001)</td>
<td>10mm</td>
<td>99.999%</td>
<td>Unpolished</td>
<td>Permanent Mylar: 3.5 microns</td>
<td></td>
</tr>
<tr>
<td>CO002090</td>
<td>(0001)</td>
<td>10mm, Length: 25 mm</td>
<td>99.999%</td>
<td></td>
<td>Permanent Mylar: 3.5 microns</td>
<td></td>
</tr>
<tr>
<td>CO002100</td>
<td>(0001)</td>
<td>10mm, Length: 20mm</td>
<td>99.999%</td>
<td></td>
<td>Permanent Mylar: 3.5 microns</td>
<td></td>
</tr>
</tbody>
</table>

**Copper (Cu)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Thickness</th>
<th>Purity</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU004500</td>
<td>0.1micron</td>
<td>99.9%</td>
<td>Support: Permanent Mylar 3.5 microns, Diameter: 10 mm to 25 mm</td>
</tr>
<tr>
<td>CU004600</td>
<td>0.25micron</td>
<td>99.9%</td>
<td>Support: Permanent Mylar 3.5 microns, Diameter: 10 mm to 25 mm</td>
</tr>
<tr>
<td>CU004700</td>
<td>0.5micron</td>
<td>99.9%</td>
<td>Support: Permanent Mylar 3.5 microns, Diameter: 10 mm to 25 mm</td>
</tr>
<tr>
<td>CU004850</td>
<td>1.0micron</td>
<td>99.9%</td>
<td>Support: Permanent Mylar 3.5 microns, Diameter: 10 mm to 25 mm</td>
</tr>
</tbody>
</table>

**Microfoil**

<table>
<thead>
<tr>
<th>Code</th>
<th>Thickness</th>
<th>Purity</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU000080</td>
<td>0.0005mm</td>
<td>99.9%</td>
<td>Support: Temporary Acrylic, Size: 25x25 mm to 50x50 mm</td>
</tr>
<tr>
<td>CU000090</td>
<td>0.00075mm</td>
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<tr>
<td>CU000100</td>
<td>0.001mm</td>
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<tr>
<td>CU000105</td>
<td>0.0015mm</td>
<td>99.9%</td>
<td>Size: 25x25 mm to 50x50 mm</td>
</tr>
</tbody>
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Metals

<table>
<thead>
<tr>
<th>Code</th>
<th>Thickness</th>
<th>Purity</th>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU000110</td>
<td>0.002mm</td>
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<td>25x25 mm to 100x100 mm</td>
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<tr>
<td>CU000120</td>
<td>0.0025mm</td>
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<tr>
<td>CU000201</td>
<td>0.0025mm</td>
<td>99.9%</td>
<td>Support Permanent Aluminum 0.04mm, 25x25 mm to 300x300 mm</td>
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<tr>
<td>CU000130</td>
<td>0.003mm</td>
<td>99.97%</td>
<td>25x25 mm to 100x100 mm</td>
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</tr>
<tr>
<td>CU000140</td>
<td>0.004mm</td>
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<tr>
<td>CU000150</td>
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<tr>
<td>CU000211</td>
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<td>99.9%</td>
<td>Support Permanent Aluminum 0.04mm, Size: 150x150 mm to 300x300 mm</td>
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<tr>
<td>CU000160</td>
<td>0.006mm</td>
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<tr>
<td>CU000170</td>
<td>0.007mm</td>
<td>99.97%</td>
<td>50x50 mm to 100x100 mm</td>
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</tr>
<tr>
<td>CU000200</td>
<td>0.0076mm</td>
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<td>25x25 mm to 100x100 mm</td>
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<tr>
<td>CU000202</td>
<td>0.0076mm</td>
<td>99.9%</td>
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<tr>
<td>CU000203</td>
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<tr>
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<td>6.6mm, Purity: 99.9%, Length: 1 m to 50 m</td>
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<tr>
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<td>CU000206</td>
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<td>CU000207</td>
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<td>CU000208</td>
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<tr>
<td>CU000215</td>
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<td>CU000220</td>
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<td>CU000229</td>
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<tr>
<td>CU000230</td>
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<tr>
<td>CU000251</td>
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<td>150x150 mm</td>
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<tr>
<td>CU000260</td>
<td>0.012mm</td>
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<td>99.99 + %, Purity: 99.99 %, Size: 25x25 mm to 100x150 mm</td>
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<tr>
<td>CU000300</td>
<td>0.0125mm</td>
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<td>150x150 mm</td>
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<tr>
<td>CU000315</td>
<td>0.0125mm</td>
<td></td>
<td>99.9%, Purity: 99.9%, Coil width 150 mm, Size: 25x25 mm to 150x150 mm</td>
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<tr>
<td>CU000320</td>
<td>0.015mm</td>
<td>99.99%</td>
<td>150x150 mm</td>
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<tr>
<td>CU000370</td>
<td>0.02mm</td>
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<td>12mm, Purity: 99.9%, Supports: Half hard, Length: 1 m to 100 m</td>
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<tr>
<td>CU000371</td>
<td>0.025mm</td>
<td>99.9%</td>
<td>16mm, Purity: 99.9%, Tempered: Half hard, Length: 1 m to 100 m</td>
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<tr>
<td>CU000372</td>
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<tr>
<td>CU000380</td>
<td>0.03mm</td>
<td>99.9%</td>
<td>150x150 mm</td>
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</tr>
<tr>
<td>CU000390</td>
<td>0.03mm</td>
<td>99.9%</td>
<td>150x150 mm</td>
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<tr>
<td>CU000400</td>
<td>0.038mm</td>
<td>99.9%</td>
<td>30mm, Purity: 99.9%, Tempered: Half hard, Length: 1 m to 100 m</td>
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<tr>
<td>CU000410</td>
<td>0.038mm</td>
<td>99.9%</td>
<td>150x150 mm</td>
<td></td>
</tr>
<tr>
<td>CU000420</td>
<td>0.025mm</td>
<td>99.95%</td>
<td>25x25 mm to 150x150 mm</td>
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</tr>
<tr>
<td>CU000428</td>
<td>0.03mm</td>
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<td>25x25 mm to 150x150 mm</td>
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<tr>
<td>CU000438</td>
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<tr>
<td>CU000440</td>
<td>0.038mm</td>
<td>99.9%</td>
<td>150x150 mm</td>
<td></td>
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<tr>
<td>CU000460</td>
<td>0.038mm</td>
<td>99.9%</td>
<td>25x25 mm to 150x150 mm</td>
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</table>

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<table>
<thead>
<tr>
<th>CU000425</th>
<th>Thickness: 0.04mm, Coil width: 12.5mm, Purity: 99.9%, Temper: Annealed, Length: 1 m to 20 m</th>
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<tbody>
<tr>
<td>CU000465</td>
<td>Thickness: 0.04mm, Coil width: 25mm, Purity: 99.9%, Temper: Half hard, Length: 1 m to 50 m</td>
</tr>
<tr>
<td>CU000466</td>
<td>Thickness: 0.045mm, Coil width: 25.4mm, Purity: 99.9%, Temper: Half hard, Length: 1 m to 100 m</td>
</tr>
<tr>
<td>CU000470</td>
<td>Thickness: 0.05mm, Coil width: 1.5mm, Purity: 99.9%, Temper: Half hard, Length: 1 m to 50 m</td>
</tr>
<tr>
<td>CU000467</td>
<td>Thickness: 0.05mm, Coil width: 3.2mm, Purity: 99.9%, Temper: Annealed, Length: 1 m to 100 m</td>
</tr>
<tr>
<td>CU000468</td>
<td>Thickness: 0.05mm, Coil width: 6mm, Purity: 99.9%, Temper: Annealed, Length: 1 m to 100 m</td>
</tr>
<tr>
<td>CU000469</td>
<td>Thickness: 0.05mm, Coil width: 8mm, Purity: 99.9%, Temper: Annealed, Length: 1 m to 500 m</td>
</tr>
<tr>
<td>CU000472</td>
<td>Thickness: 0.05mm, Coil width: 10mm, Purity: 99.9%, Temper: Annealed, Length: 1 m to 200 m</td>
</tr>
<tr>
<td>CU000473</td>
<td>Thickness: 0.05mm, Coil width: 12mm, Purity: 99.9%, Temper: Annealed, Length: 1 m to 200 m</td>
</tr>
<tr>
<td>CU000497</td>
<td>Thickness: 0.05mm, Coil width: 20mm, Purity: 99.9%, Temper: Annealed, Length: 1 m to 20 m</td>
</tr>
<tr>
<td>CU000499</td>
<td>Thickness: 0.05mm, Coil width: 25mm, Purity: 99.9%, Temper: Annealed, Length: 1 m</td>
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<tr>
<td>CU000498</td>
<td>Thickness: 0.05mm, Coil width: 30mm, Purity: 99.9%, Temper: Annealed, Length: 1 m to 20 m</td>
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<tr>
<td>CU000495</td>
<td>Thickness: 0.05mm, Purity: 99.9%, Temper: Annealed, Coil width 150 mm, Size: 25x25 mm to 150x150 mm</td>
</tr>
<tr>
<td>CU000491</td>
<td>Thickness: 0.05mm, High Purity: 99.99 +%, Temper: As rolled, Coil width 150 mm, Size: 25x25 mm to 150x150 mm</td>
</tr>
<tr>
<td>CU000496</td>
<td>Thickness: 0.05mm, Coil width: 300mm, Purity: 99.9%, Temper: Annealed, Length: 0.5 to 2 m</td>
</tr>
<tr>
<td>CU000500</td>
<td>Thickness: 0.05mm, Purity: 99.9%, Temper: Half hard, Coil width 305 mm, Size: 25x25 mm to 300x300 mm</td>
</tr>
<tr>
<td>CU000520</td>
<td>Thickness: 0.068mm, Purity: 99.95%, Coil width 300 mm, Size: 25x25 mm to 300x300 mm</td>
</tr>
<tr>
<td>CU000531</td>
<td>Thickness: 0.075mm, Coil width: 10mm, Purity: 99.9%, Temper: Annealed, Length: 1 m to 50 m</td>
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<tr>
<td>CU000541</td>
<td>Thickness: 0.075mm, Purity: 99.9%, Temper: Hard, Coil width 150 mm, Size: 25x25 mm to 150x150 mm</td>
</tr>
<tr>
<td>CU000540</td>
<td>Thickness: 0.075mm, Purity: 99.9%, Temper: Half hard, Coil width 150 mm, Size: 25x25 mm to 150x150 mm</td>
</tr>
<tr>
<td>CU000550</td>
<td>Thickness: 0.075mm, High Purity: 99.99 +%, Temper: As rolled, Coil width 150 mm, Size: 25x25 mm to 150x150 mm</td>
</tr>
<tr>
<td>CU000530</td>
<td>Thickness: 0.075mm, Purity: 99.9%, Temper: Annealed, Coil width 165 mm, Size: 25x25 mm to 150x150 mm</td>
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<tr>
<td>CU000542</td>
<td>Thickness: 0.075mm, Purity: 99.9%, Temper: Half hard, Coil width 300 mm, Size: 300x300 mm</td>
</tr>
<tr>
<td>CU000532</td>
<td>Thickness: 0.075mm, Purity: 99.9%, Temper: Annealed, Condition: Flattened, Size: 150x150 mm to 300x450 mm</td>
</tr>
<tr>
<td>CU000547</td>
<td>Thickness: 0.1mm, Coil width: 0.75mm, Purity: 99.9%, Temper: Annealed, Length: 0.1 m to 10 m</td>
</tr>
<tr>
<td>CU000548</td>
<td>Thickness: 0.1mm, Coil width: 1mm, Purity: 99.9%, Temper: Annealed, Length: 0.1 m to 10 m</td>
</tr>
<tr>
<td>CU000551</td>
<td>Thickness: 0.1mm, Coil width: 1.5mm, Purity: 99.9%, Temper: Half hard, Length: 1 m to 50 m</td>
</tr>
</tbody>
</table>

Metals — Copper

CU000553 | Thickness: 0.1mm, Coil width: 3mm, Purity: 99.9%, Temper: Annealed, Length: 1 m to 10 m |
CU000552 | Thickness: 0.1mm, Coil width: 4.8mm, Purity: 99.9%, Temper: As rolled, Length: 1 m to 50 m |
CU000554 | Thickness: 0.1mm, Coil width: 10mm, Purity: 99.9%, Temper: Annealed, Length: 5 m to 20 m |
CU000556 | Thickness: 0.1mm, Coil width: 16mm, Purity: 99.9%, Temper: Half hard, Length: 1 m to 50 m |
CU000557 | Thickness: 0.1mm, Purity: 99.9%, Temper: Half hard, Diameter: 12 mm |
CU000555 | Thickness: 0.1mm, Coil width: 25.4mm, Purity: 99.9%, Temper: Annealed, Length: 1 m to 50 m |
CU000559 | Thickness: 0.1mm, Coil width: 26mm, Purity: 99.9%, Temper: Annealed, Length: 1 m to 20 m |
CU000558 | Thickness: 0.1mm, Coil width: 30mm, Purity: 99.9%, Temper: Annealed, Length: 1 m to 20 m |
CU000570 | Thickness: 0.1mm, High Purity: 99.99 +%, Temper: As rolled, Coil width 150 mm, Size: 25x25 mm to 150x150 mm |
CU000565 | Thickness: 0.1mm, Purity: 99.9%, Temper: Annealed, Coil width 300 mm, Size: 25x25 mm to 300x300 mm |
CU000560 | Thickness: 0.1mm, Purity: 99.9%, Temper: Half hard, Coil width 305 mm, Size: 25x25 mm to 150x150 mm |
CU000580 | Thickness: 0.11mm, Purity: 99.95%, Coil width 380 mm, Size: 25x25 mm to 300x300 mm |
CU000583 | Thickness: 0.125mm, Coil width: 50.8mm, Purity: 99.9%, Temper: Annealed, Length: 0.5 m to 20 m |
CU000586 | Thickness: 0.125mm, Coil width: 76.2mm, Purity: 99.9%, Temper: Annealed, Length: 1 m to 20 m |
CU000591 | Thickness: 0.125mm, Purity: 99.9%, Temper: Half hard, Coil width 150 mm, Size: 25x25 mm to 150x150 mm |
CU000585 | Thickness: 0.125mm, Purity: 99.9%, Temper: Annealed, Coil width 150 mm, Size: 25x25 mm to 150x150 mm |
CU000600 | Thickness: 0.125mm, High Purity: 99.99 +%, Temper: As rolled, Coil width 150 mm, Size: 25x25 mm to 150x150 mm |
CU000590 | Thickness: 0.125mm, Purity: 99.9%, Temper: Half hard, Coil width 305 mm, Size: 25x25 mm to 150x150 mm |
CU000645 | Thickness: 0.15mm, Coil width: 6.0mm, Purity: 99.9%, Temper: Annealed, Length: 1 m to 20 m |
CU000640 | Thickness: 0.15mm, Purity: 99.9%, Temper: Half hard, Coil width 150 mm, Size: 25x25 mm to 150x150 mm |
CU000650 | Thickness: 0.15mm, Purity: 99.9%, Temper: Annealed, Coil width 150 mm, Size: 25x25 mm to 150x150 mm |
CU000630 | Thickness: 0.15mm, High Purity: 99.99 +%, Temper: As rolled, Coil width 150 mm, Size: 25x25 mm to 150x150 mm |
CU000642 | Thickness: 0.15mm, Purity: 99.9%, Temper: Half hard, Condition: Flattened, Size: 150x150 mm to 300x450 mm |
CU000641 | Thickness: 0.15mm, Purity: 99.9%, Temper: Half hard, Coil width 305 mm, Size: 300x300 mm |
CU000655 | Thickness: 0.2mm, Coil width: 30mm, Purity: 99.9%, Temper: Annealed, Length: 0.5 m to 10 m |
CU000652 | Thickness: 0.25mm, Coil width: 1.4mm, Purity: 99.9%, Temper: Half hard, Length: 1 m to 50 m |
### Metals

<table>
<thead>
<tr>
<th>Code</th>
<th>Thickness</th>
<th>Purity</th>
<th>Surface Finish</th>
<th>Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU000701</td>
<td>0.25mm</td>
<td>99.9% Polished on one side Polish: 0.1μm Ra or better</td>
<td>9 mm</td>
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<tr>
<td>CU000703</td>
<td>0.25mm</td>
<td>99.9% Hard</td>
<td>25.4 mm</td>
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<tr>
<td>CU000680</td>
<td>0.25mm</td>
<td>99.9% Hard</td>
<td>25.4 mm</td>
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</tr>
<tr>
<td>CU000700</td>
<td>0.25mm</td>
<td>99.9% Polished</td>
<td>305 mm</td>
<td></td>
</tr>
<tr>
<td>CU000702</td>
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<td>99.9% Polished</td>
<td>305 mm</td>
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<tr>
<td>CU000720</td>
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<td>99.9% Annealed</td>
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<tr>
<td>CU000695</td>
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<td>99.9% Polished</td>
<td>80 mm</td>
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<tr>
<td>CU000691</td>
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<td>99.9% Polished</td>
<td>305 mm</td>
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<tr>
<td>CU000690</td>
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<td>305 mm</td>
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<tr>
<td>CU000710</td>
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<tr>
<td>CU000743</td>
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<td>CU000745</td>
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<td>25.4 mm</td>
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<tr>
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<td>25.4 mm</td>
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<tr>
<td>CU000750</td>
<td>1.0mm</td>
<td>99.9% Polished</td>
<td>25.4 mm</td>
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</tr>
<tr>
<td>CU000751</td>
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<td>99.9% Polished</td>
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<td>CU000748</td>
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<td>99.9% Polished</td>
<td>25.4 mm</td>
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<tr>
<td>CU000747</td>
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<tr>
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<td>CU000760</td>
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<td>99.9% Hard</td>
<td>25.4 mm</td>
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<td>CU000766</td>
<td>2.0mm</td>
<td>99.9% Hard</td>
<td>25.4 mm</td>
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<td>CU000765</td>
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<td>99.9% Hard</td>
<td>25.4 mm</td>
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<tr>
<td>CU000769</td>
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<td>CU000770</td>
<td>3.25mm</td>
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<td>25.4 mm</td>
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#### Sputtering Target

<table>
<thead>
<tr>
<th>Code</th>
<th>Thickness</th>
<th>Purity</th>
<th>Surface Finish</th>
<th>Diameter</th>
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<tbody>
<tr>
<td>CU009300</td>
<td>3.0mm</td>
<td>99.99%</td>
<td>Half hard</td>
<td>25 mm to 75 mm</td>
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<tr>
<td>CU009301</td>
<td>3.0mm</td>
<td>99.999%</td>
<td>Half hard</td>
<td>25 mm to 75 mm</td>
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<tr>
<td>CU009500</td>
<td>5mm</td>
<td>99.99%</td>
<td>Half hard</td>
<td>31 mm</td>
</tr>
<tr>
<td>CU009600</td>
<td>6.0mm</td>
<td>99.99%</td>
<td>Half hard</td>
<td>25 mm to 75 mm</td>
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</table>

#### Foam

<table>
<thead>
<tr>
<th>Code</th>
<th>Thickness</th>
<th>Bulk Density</th>
<th>Porosity</th>
<th>Surface Finish</th>
<th>Diameter</th>
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<tbody>
<tr>
<td>CU003804</td>
<td>4mm</td>
<td>3.32g.cm⁻³</td>
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<td>23 mm</td>
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<td>CU003814</td>
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<tr>
<td>CU003805</td>
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<td>3.32g.cm⁻³</td>
<td>63%</td>
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<tr>
<td>CU003815</td>
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<td>3.32g.cm⁻³</td>
<td>99.9%</td>
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#### Mesh

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<tr>
<th>Code</th>
<th>Nominal Aperture</th>
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<tbody>
<tr>
<td>CU008725</td>
<td>0.14mm</td>
<td>0.115mm</td>
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<tr>
<td>CU008705</td>
<td>0.18mm</td>
<td>0.0125mm</td>
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<tr>
<td>CU008720</td>
<td>0.2mm</td>
<td>0.004mm</td>
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<td>260x260</td>
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<td>CU008710</td>
<td>0.38mm</td>
<td>0.0125mm</td>
<td>Half hard</td>
<td>600x600</td>
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#### Wire

<table>
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<tr>
<th>Code</th>
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<th>Diameter</th>
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<tr>
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<tr>
<td>Metals</td>
<td>Insulated Wire</td>
<td>Rod</td>
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<tr>
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<td>CU00519</td>
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<tr>
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<td>CU00525</td>
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<td>CU00525</td>
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<td>CU00526</td>
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<tr>
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<td>Diameter: 1.0mm, Insulation thickness: 0.025mm, Material: Polyimide, Temper: As drawn</td>
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<tr>
<td>CU00525</td>
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<td>CU00526</td>
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<td>Diameter: 1.0mm, Insulation thickness: 0.025mm, Material: Polyimide, Temper: As drawn</td>
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<td>CU00524</td>
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<td>Diameter: 1.0mm, Insulation thickness: 0.025mm, Material: Polyimide, Temper: As drawn</td>
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<td>CU00523</td>
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<td>Diameter: 1.0mm, Insulation thickness: 0.025mm, Material: Polyimide, Temper: As drawn</td>
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<td>CU00529</td>
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<td>Diameter: 1.0mm, Insulation thickness: 0.025mm, Material: Polyimide, Temper: As drawn</td>
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<td>CU00520</td>
<td>Diameter: 1.0mm, Purity: 99.99%</td>
<td>Diameter: 1.0mm, Insulation thickness: 0.025mm, Material: Polyimide, Temper: As drawn</td>
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<td>CU00520</td>
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<td>Diameter: 1.0mm, Insulation thickness: 0.025mm, Material: Polyimide, Temper: As drawn</td>
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<td>Diameter: 1.0mm, Insulation thickness: 0.025mm, Material: Polyimide, Temper: As drawn</td>
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<td>Diameter: 1.0mm, Insulation thickness: 0.025mm, Material: Polyimide, Temper: As drawn</td>
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</table>

**Insulated Wire**
- Diameter: 0.012mm, Insulation thickness: 0.002mm, Material: Polyurethane
- Diameter: 0.018mm, Insulation thickness: 0.005mm, Material: Polyurethane

**Rod**
- Diameter: 2.0mm, Purity: 99.9%, Temper: Hard, Length: 500 mm
- Diameter: 2.0mm, Purity: 99.99%
| CU007920 | Diameter: 3.2mm, High Purity: 99.99+ %, Temper: As drawn, Length: 100 mm to 1000 mm |
| CU007930 | Diameter: 4.8mm, Purity: 99.9%, Temper: Hard, Length: 100 mm to 1000 mm |
| CU007940 | Diameter: 4.8mm, High Purity: 99.99+ %, Temper: As drawn, Length: 100 mm to 1000 mm |
| CU007945 | Diameter: 5.0mm, High Purity: 99.999%, Temper: As drawn, Length: 50 mm to 500 mm |
| CU007948 | Diameter: 6.35mm, High Purity: 99.999%, Temper: As drawn, Length: 50 mm to 500 mm |
| CU007949 | Diameter: 8.0mm, High Purity: 99.99+ %, Temper: As drawn, Length: 100 mm to 500 mm |
| CU007950 | Diameter: 9.5mm, Purity: 99.9%, Temper: Hard, Length: 100 mm to 1000 mm |
| CU007955 | Diameter: 9.5mm, High Purity: 99.99+ %, Temper: As drawn, Length: 100 mm to 500 mm |
| CU007960 | Diameter: 12.7mm, High Purity: 99.99+ %, Temper: As drawn, Length: 59 mm to 200 mm |
| CU007965 | Diameter: 16mm, High Purity: 99.99+ %, Temper: As drawn, Length: 50 mm to 200 mm |
| CU007970 | Diameter: 19.0mm, High Purity: 99.99+ %, Temper: As drawn, Length: 25 mm to 200 mm |
| CU007980 | Diameter: 20.6mm, Purity: 99.9%, Temper: Hard, Length: 100 mm to 1000 mm |

**Bar**

| CU008021 | Side Length: 8.0mm, Side Length (of longer side): 52mm, High Purity: 99.995%, Length: 50 mm to 200 mm |

**Tube**

| CU007050 | Outside Diameter: 0.25mm, Wall Thickness: 0.1mm, Inside Diameter: 0.05mm, Purity: 99.9%, Temper: As drawn, Length: 100 mm to 1000 mm |
| CU007100 | Outside Diameter: 0.5mm, Wall Thickness: 0.14mm, Inside Diameter: 0.22mm, Purity: 99.9%, Temper: As drawn, Length: 100 mm to 1000 mm |
| CU007110 | Outside Diameter: 0.65mm, Wall Thickness: 0.22mm, Inside Diameter: 0.21mm, Purity: 99.9%, Temper: As drawn, Length: 100 mm to 1000 mm |
| CU007130 | Outside Diameter: 0.75mm, Wall Thickness: 0.26mm, Inside Diameter: 0.23mm, Purity: 99.9%, Temper: As drawn, Length: 100 mm to 1000 mm |
| CU007170 | Outside Diameter: 0.95mm, Wall Thickness: 0.33mm, Inside Diameter: 0.29mm, Purity: 99.9%, Temper: As drawn, Length: 100 mm to 1000 mm |
| CU007180 | Outside Diameter: 1.0mm, Wall Thickness: 0.38mm, Inside Diameter: 0.24mm, Purity: 99.9%, Temper: As drawn, Length: 100 mm to 1000 mm |
| CU007190 | Outside Diameter: 1.0mm, Wall Thickness: 0.17mm, Inside Diameter: 0.66mm, Purity: 99.9%, Length: 100 mm to 400 mm |
| CU007220 | Outside Diameter: 1.2mm, Wall Thickness: 0.32mm, Inside Diameter: 0.56mm, Purity: 99.9%, Temper: As drawn, Length: 100 mm to 1000 mm |
| CU007271 | Outside Diameter: 1.5mm, Wall Thickness: 0.45mm, Inside Diameter: 0.6mm, Purity: 99.9%, Temper: As drawn, Length: 100 mm to 1000 mm |

**Powder**

| CU006022 | Max. Particle size: 5micron, Purity: 99.8%, Condition: Sphercial |
| CU006024 | Max. Particle size: 50micron, Purity: 99%, Condition: Sphercial |
| CU006020 | Max. Particle size: 50micron, Purity: 99%, Condition: Dendritic |
| CU006025 | Max. Particle size: 150micron, Purity: 99%, Condition: Sphercial |
| CU006045 | Max. Particle size: 200micron, Purity: 99.8%, Condition: Dendritic |
| CU006030 | Max. Particle size: 800micron, High Purity: 99.99%, Condition: Pellets |

**Lump**

<p>| CU006101 | Max. Lump size: 5mm, High Purity: 99.99+ %, Condition: Pellets |
| CU006103 | Max. Lump size: 5mm, High Purity: 99.99+ %, Condition: Pellets |
| CU006102 | Max. Lump size: 5mm, High Purity: 99.9999%, Condition: Pellets |</p>
<table>
<thead>
<tr>
<th>Reference Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU006107</td>
<td>Max. Lump size: <strong>6.35mm</strong>, High Purity: 99.99% +%, Condition: Shot</td>
</tr>
<tr>
<td>CU006106</td>
<td>Max. Lump size: <strong>6.35mm</strong>, High Purity: 99.9999%, Condition: Shot</td>
</tr>
<tr>
<td>CU006100</td>
<td>Max. Lump size: <strong>10mm</strong>, High Purity: 99.99% +%, Condition: Shot</td>
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<tr>
<td>CU006110</td>
<td>Max. Lump size: <strong>10mm</strong>, High Purity: 99.9999%, Condition: Pellets</td>
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<tr>
<td>CU000311</td>
<td>Diameter: <strong>1.0mm</strong>, Tolerance: ± 25.4µm, Sphericity: 5.08µm, Grade: Precision Sphere, Condition: Grade 200</td>
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<tr>
<td>CU000306</td>
<td>Diameter: <strong>3.0mm</strong>, Tolerance: ± 25.4µm, Sphericity: 5.08µm, Grade: Precision Sphere, Condition: Grade 200</td>
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<td>CU002115</td>
<td>Oriented: (110), Diameter: 12mm, Length: 25mm, Purity: 99.9999%</td>
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<td>CU002120</td>
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<td>CU002132</td>
<td>Oriented: (111), Diameter: 12mm, Length: 50mm, Purity: 99.9999%</td>
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<tr>
<td>CU002182</td>
<td>Oriented: (111), Thickness: 0.5mm, Purity: 99.9999%, Condition: Polished on 1 side to 1 micron, Size: 10x10 mm</td>
</tr>
</tbody>
</table>

**Copper - O.F.H.C. (Cu - OFHC)**

<table>
<thead>
<tr>
<th>Reference Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CV000305</td>
<td>Thickness: 0.006mm, Purity: 99.95 +%%, Temper: Hard, Coil width 200 mm, Size: 50x50 mm to 200x200 mm</td>
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<tr>
<td>CV000306</td>
<td>Thickness: 0.007mm, Purity: 99.95 +%%, Temper: Hard, Coil width 200 mm, Size: 50x50 mm to 200x200 mm</td>
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<td>CV000307</td>
<td>Thickness: 0.008mm, Purity: 99.95 +%%, Temper: Hard, Coil width 200 mm, Size: 50x50 mm to 200x200 mm</td>
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<td>CV000310</td>
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<td>CV000361</td>
<td>Thickness: 0.02mm, Coil width: 6.35mm, Purity: 99.95 +%%, Temper: Annealed, Length: 1 m to 50 m</td>
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<td>CV000503</td>
<td>Thickness: 0.05mm, Coil width: 10mm, Purity: 99.95 +%%, Temper: Annealed, Length: 1 m to 50 m</td>
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<td>Thickness: 0.05mm, Purity: 99.95 +%%, Temper: Hard, Coil width 150 mm, Size: 25x25 mm to 150x150 mm</td>
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<td>CV000504</td>
<td>Thickness: 0.05mm, Coil width: 300mm, Purity: 99.95 +%%, Temper: Half hard, Length: 0.5 m to 10 m</td>
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<td>Metals</td>
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<td><strong>CV000502</strong></td>
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<td>Temper: Annealed, Coil width 300 mm, Size: 25x25 mm to 150x150 mm</td>
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<td><strong>CV000540</strong></td>
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<td>Thickness: 0.075mm, Purity: 99.95+</td>
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<td>Temper: Half hard, Coil width 150 mm, Size: 25x25 mm to 150x150 mm</td>
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<td><strong>CV000563</strong></td>
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<td>Temper: Annealed, Length: 1 m to 50 m</td>
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<td><strong>CV000560</strong></td>
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<td>Temper: Half hard, Coil width 305 mm, Size: 25x25 mm to 300x300 mm</td>
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<td>Temper: Half hard, Coil width 305 mm, Size: 300x300 mm</td>
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<td><strong>CV000670</strong></td>
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<td>Thickness: 0.20mm, Purity: 99.95+</td>
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<td>Temper: Hard, Coil width 305 mm, Size: 25x25 mm to 300x300 mm</td>
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<td><strong>CV000702</strong></td>
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<td><strong>CV000740</strong></td>
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<td>Thickness: 0.4mm, Purity: 99.95+</td>
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<td>Temper: Hard, Condition: Flattenened, Condition: Polished on both sides, Size: 50x50 mm to 200x200 mm</td>
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<td><strong>CV000745</strong></td>
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<tr>
<td>Temper: Half hard, Condition: Flattenened, Condition: Polished on both sides, Size: 50x50 mm to 200x200 mm</td>
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<td><strong>CV000744</strong></td>
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<tr>
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<td><strong>CV000743</strong></td>
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<td><strong>CV000746</strong></td>
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<td><strong>CV000765</strong></td>
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<td>Thickness: 2.0mm, Purity: 99.95+</td>
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<tr>
<td>Temper: Half hard, Size: 25x25 mm to 300x1000 mm</td>
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<tr>
<td>Size: 100x100 mm to 300x300 mm</td>
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<td><strong>CV0003050</strong></td>
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<tr>
<td>Thickness: 4.76mm, Purity: 99.95+</td>
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<td>Size: 50x50 mm to 300x300 mm</td>
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<td><strong>CV0003121</strong></td>
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<td>Thickness: 12.7mm, High Purity: 99.99+</td>
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<td>Temper: Annealed, Size: 150x150 mm</td>
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<td>Thickness: 12.7mm, Purity: 99.95+</td>
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<tr>
<td>Size: 102x102 mm to 305x305 mm</td>
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<tr>
<td>Size: 102x102 mm</td>
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<tr>
<td><strong>Wire</strong></td>
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<td>Temper: Hard, Condition: Straight wire</td>
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<td><strong>CV0005288</strong></td>
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<td>Diameter: 0.80mm, Purity: 99.95+</td>
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<tr>
<td><strong>Insulated Wire</strong></td>
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<td>Conductor diameter: 0.25mm, Insulation thickness: 0.013mm, Purity: 99.95+</td>
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<td>Temper: Annealed, Insulation: Polyimide</td>
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<tr>
<td><strong>Rod</strong></td>
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<td>Diameter: 2.0mm, Purity: 99.95+</td>
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<td><strong>CV0007910</strong></td>
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<td>Diameter: 3.15mm, Purity: 99.95+</td>
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<tr>
<td><strong>CV0007960</strong></td>
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<tr>
<td>Diameter: 12.7mm, Purity: 99.95+</td>
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</tr>
<tr>
<td>Temper: As drawn, Length: 100 mm to 1000 mm</td>
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<thead>
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<th>Metals — Dysprosium</th>
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<tbody>
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<td><strong>CV007965</strong> Diameter: 16mm, Purity: 99.95 + %, Temper: As drawn, Length: 100 mm to 1000 mm</td>
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<td><strong>CV007968</strong> Diameter: 19mm, Purity: 99.95 + %, Temper: As drawn, Length: 100 mm to 1000 mm</td>
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<td><strong>CV007970</strong> Diameter: 25.4mm, Purity: 99.95 + %, Temper: As drawn, Length: 100 mm to 1000 mm</td>
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<tr>
<td><strong>CV007971</strong> Diameter: 25.4mm, High Purity: 99.99 + %, Temper: As drawn, Length: 25 mm to 200 mm</td>
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<tr>
<td><strong>CV007975</strong> Diameter: 38.1mm, Purity: 99.95 + %, Temper: As drawn, Length: 100 mm to 1000 mm</td>
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<tr>
<td><strong>CV007980</strong> Diameter: 50.0mm, Purity: 99.95 + %, Temper: As drawn, Length: 50 mm to 500 mm</td>
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<tr>
<td><strong>CV007985</strong> Diameter: 63.5mm, Purity: 99.95 + %, Temper: As drawn, Length: 50 mm to 1000 mm</td>
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<tr>
<td><strong>CV007988</strong> Diameter: 76mm, Purity: 99.95 + %, Temper: As drawn, Length: 50 mm to 200 mm</td>
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<tr>
<td><strong>CV007990</strong> Diameter: 80mm, Purity: 99.95 + %, Temper: As drawn, Length: 50 mm to 200 mm</td>
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<td><strong>CV007999</strong> Diameter: 101mm, Purity: 99.95 + %, Length: 36.7 mm</td>
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<td><strong>Tube</strong></td>
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<tr>
<td><strong>CV007040</strong> Outside Diameter: 0.38mm, Wall Thickness: 0.08mm, Inside Diameter: 0.22mm, Purity: 99.95 + %, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td><strong>CV007060</strong> Outside Diameter: 0.635mm, Wall Thickness: 0.18mm, Inside Diameter: 0.275mm, Purity: 99.95 + %, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td><strong>CV007090</strong> Outside Diameter: 0.9mm, Wall Thickness: 0.17mm, Inside Diameter: 0.56mm, Purity: 99.95 + %, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td><strong>CV007120</strong> Outside Diameter: 1.23mm, Wall Thickness: 0.36mm, Inside Diameter: 0.51mm, Purity: 99.95 + %, Length: 100 mm to 1000 mm</td>
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<tr>
<td><strong>CV007160</strong> Outside Diameter: 1.60mm, Wall Thickness: 0.5mm, Inside Diameter: 0.55mm, Purity: 99.95 + %, Length: 100 mm to 1000 mm</td>
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<tr>
<td><strong>CV007180</strong> Outside Diameter: 1.78mm, Wall Thickness: 0.49mm, Inside Diameter: 0.8mm, Purity: 99.95 + %, Length: 100 mm to 1000 mm</td>
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<tr>
<td><strong>CV007250</strong> Outside Diameter: 2.54mm, Wall Thickness: 0.5mm, Inside Diameter: 1.54mm, Purity: 99.95 + %, Length: 100 mm to 1000 mm</td>
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<tr>
<td><strong>CV007290</strong> Outside Diameter: 3.0mm, Wall Thickness: 0.5mm, Inside Diameter: 2mm, Purity: 99.95 + %, Temper: Hard, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td><strong>CV007300</strong> Outside Diameter: 3.2mm, Wall Thickness: 0.4mm, Inside Diameter: 2.4mm, Purity: 99.95 + %, Length: 100 mm to 1000 mm</td>
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<tr>
<td><strong>CV007390</strong> Outside Diameter: 3.92mm, Wall Thickness: 0.1mm, Inside Diameter: 3.72mm, Purity: 99.95 + %, Length: 100 mm to 500 mm</td>
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<tr>
<td><strong>CV007410</strong> Outside Diameter: 4.0mm, Wall Thickness: 1.0mm, Inside Diameter: 2mm, Purity: 99.95 + %, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td><strong>CV007400</strong> Outside Diameter: 4.0mm, Wall Thickness: 0.5mm, Inside Diameter: 3mm, Purity: 99.95 + %, Length: 100 mm to 1000 mm</td>
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<tr>
<td><strong>CV007450</strong> Outside Diameter: 6.0mm, Wall Thickness: 1.0mm, Inside Diameter: 4mm, Purity: 99.95 + %, Temper: Hard, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td><strong>CV007600</strong> Outside Diameter: 8.0mm, Wall Thickness: 1.0mm, Inside Diameter: 6mm, Purity: 99.95 + %, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td><strong>CV007700</strong> Outside Diameter: 9.5mm, Wall Thickness: 0.8mm, Inside Diameter: 7.9mm, Purity: 99.95 + %, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td><strong>CV007800</strong> Outside Diameter: 10mm, Wall Thickness: 1.0mm, Inside Diameter: 8mm, Purity: 99.95 + %, Length: 100 mm to 1000 mm</td>
</tr>
</tbody>
</table>

### Dysprosium (Dy)

**Foil**

**DY000200** Thickness: 0.005mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm to 50x50 mm

**DY000210** Thickness: 0.025mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm to 50x50 mm

**DY000220** Thickness: 0.1mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm to 100x100 mm

**DY000240** Thickness: 0.25mm, Tolerance: 20%, Purity: 99%, Temper: As rolled, Size: 25x25 mm to 50x50 mm

**DY000260** Thickness: 0.50mm, Tolerance: 20%, Purity: 99%, Temper: As rolled, Size: 100x100 mm

**Sputtering Target**

**DY009100** Thickness: 1.0mm, Purity: 99%, Size: 50 mm to 75 mm

**Wire**

**DY005105** Diameter: 0.5mm, Purity: 99.9%, Temper: Hard

**DY005110** Diameter: 1.0mm, Purity: 99.9%, Temper: Hard

**Rod**

**DY007905** Diameter: 2.0mm, Purity: 99%, Condition: Cast, Length: 50 mm

**DY007910** Diameter: 6.35mm, Purity: 99%, Condition: Cast, Length: 50 mm to 100 mm

**Powder**

**DY006100** Max. Particle size: 500 micron, Purity: 99.9%

**Lump**

**DY006100** Max. Lump size: 25mm, Purity: 99%
### Metals

#### Europium (Eu)
- **Foil**
  - EU00200: Thickness: 0.1mm, Purity: 99.95%, Temper: As rolled, Size: 25x25 mm to 50x50 mm

#### Sputtering Target
- EU009300: Thickness: 3.0mm, Purity: 99.9%, Size: 25 mm to 75 mm

#### Microfoil
- Thickness: 0.25µm, Specific density: 166.3µg.cm⁻², Purity: 99.999%, Permanent support: 6 micron Aluminum, Size: 25x25 mm to 50x50 mm

#### Germanium (Ge)
- **Sheet**
  - GE003010: Thickness: 0.05mm, Purity: 99.999%, Condition: Polycrystalline, Electrical type: N-Type, Size: 4x4 mm

#### Gallium (Ga)
- **Lump**
  - GA006120: Max. Lump size: 25mm, Purity: 99.99%, Melting Point: 29.8°C

#### Gadolinium (Gd)
- **Foil**
  - GD00205: Thickness: 0.005mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm

#### Sputtering Target
- GD009100: Thickness: 1.0mm, Purity: 99%, Size: 50 mm to 75 mm

#### Wire
- GD005105: Diameter: 0.5mm, Purity: 99.9%, Temper: Hard
- GD005110: Diameter: 1.0mm, Purity: 99.9%, Temper: Hard

#### Rod
- GD007905: Diameter: 3.0mm, Purity: 99%, Condition: Cast, Length: 48 mm to 100 mm
- GD007910: Diameter: 6.35mm, Purity: 99%, Condition: Cast, Length: 50 mm to 100 mm
- GD007925: Diameter: 12.5mm, Purity: 99%, Condition: Cast, Length: 25 mm to 100 mm

---

**Powder**
- GD006010: Max. Particle size: 500µm, Purity: 99.9%
- GD006100: Max. Lump size: 25mm, Purity: 99.9%
- GD006101: Max. Lump size: 50mm, Purity: 99.9%
- GA006120: Max. Lump size: 25mm, Purity: 99.99%, Melting Point: 29.8°C
- GA006100: Max. Lump size: 25mm, High Purity: 99.9999%, Melting Point: 29.8°C

---

**Germanium (Ge)**
- GE004600: Thickness: 0.25µm, Specific density: 166.3µg.cm⁻², Purity: 99.999%, Permanent support: 6 micron Aluminum, Size: 25x25 mm to 50x50 mm

---

**Metals — Europium**

---

**Germanium (Ge)**
- GE004600: Thickness: 0.25µm, Specific density: 166.3µg.cm⁻², Purity: 99.999%, Permanent support: 6 micron Aluminum, Size: 25x25 mm to 50x50 mm

---

**Germanium (Ge)**
- GE004700: Thickness: 0.5µm, Specific density: 333µg.cm⁻², Purity: 99.9999%, Permanent support: 6 micron Aluminum, Size: 25x25 mm
### Metals

**Gold (Au)**

<table>
<thead>
<tr>
<th>Item</th>
<th>Code</th>
<th>Description</th>
<th>Purity</th>
<th>Support</th>
<th>Diameter</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microfoil</td>
<td>AU004100</td>
<td>Thinness: 0.01µm, Specific density: 20.7g.cm⁻²</td>
<td>99.99+ %</td>
<td>Permanent Mylar 3.5µm</td>
<td>10 mm</td>
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<tr>
<td></td>
<td>AU004300</td>
<td>Thinness: 0.05µm, Specific density: 101.3g.cm⁻²</td>
<td>99.99+ %</td>
<td>Permanent Mylar 3.5µm</td>
<td>10 mm</td>
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</tr>
<tr>
<td></td>
<td>AU004500</td>
<td>Thinness: 0.1µm, Specific density: 204.1g.cm⁻²</td>
<td>99.99+ %</td>
<td>Permanent Mylar 3.5µm</td>
<td>10 mm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AU004600</td>
<td>Thinness: 0.25µm, Specific density: 483µg.cm⁻²</td>
<td>99.99+ %</td>
<td>Permanent Mylar 3.5µm</td>
<td>10 mm</td>
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<tr>
<td></td>
<td>AU004700</td>
<td>Thinness: 0.5µm, Specific density: 966µg.cm⁻²</td>
<td>99.99+ %</td>
<td>Permanent Mylar 3.5µm</td>
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<td></td>
<td>AU004800</td>
<td>Thinness: 0.75µm, Specific density: 1448µg.cm⁻²</td>
<td>99.99+ %</td>
<td>Permanent Mylar 3.5µm</td>
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<tr>
<td></td>
<td>AU004850</td>
<td>Thinness: 1.0µm, Specific density: 1932µg.cm⁻²</td>
<td>99.99+ %</td>
<td>Permanent Mylar 3.5µm</td>
<td>10 mm</td>
<td></td>
</tr>
</tbody>
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**Microleaf**

<table>
<thead>
<tr>
<th>Item</th>
<th>Code</th>
<th>Description</th>
<th>Purity</th>
<th>Support</th>
<th>Diameter</th>
<th>Length</th>
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<tbody>
<tr>
<td>AU004925</td>
<td>Thinness: 0.25µm, Specific density: 483µg.cm⁻²</td>
<td>99.99+ %</td>
<td>Removable</td>
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<tr>
<td>AU004950</td>
<td>Thinness: 0.5µm, Specific density: 966µg.cm⁻²</td>
<td>99.99+ %</td>
<td>Removable</td>
<td>10 mm</td>
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<tr>
<td>AU004990</td>
<td>Thinness: 1.0µm, Specific density: 1932µg.cm⁻²</td>
<td>99.99+ %</td>
<td>Removable</td>
<td>10 mm</td>
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**Foil**

<table>
<thead>
<tr>
<th>Item</th>
<th>Code</th>
<th>Description</th>
<th>Purity</th>
<th>Support</th>
<th>Diameter</th>
<th>Length</th>
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<tbody>
<tr>
<td>AU000060</td>
<td>Thinness: 0.001mm</td>
<td>99.9%</td>
<td></td>
<td>25x25 mm</td>
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<tr>
<td>AU000065</td>
<td>Thinness: 0.0015mm</td>
<td>99.9%</td>
<td></td>
<td>25x25 mm to 50x50 mm</td>
<td></td>
<td></td>
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<tr>
<td>AU000070</td>
<td>Thinness: 0.002mm</td>
<td>99.9%</td>
<td></td>
<td>25x25 mm to 50x50 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AU000080</td>
<td>Thinness: 0.0025mm</td>
<td>99.9%</td>
<td></td>
<td>25x25 mm to 100x100 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AU000090</td>
<td>Thinness: 0.003mm</td>
<td>99.9%</td>
<td></td>
<td>25x25 mm to 100x100 mm</td>
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<tr>
<td>AU000100</td>
<td>Thinness: 0.004mm</td>
<td>99.9%</td>
<td></td>
<td>25x25 mm to 150x150 mm</td>
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<tr>
<td>AU000110</td>
<td>Thinness: 0.005mm</td>
<td>99.9%</td>
<td></td>
<td>25x25 mm to 150x150 mm</td>
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<tr>
<td>AU000120</td>
<td>Thinness: 0.006mm</td>
<td>99.9%</td>
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<td>25x25 mm to 150x150 mm</td>
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<tr>
<td>AU000130</td>
<td>Thinness: 0.007mm</td>
<td>99.9%</td>
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<td>25x25 mm to 150x150 mm</td>
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<tr>
<td>AU000140</td>
<td>Thinness: 0.008mm</td>
<td>99.9%</td>
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<td>25x25 mm to 150x150 mm</td>
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<tr>
<td>AU000150</td>
<td>Thinness: 0.009mm</td>
<td>99.9%</td>
<td></td>
<td>25x25 mm to 150x150 mm</td>
<td></td>
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</tr>
<tr>
<td>AU000310</td>
<td>Thinness: 0.01mm, Coil width: 35mm</td>
<td>99.95%</td>
<td>As rolled</td>
<td>0.1 m to 2 m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AU000160</td>
<td>Thinness: 0.01mm</td>
<td>99.9%</td>
<td></td>
<td>25x25 mm to 100x100 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AU000329</td>
<td>Thinness: 0.0125mm, Coil width: .127mm</td>
<td>99.95%</td>
<td>As rolled</td>
<td>0.1 m to 2 m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AU000330</td>
<td>Thinness: 0.0125mm, Coil width: .38mm</td>
<td>99.95%</td>
<td>As rolled</td>
<td>0.1 m to 2 m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AU000331</td>
<td>Thinness: 0.0125mm, Coil width: .508mm</td>
<td>99.95%</td>
<td>As rolled</td>
<td>0.1 m to 2 m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AU000170</td>
<td>Thinness: 0.0125mm</td>
<td>99.9%</td>
<td></td>
<td>25x25 mm to 150x150 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AU000180</td>
<td>Thinness: 0.015mm</td>
<td>99.9%</td>
<td></td>
<td>25x25 mm to 150x150 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AU000190</td>
<td>Thinness: 0.02mm</td>
<td>99.9%</td>
<td></td>
<td>25x25 mm to 100x100 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AU000342</td>
<td>Thinness: 0.025mm, Coil width: 2mm</td>
<td>99.95%</td>
<td>As rolled</td>
<td>0.05 m to 0.5 m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AU000340</td>
<td>Thinness: 0.025mm</td>
<td>99.95%</td>
<td>As rolled</td>
<td>25x25 mm to 100x100 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AU000341</td>
<td>Thinness: 0.025mm, High Purity</td>
<td>99.99 + %</td>
<td>As rolled</td>
<td>25x25 mm to 100x100 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AU000343</td>
<td>Thinness: 0.05mm, Coil width: 4mm</td>
<td>99.95%</td>
<td>As rolled</td>
<td>0.05 m to 0.5 m</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Sputtering Target

<table>
<thead>
<tr>
<th>Code</th>
<th>Thickness</th>
<th>Purity</th>
<th>Condition</th>
<th>Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU009100</td>
<td>0.1mm</td>
<td>99.95%</td>
<td>Tolerance: 15%</td>
<td>25 mm to 57 mm</td>
</tr>
<tr>
<td>AU009202</td>
<td>0.2mm</td>
<td>99.95%</td>
<td>Tolerance: 15%</td>
<td>25 mm to 57 mm</td>
</tr>
<tr>
<td>AU009203</td>
<td>0.5mm</td>
<td>99.95%</td>
<td>Tolerance: 15%</td>
<td>25 mm to 54 mm</td>
</tr>
<tr>
<td>AU009205</td>
<td>1.0mm</td>
<td>99.999%</td>
<td></td>
<td>25.4 mm</td>
</tr>
<tr>
<td>AU009206</td>
<td>1.0mm</td>
<td>99.95%</td>
<td></td>
<td>25 mm to 57 mm</td>
</tr>
<tr>
<td>AU009207</td>
<td>2.0mm</td>
<td>99.999%</td>
<td></td>
<td>25.4 mm to 50.8 mm</td>
</tr>
<tr>
<td>AU009208</td>
<td>3mm</td>
<td>99.95%</td>
<td></td>
<td>25 mm to 50 mm</td>
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### Mesh

<table>
<thead>
<tr>
<th>Code</th>
<th>Nominal Aperture</th>
<th>Thickness</th>
<th>Purity</th>
<th>Type</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU008721</td>
<td>0.011 mm</td>
<td>0.004 mm</td>
<td>99.9%</td>
<td>Type</td>
<td>1500</td>
</tr>
<tr>
<td>AU008725</td>
<td>0.04 mm</td>
<td>0.006 mm</td>
<td>99.9%</td>
<td>Type</td>
<td>50x50</td>
</tr>
<tr>
<td>AU008730</td>
<td>0.064 mm</td>
<td>0.004 mm</td>
<td>99.9%</td>
<td>Type</td>
<td>50x50</td>
</tr>
<tr>
<td>AU008710</td>
<td>0.25 mm</td>
<td>0.06 mm</td>
<td>99.9%</td>
<td>Type</td>
<td>50x50</td>
</tr>
</tbody>
</table>

### Wire

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
<th>Purity</th>
<th>Temper</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU005110</td>
<td>0.01 mm</td>
<td>99.99%</td>
<td>Hard</td>
<td>10x10 mm</td>
</tr>
<tr>
<td>AU005115</td>
<td>0.0125 mm</td>
<td>99.99%</td>
<td>Hard</td>
<td>10x10 mm</td>
</tr>
<tr>
<td>AU005120</td>
<td>0.025 mm</td>
<td>99.99%</td>
<td>Hard</td>
<td>10x10 mm</td>
</tr>
<tr>
<td>AU005121</td>
<td>0.025 mm</td>
<td>99.99%</td>
<td>Annealed</td>
<td>10x10 mm</td>
</tr>
<tr>
<td>AU005125</td>
<td>0.05 mm</td>
<td>99.99%</td>
<td>Hard</td>
<td>10x10 mm</td>
</tr>
<tr>
<td>AU005126</td>
<td>0.05 mm</td>
<td>99.99%</td>
<td>Annealed</td>
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<tr>
<td>AU005130</td>
<td>0.06 mm</td>
<td>99.99%</td>
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</tr>
<tr>
<td>AU005132</td>
<td>0.075 mm</td>
<td>99.99%</td>
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<tr>
<td>AU005133</td>
<td>0.10 mm</td>
<td>99.99%</td>
<td>Annealed</td>
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</tr>
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<td>AU005135</td>
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<td>0.20 mm</td>
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<td>AU005140</td>
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<td>AU005145</td>
<td>0.33 mm</td>
<td>99.95%</td>
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<td>AU005148</td>
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<tr>
<td>AU005150</td>
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<td>AU005151</td>
<td>0.5 mm</td>
<td>99.99%</td>
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<tr>
<td>AU005160</td>
<td>0.5 mm</td>
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<td>AU005155</td>
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<td>AU005165</td>
<td>0.75 mm</td>
<td>99.95%</td>
<td>As drawn</td>
<td>10x10 mm</td>
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### Metals — Gold

<table>
<thead>
<tr>
<th>Code</th>
<th>Thickness</th>
<th>Purity</th>
<th>Size</th>
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</thead>
<tbody>
<tr>
<td>AU009209</td>
<td>3 mm</td>
<td>99.99%</td>
<td>25 mm to 50 mm</td>
</tr>
</tbody>
</table>

Please visit [www.goodfellow.com](http://www.goodfellow.com) or [www.goodfellowusa.com](http://www.goodfellowusa.com) for latest prices.
# Metals — Gold

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
<th>Purity</th>
<th>Temper</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU00517</td>
<td>1.0mm</td>
<td>99.95%</td>
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<tr>
<td>AU005170</td>
<td>1.0mm, High Purity: 99.99%</td>
<td>Tempered: Hard</td>
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<tr>
<td>AU005172</td>
<td>1.0mm</td>
<td>99.999%</td>
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## Insulated Wire

<table>
<thead>
<tr>
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<th>Purity</th>
<th>Insulation</th>
<th>Length</th>
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<tbody>
<tr>
<td>AU005825</td>
<td>0.025mm</td>
<td>99.99%</td>
<td>PTFE</td>
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</tr>
<tr>
<td>AU005820</td>
<td>0.025mm</td>
<td>99.99%</td>
<td>PTFE</td>
<td></td>
</tr>
<tr>
<td>AU005830</td>
<td>0.05mm</td>
<td>99.99%</td>
<td>Polyether</td>
<td></td>
</tr>
<tr>
<td>AU005831</td>
<td>0.05mm</td>
<td>99.99%</td>
<td>Polyether</td>
<td></td>
</tr>
<tr>
<td>AU005835</td>
<td>0.05mm</td>
<td>99.99%</td>
<td>Polyether</td>
<td></td>
</tr>
<tr>
<td>AU005810</td>
<td>0.075mm</td>
<td>99.99%</td>
<td>PTFE</td>
<td></td>
</tr>
<tr>
<td>AU005837</td>
<td>0.10mm</td>
<td>99.99%</td>
<td>PTFE</td>
<td></td>
</tr>
<tr>
<td>AU005836</td>
<td>0.10mm</td>
<td>99.99%</td>
<td>Polyether</td>
<td></td>
</tr>
<tr>
<td>AU005840</td>
<td>0.125mm</td>
<td>99.99%</td>
<td>Polyether</td>
<td></td>
</tr>
<tr>
<td>AU005845</td>
<td>0.125mm</td>
<td>99.99%</td>
<td>Polyether</td>
<td></td>
</tr>
</tbody>
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## Powder

<table>
<thead>
<tr>
<th>Code</th>
<th>Mean Particle size</th>
<th>Purity</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU006022</td>
<td>0.015 micron</td>
<td>99.95%</td>
<td>Nanopowder</td>
</tr>
<tr>
<td>AU006020</td>
<td>0.02 micron</td>
<td>99.95%</td>
<td></td>
</tr>
<tr>
<td>AU006015</td>
<td>0.045 micron</td>
<td>99.95%</td>
<td>Polyether</td>
</tr>
<tr>
<td>AU006010</td>
<td>0.025 micron</td>
<td>99.95%</td>
<td>Polyether</td>
</tr>
</tbody>
</table>

## Lump

<table>
<thead>
<tr>
<th>Code</th>
<th>Max. Lump size</th>
<th>Purity</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU006106</td>
<td>4mm</td>
<td>99.999%</td>
<td>Unpolished</td>
</tr>
<tr>
<td>AU006100</td>
<td>Max. Lump size</td>
<td>99.99%</td>
<td>Polished</td>
</tr>
</tbody>
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## Sphere

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
<th>Purity</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU006840</td>
<td>0.5mm</td>
<td>99.99%</td>
<td>Polished</td>
</tr>
<tr>
<td>AU006845</td>
<td>0.6mm</td>
<td>99.99%</td>
<td>Polished</td>
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</tbody>
</table>

## Single Crystal

<table>
<thead>
<tr>
<th>Code</th>
<th>Oriented</th>
<th>Thickness</th>
<th>Diameter</th>
<th>Purity</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU002121</td>
<td>(100)</td>
<td>1mm</td>
<td>10mm</td>
<td>99.999%</td>
<td>Polished on 1 side to 1 micron</td>
</tr>
<tr>
<td>AU002120</td>
<td>(100)</td>
<td>1mm</td>
<td>10mm</td>
<td>99.999%</td>
<td>Polished on 1 side to 1 micron</td>
</tr>
<tr>
<td>AU002131</td>
<td>(110)</td>
<td>1mm</td>
<td>10mm</td>
<td>99.999%</td>
<td>Polished on 1 side to 1 micron</td>
</tr>
<tr>
<td>AU002130</td>
<td>(110)</td>
<td>1mm</td>
<td>10mm</td>
<td>99.999%</td>
<td>Unpolished</td>
</tr>
<tr>
<td>AU002141</td>
<td>(111)</td>
<td>1mm</td>
<td>10mm</td>
<td>99.999%</td>
<td>Polished on 1 side to 1 micron</td>
</tr>
<tr>
<td>AU002140</td>
<td>(111)</td>
<td>1mm</td>
<td>10mm</td>
<td>99.999%</td>
<td>Unpolished</td>
</tr>
</tbody>
</table>

---

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Metals

Graphene (C)

**Film**

- **GR001005**  Thickness: 0.035mm, Monolayer thickness: 2-3nm, Substrate: Copper foil - 0.035mm thick, Film morphology: Continuous monolayer >95%, Sheet resistance: Av. <250-400 ohms/sq (after transfer), Mobility: >3500cm²/Vs, Transmittance: >97%, Domain size: 10-20μm, Size: 50x50 mm to 80x80 mm

- **GR001410**  Thickness: 0.1mm, Condition: Single crystal, Size: 15x15 mm

**Powder**

- **GR006040**  Bulk density: 2.15%, Platelet Planar Size: 0.3-5μm, Platelet Thickness: <50nm, Functionalization Levels: Kit containing 2g each of Low, Medium, & High, Process Route: Oxygen

- **GR006050**  Bulk density: 2.15%, Platelet Planar Size: 0.3-5μm, Platelet Thickness: <50nm, Functionalization Levels: Kit containing 2g each of Low, Medium, & High, Process Route: Nitrogen

- **GR006060**  Bulk density: 2.15%, Platelet Planar Size: 0.3-5μm, Platelet Thickness: <50nm, Functionalization Levels: Kit containing 2g each of Low, Medium, & High, Process Route: Ammonia

- **GR006070**  Bulk density: 2.15%, Platelet Planar Size: 0.3-5μm, Platelet Thickness: <50nm, Functionalization Levels: Kit containing 2g each of Low, Medium, & High, Process Route: Fluorocarbon

- **GR006080**  Bulk density: 2.15%, Platelet Planar Size: 0.3-5μm, Platelet Thickness: <50nm, Functionalization Levels: Kit containing 2g each of Low, Medium, & High, Process Route: Argon

**Foil**

- **HF000090**  Thickness: 0.003mm, Purity: 97.0%, Size: 25x25 mm

**Sputtering Target**

- **HF001000**  Thickness: 0.004mm, Purity: 97.0%, Size: 25x25 mm to 50x50 mm

- **HF001110**  Thickness: 0.005mm, Purity: 97.0%, Size: 25x25 mm to 50x50 mm

- **HF001220**  Thickness: 0.006mm, Purity: 97.0%, Size: 25x25 mm to 50x50 mm

- **HF001330**  Thickness: 0.007mm, Purity: 97.0%, Size: 25x25 mm to 50x50 mm

- **HF001440**  Thickness: 0.008mm, Purity: 97.0%, Size: 25x25 mm to 50x50 mm

- **HF001550**  Thickness: 0.009mm, Purity: 97.0%, Size: 100x100 mm

- **HF001660**  Thickness: 0.01mm, Purity: 97.0%, Size: 100x100 mm

- **HF001770**  Thickness: 0.0125mm, Purity: 97.0%, Size: 100x100 mm

- **HF001880**  Thickness: 0.015mm, Purity: 97.0%, Size: 25x25 mm to 100x100 mm

- **HF001990**  Thickness: 0.02mm, Purity: 97.0%, Size: 25x25 mm to 100x100 mm

- **HF002000**  Thickness: 0.025mm, Purity: 97.0%, Temper: Annealed, Size: 150x150 mm

- **HF002055**  Thickness: 0.075mm, Purity: 97.0%, Temper: Annealed, Size: 25x25 mm to 150x150 mm

- **HF002110**  Thickness: 0.125mm, Purity: 97.0%, Temper: Annealed, Size: 25x25 mm to 150x150 mm

- **HF002144**  Thickness: 0.14mm, Purity: 97.0%, Temper: Annealed, Size: 25x25 mm to 150x150 mm

- **HF002220**  Thickness: 0.25mm, Purity: 97.0%, Temper: Annealed, Size: 25x25 mm to 100x100 mm

- **HF002230**  Thickness: 0.5mm, Purity: 97.0%, Temper: Annealed, Size: 25x25 mm to 100x100 mm

- **HF002440**  Thickness: 1.0mm, Purity: 97.0%, Temper: Annealed, Size: 25x25 mm to 100x100 mm

**Wire**

- **HF005105**  Diameter: 0.125mm, Purity: 97.0%, Temper: As drawn

- **HF005110**  Diameter: 0.25mm, Purity: 97.0%, Temper: As drawn

- **HF005120**  Diameter: 0.5mm, Purity: 97.0%, Temper: As drawn

- **HF005130**  Diameter: 1.0mm, Purity: 97.0%, Temper: As drawn

**Rod**

- **HF007901**  Diameter: 1.6mm, Purity: 97.0%, Temper: As drawn, Length: 100 mm to 1000 mm

- **HF007902**  Diameter: 2.0mm, Purity: 97.0%, Temper: As drawn, Length: 100 mm to 1000 mm

- **HF007910**  Diameter: 5.0mm, Purity: 97.0%, Temper: As drawn, Length: 50 mm to 200 mm

**Powder**

- **HF006000**  Max. Particle size: 45 micron, Purity: 95.0+%
### Metals — Holmium

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Diameter</th>
<th>Thickness</th>
<th>Purity</th>
<th>Temper</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>HO006100</td>
<td>Max. Lump size: 10mm, Purity: 97.0%, Condition: Sponge</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>IN00100</td>
<td>Thickness: 0.007mm, Purity: 99.8%, Support: Temporary Acrylic, Size: 25x25 mm to 100x100 mm</td>
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<td></td>
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<td></td>
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<tr>
<td>IN00110</td>
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<tr>
<td>IN00120</td>
<td>Thickness: 0.009mm, Purity: 99.8%, Support: Temporary Acrylic, Size: 25x25 mm to 100x100 mm</td>
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<tr>
<td>IN00130</td>
<td>Thickness: 0.01mm, Purity: 99.8%, Size: 25x25 mm to 100x100 mm</td>
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<td></td>
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<tr>
<td>IN00140</td>
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<td>IN00150</td>
<td>Thickness: 0.015mm, Purity: 99.8%, Size: 25x25 mm to 100x100 mm</td>
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<td>IN00160</td>
<td>Thickness: 0.02mm, Purity: 99.8%, Size: 25x25 mm to 100x100 mm</td>
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<tr>
<td>IN00170</td>
<td>Thickness: 0.025mm, Purity: 99.8%, Size: 25x25 mm to 100x100 mm</td>
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<tr>
<td>IN00180</td>
<td>Thickness: 0.03mm, Purity: 99.8%, Size: 25x25 mm to 100x100 mm</td>
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<tr>
<td>IN00190</td>
<td>Thickness: 0.04mm, Purity: 99.8%, Size: 25x25 mm to 100x100 mm</td>
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<tr>
<td>IN00200</td>
<td>Thickness: 0.05mm, Tolerance: 20 %, High Purity: 99.999%, Temper: As rolled, Size: 25x25 mm to 75x300 mm</td>
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<tr>
<td>IN00210</td>
<td>Thickness: 0.075mm, Tolerance: 20 %, High Purity: 99.999%, Temper: As rolled, Size: 150x150 mm</td>
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<tr>
<td>IN00230</td>
<td>Thickness: 0.1mm, Tolerance: 20 %, High Purity: 99.999%, Temper: As rolled, Size: 25x25 mm to 150x150 mm</td>
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<td>IN00250</td>
<td>Thickness: 0.125mm, Tolerance: 20 %, High Purity: 99.999%, Temper: As rolled, Size: 25x25 mm to 150x150 mm</td>
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<tr>
<td>IN00251</td>
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<td>IN00260</td>
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<td>IN00264</td>
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<tr>
<td>IN00266</td>
<td>Thickness: 0.5mm, High Purity: 99.999%, Temper: As rolled, Size: 25x25 mm to 100x200 mm</td>
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<tr>
<td>IN00267</td>
<td>Thickness: 0.6mm, High Purity: 99.999%, Temper: As rolled</td>
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<td>IN00268</td>
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<td>IN00270</td>
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<tr>
<td>IN00300</td>
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<tr>
<td>IN00350</td>
<td>Thickness: 3.0mm, High Purity: 99.999%, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
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</tbody>
</table>

---

### Indium (In)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Diameter</th>
<th>Thickness</th>
<th>Purity</th>
<th>Temper</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>HO005105</td>
<td>Diameter: 0.5mm, Purity: 99.9%, Temper: As drawn</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>HO005110</td>
<td>Diameter: 1.0mm, Purity: 99.9%, Temper: Hard</td>
<td></td>
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<td></td>
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<tr>
<td>HO007902</td>
<td>Diameter: 2.0mm, Purity: 99%, Length: 50 mm</td>
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<tr>
<td>HO007905</td>
<td>Diameter: 3.8mm, Purity: 99%, Length: 50 mm to 200 mm</td>
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<tr>
<td>HO007910</td>
<td>Diameter: 6.35mm, Purity: 99%, Condition: Cast, Length: 50 mm to 100 mm</td>
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<tr>
<td>HO006010</td>
<td>Max. Particle size: 500micron, Purity: 99.9%</td>
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<tr>
<td>HO006100</td>
<td>Max. Lump size: 25mm, Purity: 99%</td>
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</tr>
</tbody>
</table>

---

### Goodfellow Corporation

February 2017

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Metals

Sputtering Target

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Diameter</th>
<th>Length</th>
<th>Purity</th>
<th>Temper</th>
</tr>
</thead>
<tbody>
<tr>
<td>IR000200</td>
<td>Thickness: 2.0mm, High Purity: 99.999%, Size: 50 mm to 75 mm</td>
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<tr>
<td>IR000300</td>
<td>Thickness: 3.0mm, High Purity: 99.999%, Size: 50 mm to 75 mm</td>
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<tr>
<td>IR000600</td>
<td>Thickness: 6.0mm, High Purity: 99.999%, Size: 50 mm to 76.2 mm</td>
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Wire

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
<th>Purity</th>
<th>Temper</th>
</tr>
</thead>
<tbody>
<tr>
<td>IN005105</td>
<td>0.15mm</td>
<td>99.999%</td>
<td>As drawn</td>
</tr>
<tr>
<td>IN005110</td>
<td>0.25mm</td>
<td>99.999%</td>
<td>As drawn</td>
</tr>
<tr>
<td>IN005120</td>
<td>0.5mm</td>
<td>99.999%</td>
<td>As drawn</td>
</tr>
<tr>
<td>IN005125</td>
<td>0.75mm</td>
<td>99.999%</td>
<td>As drawn</td>
</tr>
<tr>
<td>IN005130</td>
<td>1.0mm</td>
<td>99.999%</td>
<td>As drawn</td>
</tr>
<tr>
<td>IN005132</td>
<td>1.2mm</td>
<td>99.999%</td>
<td>As drawn</td>
</tr>
<tr>
<td>IN005140</td>
<td>1.5mm</td>
<td>99.999%</td>
<td>As drawn</td>
</tr>
<tr>
<td>IN005142</td>
<td>1.8mm</td>
<td>99.999%</td>
<td>As drawn</td>
</tr>
<tr>
<td>IN005148</td>
<td>2.4mm</td>
<td>99.999%</td>
<td>As drawn</td>
</tr>
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<td>IN007910</td>
<td>2.0mm</td>
<td>99.999%</td>
<td>As drawn</td>
</tr>
<tr>
<td>IN007912</td>
<td>3.0mm</td>
<td>99.999%</td>
<td>As drawn</td>
</tr>
<tr>
<td>IN007915</td>
<td>3.5mm</td>
<td>99.999%</td>
<td>As drawn</td>
</tr>
<tr>
<td>IN007920</td>
<td>5.0mm</td>
<td>99.999%</td>
<td>As drawn</td>
</tr>
<tr>
<td>IN007921</td>
<td>5.0mm</td>
<td>99.9999%</td>
<td>As drawn</td>
</tr>
<tr>
<td>IN007930</td>
<td>10.0mm</td>
<td>99.999%</td>
<td>As drawn</td>
</tr>
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</table>

Bar

<table>
<thead>
<tr>
<th>Code</th>
<th>Side Length</th>
<th>Purity</th>
<th>Temper</th>
</tr>
</thead>
<tbody>
<tr>
<td>IN008010</td>
<td>27mm</td>
<td>99.9%</td>
<td>As drawn</td>
</tr>
</tbody>
</table>

Powder

| Code   | Max. Particle size: 150 micron, High Purity: 99.999% |  |  |  |
|--------|-----------------------------------------------------|  |  |  |

Lump

| Code   | Max. Lump size: 8mm, High Purity: 99.999%, Condition: Pellets - nominally 6.35mm diameter x 6.35mm length |  |  |  |
|--------|----------------------------------------------------------------------------------------------------------|  |  |  |
| IN006101 | Max. Lump size: 15mm, High Purity: 99.999%                                                                 |  |  |  |
| IN006120 | Max. Lump size: 20mm, High Purity: 99.99998%                                                              |  |  |  |

Iridium (Ir)

Microfoil

| Code   | Thickness: 0.1μm, Specific density: 224μg.cm², Purity: 99.9%, Support: Permanent Mylar 3.5μm, Diameter: 10 mm to 25 mm |  |  |  |
|--------|---------------------------------------------------------------------------------------------------------------|  |  |  |

Foil

| Code   | Thickness: 0.01mm, Purity: 99.9%, Temper: As rolled, Size: 10x50 mm to 40x40 mm |  |  |  |
|--------|--------------------------------------------------------------------------------|  |  |  |
| IR000205 | Thickness: 0.025mm, Purity: 99.9%, Temper: As rolled, Size: 25x25 mm to 50x50 mm |  |  |  |
| IR000206 | Thickness: 0.03mm, Purity: 99.9%, Temper: As rolled, Size: 25x25 mm |  |  |  |
| IR000201 | Thickness: 0.05mm, Coil width: 5mm, Purity: 99.9%, Temper: As rolled, Length: 0.025 m to 0.18 m |  |  |  |
| IR000200 | Thickness: 0.05mm, Purity: 99.9%, Temper: As rolled, Size: 25x25 mm to 50x50 mm |  |  |  |
| IR000209 | Thickness: 0.1mm, Purity: 99.9%, Temper: As rolled, Size: 25x25 mm |  |  |  |
| IR000210 | Thickness: 0.125mm, Purity: 99.9%, Temper: As rolled, Size: 25x25 mm to 50x50 mm |  |  |  |
| IR000215 | Thickness: 0.15mm, Purity: 99.9%, Temper: As rolled, Size: 25x25 mm to 50x50 mm |  |  |  |
| IR000220 | Thickness: 0.25mm, Purity: 99.9%, Temper: As rolled, Size: 25x25 mm to 50x50 mm |  |  |  |
| IR000270 | Thickness: 0.5mm, Purity: 99.9%, Temper: As rolled, Size: 25x25 mm to 50x50 mm |  |  |  |
| IR000301 | Thickness: 1.0mm, Purity: 99.9%, Temper: As rolled, Diameter: 5 mm to 8 mm |  |  |  |
| IR000300 | Thickness: 1.0mm, Purity: 99.9%, Temper: As rolled, Size: 10x10 mm to 50x50 mm |  |  |  |

Sputtering Target

| Code   | Diameter: 0.25mm, High Purity: 99.9%, Length: 10 mm to 50 mm |  |  |  |
|--------|----------------------------------------------------------------|  |  |  |
| IR009100 | Thickness: 1.0mm, Purity: 99.9%, Size: 25.4 mm to 57 mm |  |  |  |
| IR009300 | Thickness: 3.2mm, Purity: 99.9%, Size: 25.4 mm to 50.6 mm |  |  |  |

Wire

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<tr>
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Please visit www.goodfellow.com or www.goodfellowusa.com for latest prices
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<th>Microfoil</th>
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<td>Permanent Mylar 3.5 μm</td>
<td>25 mm</td>
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Fe0000100 | Thickness: 0.005 mm, Purity: 99.85%, Size: 25x25 mm to 150x150 mm |
Fe000110  | Thickness: 0.006 mm, Purity: 99.85%, Size: 25x25 mm to 150x150 mm |
Fe000120  | Thickness: 0.007 mm, Purity: 99.85%, Size: 25x25 mm to 150x150 mm |
Fe000130  | Thickness: 0.008 mm, Purity: 99.85%, Size: 25x25 mm to 150x150 mm |
Fe000140  | Thickness: 0.009 mm, Purity: 99.85%, Size: 25x25 mm to 150x150 mm |
Fe000207  | Thickness: 0.01 mm, Purity: 99.99 +%, Size: 50x50 mm to 100x100 mm |
Fe000150  | Thickness: 0.01 mm, Purity: 99.85%, Size: 25x25 mm to 100x100 mm |
Fe000210  | Thickness: 0.0125 mm, Purity: 99.85%, Size: 50x50 mm to 100x100 mm |
Fe000216  | Thickness: 0.0125 mm, Purity: 99.85%, Size: 50x50 mm to 150x150 mm |
Fe000211  | Thickness: 0.015 mm, Purity: 99.99 +%, Size: 100x100 mm |
Fe000170  | Thickness: 0.015 mm, Purity: 99.85%, Size: 100x100 mm to 150x150 mm |
Fe000180  | Thickness: 0.020 mm, Purity: 99.85%, Size: 100x100 mm to 150x150 mm |
Fe000230  | Thickness: 0.025 mm, Purity: 99.5%, Temper: As rolled, Size: 25x25 mm to 100x100 mm |
Fe000240  | Thickness: 0.025 mm, Purity: 99.5%, Temper: Hard, Coil width 150 mm, Size: 25x25 mm to 300x300 mm |
Fe000255  | Thickness: 0.038 mm, Purity: 99.5%, Temper: As rolled, Size: 25x25 mm to 100x100 mm |
Fe000262  | Thickness: 0.05 mm, Purity: 99.99 +%, Temper: As rolled, Size: 25x25 mm to 100x100 mm |
Fe000265  | Thickness: 0.05 mm, Purity: 99.5%, Temper: Hard, Coil width 305 mm, Size: 25x25 mm to 300x300 mm |
Fe000292  | Thickness: 0.075 mm, Purity: 99.99 +%, Temper: As rolled, Size: 25x25 mm to 100x100 mm |
Fe000290  | Thickness: 0.075 mm, Purity: 99.5%, Temper: Hard, Coil width 300 mm, Size: 25x25 mm to 300x300 mm |
Fe000315  | Thickness: 0.10 mm, Purity: 99.8%, Condition: Soft ingot Iron, Temper: As rolled, Coil width 200 mm, Size: 25x25 mm to 200x200 mm |
Fe000320  | Thickness: 0.11 mm, Purity: 99.5%, Temper: Hard, Coil width 305 mm, Size: 25x25 mm to 300x300 mm |
Fe000316  | Thickness: 0.10 mm, Purity: 99.8%, Condition: Soft ingot Iron, Temper: Annealed, Coil width 305 mm, Size: 25x25 mm to 300x300 mm |
Fe000360  | Thickness: 0.125 mm, Purity: 99.99 +%, Temper: As rolled, Size: 25x25 mm to 100x100 mm |
Fe000330  | Thickness: 0.125 mm, Purity: 99.5%, Temper: Hard, Coil width 300 mm, Size: 25x25 mm to 300x300 mm |
Fe000380  | Thickness: 0.15 mm, Purity: 99.5%, Temper: Hard, Coil width 305 mm, Size: 25x25 mm to 300x300 mm |
Fe000390  | Thickness: 0.20 mm, Purity: 99.5%, Temper: Hard, Coil width 300 mm, Size: 25x25 mm to 300x300 mm |
Metals

**FE00401** Thickness: 0.25mm, High Purity: 99.99+%, Temper: As rolled, Size: 25x25 mm to 100x100 mm

**FE00400** Thickness: 0.25mm, Purity: 99.5%, Temper: Hard, Coil width 300 mm, Size: 25x25 mm to 300x300 mm

**FE00403** Thickness: 0.38mm, Purity: 99.5%, Temper: Hard, Coil width 300 mm, Size: 25x25 mm to 300x300 mm

**FE00408** Thickness: 0.5mm, Coil width: 49mm, Purity: 99.8+, Condition: ARMCO®, soft ingot Iron, Length: 0.2 m to 5 m

**FE00406** Thickness: 0.5mm, High Purity: 99.99+%, Temper: As rolled, Size: 25x25 mm to 100x100 mm

**FE00405** Thickness: 0.5mm, Purity: 99.5%, Temper: Hard, Coil width 300 mm, Size: 25x25 mm to 300x300 mm

**FE00414** Thickness: 0.9mm, Purity: 99.5%, Temper: As rolled, Condition: Polished on both sides, Size: 100x100 mm to 200x200 mm

**FE00409** Thickness: 0.9mm, Purity: 99.5%, Temper: As rolled, Size: 25x25 mm to 300x300 mm

**FE00411** Thickness: 1.0mm, High Purity: 99.99+%, Temper: As rolled, Size: 25x25 mm to 100x100 mm

**FE00410** Thickness: 1.0mm, Purity: 99.5%, Temper: As rolled, Size: 25x25 mm to 300x300 mm

**FE00413** Thickness: 1.0mm, Purity: 99.8%, Temper: As rolled, Condition: ARMCO®, soft ingot Iron, Size: 150x150 mm to 300x300 mm

**FE00450** Thickness: 1.5mm, Purity: 99.5%, Temper: As rolled, Size: 25x25 mm to 500x500 mm

**FE00455** Thickness: 1.5mm, Purity: 99.8%, Temper: As rolled, Condition: ARMCO®, soft ingot Iron, Size: 150x150 mm to 300x300 mm

**FE00560** Thickness: 1.63mm, Purity: 99.9%, Temper: As drawn, Size: 50x50 mm to 150x500 mm

**FE00580** Thickness: 1.83mm, Purity: 99.5%, Temper: Quarter hard, Size: 25x25 mm to 150x150 mm

**FE00462** Thickness: 2.0mm, Purity: 99.95%, Temper: As rolled, Size: 25x25 mm to 100x100 mm

**FE00460** Thickness: 2mm, High Purity: 99.99+, Temper: As rolled, Size: 25x25 mm to 100x100 mm

**FE00465** Thickness: 2.0mm, Purity: 99.8%, Temper: As rolled, Condition: ARMCO®, soft ingot Iron, Size: 100x100 mm to 300x300 mm

**FE00471** Thickness: 3.0mm, Purity: 99.5%, Temper: As rolled, Condition: Mirror polished on both sides, Size: 305x305 mm

**FE00470** Thickness: 3.0mm, Purity: 99.5%, Temper: As rolled, Size: 150x150 mm to 300x300 mm

**FE00480** Thickness: 3.1mm, Purity: 99.95%, Temper: As rolled, Size: 25x25 mm to 100x100 mm

**FE00500** Thickness: 5mm, Purity: 99.8+, Temper: As rolled, Condition: ARMCO®, soft ingot Iron, Size: 90x200 mm to 300x300 mm

**FE00501** Thickness: 5mm, Purity: 99.8%, Temper: As rolled, Condition: ARMCO®, soft ingot Iron, Size: 175x525 mm to 60x606 mm

**Sputtering Target**

**FE009200** Thickness: 2.0mm, Purity: 99.95%, Size: 25 mm to 75 mm

**FE009301** Thickness: 3.0mm, High Purity: 99.99+, Size: 25.4 mm to 76.2 mm

**FE009300** Thickness: 3.0mm, Purity: 99.95%, Size: 25 mm to 75 mm

**FE009500** Thickness: 5.0mm, Purity: 99.95%, Size: 31 mm

**FE009600** Thickness: 6.0mm, Purity: 99.99+, Size: 25 mm to 75 mm

**FE009601** Thickness: 6.0mm, Purity: 99.95%, Size: 50.8 mm to 76.2 mm

**Wire**

**FE005105** Diameter: 0.025mm, High Purity: 99.99+, Temper: As drawn

**FE005106** Diameter: 0.03mm, Purity: 99.5%, Temper: As drawn

**FE005110** Diameter: 0.05mm, Purity: 99.5%, Temper: Hard

**FE005112** Diameter: 0.065mm, Purity: 99.5%, Temper: Hard

**FE005121** Diameter: 0.125mm, Purity: 99.5%, Temper: Hard

**FE005125** Diameter: 0.13mm, High Purity: 99.99+, Temper: Hard

**FE005140** Diameter: 0.25mm, High Purity: 99.99+, Temper: Hard

**FE005141** Diameter: 0.25mm, High Purity: 99.99+, Temper: Annealed

**FE005131** Diameter: 0.25mm, Purity: 99.5%, Temper: Hard

**FE005156** Diameter: 0.5mm, High Purity: 99.998%, Temper: As drawn

**FE005155** Diameter: 0.5mm, High Purity: 99.99+, Temper: Hard

**FE005153** Diameter: 0.5mm, Purity: 99.95%, Temper: As drawn

**FE005165** Diameter: 0.8mm, Purity: 99.5%, Temper: Annealed

**FE005172** Diameter: 1.0mm, Purity: 99.5%, Temper: Annealed

**FE005180** Diameter: 1.0mm, High Purity: 99.99+, Temper: As drawn

**Insulated Wire**

**FE005806** Conductor diameter: 0.15mm, Insulation thickness: 0.016mm, Insulation: Polyimide

**FE005811** Conductor diameter: 0.175mm, Insulation thickness: 0.0135mm, Insulation: Polyimide

**FE005816** Conductor diameter: 0.200mm, Insulation thickness: 0.018mm, Insulation: Polyimide

**FE005821** Conductor diameter: 0.25mm, Insulation thickness: 0.02mm, Insulation: Polyimide

**FE005820** Conductor diameter: 0.25mm, Insulation thickness: 0.01mm, Insulation: Polyester

**Rod**

**FE007912** Diameter: 2.0mm, Purity: 99.95%, Temper: As drawn, Length: 21 mm

**FE007911** Diameter: 2.0mm, Purity: 99.95%, Temper: As drawn, Length: 100 mm to 1000 mm

**FE007910** Diameter: 2.0mm, High Purity: 99.99+, Temper: As drawn, Length: 100 mm to 1000 mm

**FE007925** Diameter: 3.0mm, High Purity: 99.99+, Temper: As drawn, Length: 50 mm to 500 mm

**FE007920** Diameter: 3.2mm, Purity: 98+, Temper: As drawn, Length: 100 mm to 1000 mm
| FE007929 | Diameter: 4mm, Purity: 98+%, Temper: As drawn, Length: 100 mm to 1000 mm |
| FE007928 | Diameter: 4.0mm, High Purity: 99.99+%, Temper: As drawn, Length: 50 mm to 300 mm |
| FE007930 | Diameter: 4.8mm, Purity: 98+%, Temper: As drawn, Length: 100 mm to 1000 mm |
| FE007943 | Diameter: 5.0mm, High Purity: 99.99+, Temper: As drawn, Length: 50 mm to 300 mm |
| FE007945 | Diameter: 6.0mm, High Purity: 99.99+, Temper: As drawn, Length: 50 mm to 300 mm |
| FE007947 | Diameter: 6.35mm, Purity: 98+, Temper: As drawn, Length: 100 mm to 1000 mm |
| FE007948 | Diameter: 6.35mm, Purity: 99.8%, Temper: As drawn, Condition: Soft ingot iron, Length: 100 mm to 1000 mm |
| FE007950 | Diameter: 9.5mm, Purity: 98+%, Temper: As drawn, Length: 50 mm to 200 mm |
| FE007951 | Diameter: 9.5mm, Purity: 99.8+, Temper: As drawn, Length: 100 mm to 1000 mm |
| FE007955 | Diameter: 10.0mm, High Purity: 99.99+, Temper: As drawn, Condition: Soft ingot iron, Length: 100 mm to 1000 mm |
| FE007957 | Diameter: 12.7mm, Purity: 98+, Temper: As drawn, Length: 100 mm to 1000 mm |
| FE007960 | Diameter: 19.0mm, Purity: 98+, Temper: As drawn, Length: 50 mm to 500 mm |
| FE007961 | Diameter: 19.0mm, Purity: 99.8%, Temper: As drawn, Condition: Soft ingot iron, Length: 100 mm to 1000 mm |
| FE007965 | Diameter: 25mm, Purity: 99.8+, Temper: As drawn, Length: 100 mm to 1000 mm |
| FE007969 | Diameter: 25.4mm, Purity: 99.8%, Temper: As drawn, Condition: Soft ingot iron, Length: 50 mm to 1000 mm |
| FE007972 | Diameter: 27.0mm, Purity: 99.8%, Temper: As drawn, Condition: ARMCO® soft ingot iron, Length: 50 mm to 400 mm |
| FE007975 | Diameter: 30mm, Purity: 98+, Temper: As drawn, Length: 100 mm to 1000 mm |
| FE007974 | Diameter: 30mm, Purity: 99.8%, Temper: As drawn, Condition: ARMCO® soft ingot iron, Length: 100 mm to 1000 mm |
| FE007978 | Diameter: 40mm, Purity: 99.8%, Temper: As drawn, Condition: ARMCO® soft ingot iron, Length: 50 mm to 500 mm |
| FE007985 | Diameter: 50mm, Purity: 98+, Temper: As drawn, Length: 100 mm to 500 mm |
| FE007980 | Diameter: 50mm, Purity: 99.8%, Temper: As drawn, Condition: ARMCO® soft ingot iron, Length: 50 mm to 500 mm |
| FE007990 | Diameter: 80mm, Purity: 99.8%, Temper: As drawn, Condition: ARMCO® soft ingot iron, Length: 50 mm to 200 mm |
| FE007995 | Diameter: 100mm, Purity: 99.8%, Temper: As drawn, Condition: ARMCO® soft ingot iron, Length: 50 mm to 200 mm |

**Tube**

FE007070 Outside Diameter: 1.0mm, Wall Thickness: 0.1mm, Inside Diameter: 0.8mm, Purity: 99.5%, Temper: As drawn, Length: 100 mm to 1000 mm

FE007090 Outside Diameter: 1.40mm, Wall Thickness: 0.3mm, Inside Diameter: 0.8mm, Purity: 99.6%, Temper: As drawn, Condition: ARMCO® soft ingot iron, Length: 100 mm to 1000 mm

FE007100 Outside Diameter: 1.65mm, Wall Thickness: 0.38mm, Inside Diameter: 0.89mm, Purity: 99.6%, Temper: As drawn, Condition: ARMCO® soft ingot iron, Length: 100 mm to 1000 mm

FE007160 Outside Diameter: 2.0mm, Wall Thickness: 0.46mm, Inside Diameter: 1.08mm, Purity: 99.5%, Temper: As drawn, Length: 100 mm to 1000 mm

FE007150 Outside Diameter: 2.0mm, Wall Thickness: 0.2mm, Inside Diameter: 1.6mm, Purity: 99.5%, Temper: As drawn, Length: 100 mm to 1000 mm

FE007180 Outside Diameter: 2.30mm, Wall Thickness: 0.115mm, Inside Diameter: 2.07mm, Purity: 99.5%, Temper: As drawn, Length: 100 mm to 1000 mm

FE007200 Outside Diameter: 2.38mm, Wall Thickness: 0.39mm, Inside Diameter: 1.6mm, Purity: 99.6%, Temper: As drawn, Condition: ARMCO® soft ingot iron, Length: 100 mm to 1000 mm

FE007300 Outside Diameter: 3.18mm, Wall Thickness: 0.61mm, Inside Diameter: 1.96mm, Purity: 99.5%, Temper: As drawn, Length: 100 mm to 1000 mm

FE007320 Outside Diameter: 3.2mm, Wall Thickness: 0.5mm, Inside Diameter: 2.2mm, Purity: 99.6%, Temper: As drawn, Condition: ARMCO® soft ingot iron, Length: 100 mm to 1000 mm

FE007400 Outside Diameter: 4.0mm, Wall Thickness: 0.2mm, Inside Diameter: 3.6mm, Purity: 99.5%, Temper: As drawn, Length: 100 mm to 1000 mm

FE007500 Outside Diameter: 5.0mm, Wall Thickness: 0.5mm, Inside Diameter: 4mm, Purity: 99.5%, Temper: As drawn, Length: 100 mm to 499 mm

FE007501 Outside Diameter: 5.0mm, Wall Thickness: 0.25mm, Inside Diameter: 4.5mm, Purity: 99.5%, Temper: As drawn, Length: 100 mm to 1000 mm

FE007550 Outside Diameter: 6.35mm, Wall Thickness: 0.5mm, Inside Diameter: 5.35mm, Purity: 99.6%, Temper: As drawn, Condition: ARMCO® soft ingot iron, Length: 100 mm to 1000 mm

FE007570 Outside Diameter: 8.0mm, Wall Thickness: 1.5mm, Inside Diameter: 5mm, Purity: 99.5%, Temper: Annealed, Length: 100 mm to 1000 mm

FE007600 Outside Diameter: 9.5mm, Wall Thickness: 0.5mm, Inside Diameter: 8.5mm, Purity: 99.6%, Temper: As drawn, Condition: ARMCO® soft ingot iron, Length: 100 mm to 1000 mm

FE007650 Outside Diameter: 10.0mm, Wall Thickness: 1.5mm, Inside Diameter: 7mm, Purity: 99.5%, Temper: Annealed, Length: 100 mm to 1000 mm

FE007645 Outside Diameter: 10.6mm, Wall Thickness: 0.3mm, Inside Diameter: 10.0mm, Purity: 99.6%, Temper: As drawn, Condition: ARMCO® soft ingot iron, Length: 100 mm to 1000 mm

FE007680 Outside Diameter: 12.0mm, Wall Thickness: 1.5mm, Inside Diameter: 9mm, Purity: 99.5%, Temper: Annealed, Length: 100 mm to 1000 mm
### Metals

#### Lanthanum (La)

**Foil**
- LA000200: Thickness: 0.025mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm to 100x100 mm
- LA000210: Thickness: 0.1mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm to 100x100 mm
- LA000215: Thickness: 0.125mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm to 100x100 mm
- LA000240: Thickness: 0.5mm, Purity: 99%, Temper: As rolled, Size: 29x33 mm to 35x47 mm

**Sputtering Target**
- LA009100: Thickness: 1.0mm, Purity: 99%, Size: 50 mm to 75 mm

**Rod**
- LA007910: Diameter: 6.35mm, Purity: 99%, Condition: Cast, Length: 50 mm to 100 mm

**Powder**
- LA006020: Max. Particle size: 400micron, Purity: 99.9%

**Lump**
- LA006100: Max. Lump size: 25mm, Purity: 99%

### Lead (Pb)

**Microfoil**
- PB004010: Thickness: 0.001µm, Specific density: 1.135g.cm⁻³, Purity: 99.99 %, Support: Permanent Mylar 3.5µm, Diameter: 10 mm
- PB004200: Thickness: 0.025µm, Specific density: 30.9µg.cm⁻², Purity: 99.99 %, Support: Permanent Mylar 3.5µm, Diameter: 10 mm
- PB004500: Thickness: 0.1µm, Specific density: 103.4µg.cm⁻³, Purity: 99.99 %, Support: Permanent Mylar 3.5µm, Diameter: 10 mm
- PB004600: Thickness: 0.25µm, Specific density: 266.7µg.cm⁻², Purity: 99.99 %, Support: Permanent Mylar 3.5µm, Diameter: 10 mm to 25 mm
- PB004850: Thickness: 1.0µm, Specific density: 1047.8µg.cm⁻³, Purity: 99.99 %, Support: Permanent Mylar 3.5µm, Diameter: 10 mm to 25 mm

**Foil**
- PB000020: Thickness: 0.001mm, Purity: 99.99 %, Support: Temporary Acrylic, Size: 25x25 mm to 50x50 mm
- PB000030: Thickness: 0.002mm, Purity: 99.99 %, Support: Temporary Acrylic, Size: 25x25 mm to 50x50 mm
- PB000040: Thickness: 0.0025mm, Purity: 99.99 %, Support: Temporary Acrylic, Size: 25x25 mm to 50x50 mm
- PB000050: Thickness: 0.003mm, Purity: 99.99 %, Size: 25x25 mm to 50x50 mm
- PB000060: Thickness: 0.004mm, Purity: 99.99 %, Size: 25x25 mm to 100x100 mm
- PB000065: Thickness: 0.0045mm, Purity: 99.99 %, Size: 25x25 mm to 50x50 mm
- PB000070: Thickness: 0.005mm, Purity: 99.99 %, Size: 25x25 mm to 100x100 mm
- PB000080: Thickness: 0.006mm, Purity: 99.99 %, Size: 25x25 mm to 100x100 mm

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Metals — Lanthanum

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## Metals

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<tr>
<th>Code</th>
<th>Thickness</th>
<th>Purity</th>
<th>Size</th>
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<tbody>
<tr>
<td>PB000090</td>
<td>0.007mm</td>
<td>99.99%</td>
<td>25x25 mm to 100x100 mm</td>
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<tr>
<td>PB000100</td>
<td>0.008mm</td>
<td>99.99%</td>
<td>25x25 mm to 100x100 mm</td>
</tr>
<tr>
<td>PB000110</td>
<td>0.009mm</td>
<td>99.99%</td>
<td>25x25 mm to 100x100 mm</td>
</tr>
<tr>
<td>PB000120</td>
<td>0.011mm</td>
<td>99.99%</td>
<td>25x25 mm to 100x100 mm</td>
</tr>
<tr>
<td>PB000130</td>
<td>0.012mm</td>
<td>99.99%</td>
<td>25x25 mm to 100x100 mm</td>
</tr>
<tr>
<td>PB000140</td>
<td>0.015mm</td>
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<td>25x25 mm to 100x100 mm</td>
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<tr>
<td>PB000210</td>
<td>0.016mm</td>
<td>96%</td>
<td>As rolled</td>
</tr>
<tr>
<td>PB000150</td>
<td>0.02mm</td>
<td>99.99%</td>
<td>25x25 mm to 150x150 mm</td>
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<tr>
<td>PB000160</td>
<td>0.025mm</td>
<td>99.99%</td>
<td>50x50 mm to 150x150 mm</td>
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<tr>
<td>PB000220</td>
<td>0.025mm</td>
<td>97%</td>
<td>As rolled</td>
</tr>
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<td>PB000170</td>
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<tr>
<td>PB000180</td>
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<td>100x100 mm to 150x150 mm</td>
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<td>PB000240</td>
<td>0.05mm</td>
<td>99.99%</td>
<td>As rolled</td>
</tr>
<tr>
<td>PB000260</td>
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<td>96%</td>
<td>As rolled</td>
</tr>
<tr>
<td>PB000190</td>
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<td>PB000261</td>
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<td>PB000280</td>
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<td>0.12mm</td>
<td>99.95%</td>
<td>As rolled</td>
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<tr>
<td>PB000330</td>
<td>0.125mm</td>
<td>99.99%</td>
<td>As rolled</td>
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<td>PB000311</td>
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<td>PB000350</td>
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<td>As rolled</td>
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<td>PB000382</td>
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<td>As rolled</td>
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<td>PB000381</td>
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<td>PB000390</td>
<td>0.40mm</td>
<td>99.95%</td>
<td>As rolled</td>
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### Sputtering Target

<table>
<thead>
<tr>
<th>Code</th>
<th>Thickness</th>
<th>Purity</th>
<th>Size</th>
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<tbody>
<tr>
<td>PB009300</td>
<td>3.0mm</td>
<td>99.99%</td>
<td>50 mm to 75 mm</td>
</tr>
<tr>
<td>PB009600</td>
<td>6.0mm</td>
<td>99.99%</td>
<td>50 mm to 75 mm</td>
</tr>
<tr>
<td>PB009900</td>
<td>10mm</td>
<td>99.99%</td>
<td>50 mm</td>
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</tbody>
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### Wire

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
<th>Purity</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>PB005106</td>
<td>0.125mm</td>
<td>99.5%</td>
<td>As drawn</td>
</tr>
<tr>
<td>PB005111</td>
<td>0.25mm</td>
<td>99.95%</td>
<td>As drawn</td>
</tr>
<tr>
<td>PB005125</td>
<td>0.5mm</td>
<td>99.999%</td>
<td>As drawn</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>PB005128</th>
<th>Diameter: 0.75mm, High Purity: 99.99+ %, Temper: As drawn</th>
</tr>
</thead>
<tbody>
<tr>
<td>PB005130</td>
<td>Diameter: 1.0mm, High Purity: 99.99+ %, Temper: As drawn</td>
</tr>
<tr>
<td>PB005140</td>
<td>Diameter: 2.0mm, High Purity: 99.99+ %, Temper: As drawn</td>
</tr>
<tr>
<td>PB005150</td>
<td>Diameter: 3.0mm, Purity: 99.99%, Temper: As drawn</td>
</tr>
</tbody>
</table>

**Metal**

| PB002121 | Oriented: (110), Diameter: 12mm, Length: 25mm, Purity: 99.999% |
| PB002120 | Oriented: (110), Diameter: 12mm, Length: 50mm, Purity: 99.999% |

**Lithium (Li)**

| Li000205 | Thickness: 0.12mm, Purity: 99.9%, Temper: As rolled, Size: 45x200 mm |
| Li000220 | Thickness: 0.20mm, Purity: 99.99%, Temper: As rolled, Size: 38x200 mm to 38x500 mm |
| Li000260 | Thickness: 0.6mm, Purity: 99.9%, Temper: As rolled, Size: 25x100 mm to 25x300 mm |

**Rod**

| Li007915 | Diameter: 12.7mm, Purity: 99.0%, Length: 165 mm to 200 mm |

**Lutetium (Lu)**

| Lu006010 | Max. Particle size: 500 micron, Purity: 99.9% |
| Lu006100 | Max. Lump size: 25mm, Purity: 99.9% |

**Magnesium (Mg)**

| Mg004850 | Thickness: 1.0μm, Specific density: 174g.cm², Purity: 99.9%, Permanent support: 6 micron Aluminum, Size: 25x25 mm to 50x50 mm |

**Powder**

| Mg004990 | Thickness: 1.0μm, Specific density: 174g.cm², Purity: 99.9%, Support: Removable, Size: 25x25 mm to 50x50 mm |

**Microfoil**

| Mg000090 | Thickness: 0.002mm, Purity: 99.9%, Size: 25x25 mm to 50x50 mm |
| Mg001000 | Thickness: 0.003mm, Purity: 99.9%, Size: 25x25 mm to 50x50 mm |
| Mg001200 | Thickness: 0.005mm, Purity: 99.9%, Size: 25x25 mm to 50x50 mm |
| Mg001600 | Thickness: 0.01mm, Purity: 99.9%, Size: 25x25 mm to 100x100 mm |
| Mg001700 | Thickness: 0.0125mm, Purity: 99.9%, Size: 25x25 mm to 100x100 mm |
| Mg001800 | Thickness: 0.015mm, Purity: 99.9%, Size: 25x25 mm to 100x100 mm |

**Microleaf**

| Mg000090 | Thickness: 0.002mm, Purity: 99.9%, Size: 25x25 mm to 50x50 mm |
| Mg001000 | Thickness: 0.003mm, Purity: 99.9%, Size: 25x25 mm to 50x50 mm |
| Mg001200 | Thickness: 0.005mm, Purity: 99.9%, Size: 25x25 mm to 50x50 mm |
| Mg001600 | Thickness: 0.01mm, Purity: 99.9%, Size: 25x25 mm to 100x100 mm |
| Mg001700 | Thickness: 0.0125mm, Purity: 99.9%, Size: 25x25 mm to 100x100 mm |
| Mg001800 | Thickness: 0.015mm, Purity: 99.9%, Size: 25x25 mm to 100x100 mm |
# Metals — Manganese

**Sputtering Target**

<table>
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<tr>
<th>Code</th>
<th>Thickness</th>
<th>Purity</th>
<th>Size</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>MG00930</td>
<td>3.0mm</td>
<td>99.9%</td>
<td>25.4 mm to 75 mm</td>
<td>Polished on both sides</td>
</tr>
<tr>
<td>MG00960</td>
<td>6.0mm</td>
<td>99.9%</td>
<td>50 mm to 75 mm</td>
<td></td>
</tr>
<tr>
<td>MG00987</td>
<td>12.0mm</td>
<td>99.9%</td>
<td>75 mm</td>
<td></td>
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**Wire**

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<tr>
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<th>Diameter</th>
<th>Purity</th>
<th>Support</th>
<th>Condition</th>
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</thead>
<tbody>
<tr>
<td>MG00510</td>
<td>0.125mm</td>
<td>99.9%</td>
<td>50 micron</td>
<td>Ground</td>
</tr>
<tr>
<td>MG00515</td>
<td>0.25mm</td>
<td>99.9%</td>
<td>50 micron</td>
<td>Ground</td>
</tr>
<tr>
<td>MG00512</td>
<td>0.4mm</td>
<td>99.9%</td>
<td>50 micron</td>
<td>Ground</td>
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<tr>
<td>MG00515</td>
<td>0.5mm</td>
<td>99.9%</td>
<td>50 micron</td>
<td>Ground</td>
</tr>
<tr>
<td>MG00510</td>
<td>1.0mm</td>
<td>99.9%</td>
<td>50 micron</td>
<td>Ground</td>
</tr>
<tr>
<td>MG00512</td>
<td>1.1mm</td>
<td>99.9%</td>
<td>50 micron</td>
<td>Ground</td>
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**Rod**

<table>
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<th>Support</th>
<th>Condition</th>
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<tbody>
<tr>
<td>MG00790</td>
<td>1.6mm</td>
<td>99.9%</td>
<td>50 micron</td>
<td>Ground</td>
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<tr>
<td>MG00795</td>
<td>3.2mm</td>
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<tr>
<td>MG00798</td>
<td>4.8mm</td>
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<td>50 micron</td>
<td>Ground</td>
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<tr>
<td>MG00792</td>
<td>7.9mm</td>
<td>99.9%</td>
<td>50 micron</td>
<td>Ground</td>
</tr>
<tr>
<td>MG00792</td>
<td>10mm</td>
<td>99.97%</td>
<td>50 micron</td>
<td>Ground</td>
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**Powder**

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<tbody>
<tr>
<td>MG00602</td>
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**Single Crystal**

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<tbody>
<tr>
<td>MG00210</td>
<td>(0001)</td>
<td>99.99%</td>
<td>(0001)</td>
<td>Ground</td>
</tr>
<tr>
<td>MG00211</td>
<td>(0001)</td>
<td>99.999%</td>
<td>(0001)</td>
<td>Ground</td>
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<tr>
<td>MG00212</td>
<td>(0001)</td>
<td>99.99%</td>
<td>(0001)</td>
<td>Ground</td>
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**Manganese (Mn)**

**Foil**

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<tbody>
<tr>
<td>MN00050</td>
<td>0.001mm</td>
<td>98.7%</td>
<td>50 micron</td>
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<tr>
<td>MN00060</td>
<td>0.002mm</td>
<td>98.7%</td>
<td>50 micron</td>
</tr>
<tr>
<td>MN00070</td>
<td>0.0025mm</td>
<td>98.7%</td>
<td>50 micron</td>
</tr>
<tr>
<td>MN00080</td>
<td>0.003mm</td>
<td>98.7%</td>
<td>50 micron</td>
</tr>
<tr>
<td>MN00090</td>
<td>0.004mm</td>
<td>98.7%</td>
<td>50 micron</td>
</tr>
<tr>
<td>MN00100</td>
<td>0.005mm</td>
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<td>50 micron</td>
</tr>
<tr>
<td>MN00110</td>
<td>0.006mm</td>
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<td>50 micron</td>
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<tr>
<td>MN00120</td>
<td>0.007mm</td>
<td>98.7%</td>
<td>50 micron</td>
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<td>0.008mm</td>
<td>98.7%</td>
<td>50 micron</td>
</tr>
<tr>
<td>MN00140</td>
<td>0.009mm</td>
<td>98.7%</td>
<td>50 micron</td>
</tr>
<tr>
<td>MN00150</td>
<td>0.01mm</td>
<td>98.7%</td>
<td>50 micron</td>
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</table>

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<table>
<thead>
<tr>
<th>Code</th>
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<th>Support</th>
<th>Size</th>
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<tbody>
<tr>
<td>MN00160</td>
<td>0.0125mm</td>
<td>98.7%</td>
<td>Permanent Polyester</td>
<td>25x25 mm to 100x100 mm</td>
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<tr>
<td>MN00170</td>
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<td>Permanent Polyester</td>
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<tr>
<td>MN00171</td>
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<td>Permanent Polyester</td>
<td>25x25 mm to 50x50 mm</td>
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<tr>
<td>MN00180</td>
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<td>98.7%</td>
<td>Permanent Polyester</td>
<td>25x25 mm to 100x100 mm</td>
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<tr>
<td>MN00190</td>
<td>0.025mm</td>
<td>98.7%</td>
<td>Permanent Polyester</td>
<td>25x25 mm to 100x100 mm</td>
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<tr>
<td>MN00200</td>
<td>0.05mm</td>
<td>98.7%</td>
<td>Permanent Polyester</td>
<td>25x25 mm to 50x50 mm</td>
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<tr>
<td>MN00250</td>
<td>1mm</td>
<td>99.95%</td>
<td>Condition: Cast</td>
<td>Size: 25x25 mm</td>
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<tr>
<td>MN00301</td>
<td>2mm</td>
<td>99.95%</td>
<td>Condition: Hot-pressed</td>
<td>Size: 25x25 mm</td>
</tr>
<tr>
<td>MN00300</td>
<td>2mm</td>
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<td>Condition: Hot-pressed</td>
<td>Size: 50x50 mm</td>
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<tr>
<td>MN03030</td>
<td>3.0mm</td>
<td>99.95%</td>
<td>Condition: Hot-pressed</td>
<td>Size: 20 mm to 75 mm</td>
</tr>
<tr>
<td>MN09600</td>
<td>6.0mm</td>
<td>99.95%</td>
<td>Condition: Hot-pressed</td>
<td>Size: 25 mm to 75 mm</td>
</tr>
<tr>
<td>MN07905</td>
<td>2.0mm</td>
<td>99.5%</td>
<td>Condition: Cast</td>
<td>Length: 25 mm to 52 mm</td>
</tr>
<tr>
<td>MN07910</td>
<td>4.0mm</td>
<td>99.5%</td>
<td>Condition: Cast</td>
<td>Length: 10 mm to 50 mm</td>
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<td>MN07920</td>
<td>6.35mm</td>
<td>99.5%</td>
<td>Condition: Cast</td>
<td>Length: 50 mm</td>
</tr>
<tr>
<td>MN06040</td>
<td>Max. Particle size: 15micron</td>
<td>Mean Particle size: 2micron</td>
<td>Purity: 99.5%</td>
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</tr>
<tr>
<td>MN06030</td>
<td>Max. Particle size: 20micron</td>
<td>Purity: 99.5%</td>
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</tr>
<tr>
<td>MN06020</td>
<td>Max. Particle size: 45micron</td>
<td>Purity: 99.5%</td>
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<tr>
<td>MN06012</td>
<td>Max. Particle size: 300micron</td>
<td>Purity: 99.5%</td>
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<tr>
<td>MN06201</td>
<td>Max. Flake size: 25mm</td>
<td>Purity: 99.95%</td>
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<td></td>
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<tr>
<td>MO0010</td>
<td>Thickness: 0.001mm, Purity: 99.9%</td>
<td>Size: 25x25 mm to 50x50 mm</td>
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<tr>
<td>MO00120</td>
<td>Thickness: 0.004mm, Purity: 99.9%</td>
<td>Size: 25x25 mm to 100x100 mm</td>
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<tr>
<td>MO00130</td>
<td>Thickness: 0.005mm, Purity: 99.9%</td>
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<tr>
<td>MO00140</td>
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<td>MO00150</td>
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<td>Size: 50x50 mm to 100x100 mm</td>
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<tr>
<td>MO00203</td>
<td>Thickness: 0.008mm, Purity: 99.9%</td>
<td>Coil width 100 mm, Size: 25x25 mm to 150x150 mm</td>
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<tr>
<td>MO00170</td>
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<td>Size: 50x50 mm to 100x100 mm</td>
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<tr>
<td>MO00201</td>
<td>Thickness: 0.01mm, Purity: 99.9%</td>
<td>Coil width 100 mm, Size: 25x25 mm to 100x100 mm</td>
<td></td>
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<tr>
<td>MO00200</td>
<td>Thickness: 0.01mm, Purity: 99.9%</td>
<td>Tempered: Annealed, Size: 25x25 mm to 150x150 mm</td>
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<tr>
<td>MO00205</td>
<td>Thickness: 0.0125mm, Purity: 99.9%</td>
<td>Coil width 100 mm, Size: 25x25 mm to 267x300 mm</td>
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<tr>
<td>MO00211</td>
<td>Thickness: 0.015mm, Purity: 99.9%</td>
<td>Temper: Annealed, Size: 25x25 mm to 130x130 mm</td>
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<tr>
<td>MO00210</td>
<td>Thickness: 0.015mm, Purity: 99.9%</td>
<td>Tempered: Annealed, Coil width 200 mm, Size: 200x200 mm</td>
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<tr>
<td>MO00215</td>
<td>Thickness: 0.020mm, Purity: 99.9%</td>
<td>Tempered: Annealed, Coil width 200 mm, Size: 200x200 mm</td>
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<tr>
<td>MO00220</td>
<td>Thickness: 0.025mm, Purity: 99.9%</td>
<td>Tempered: Annealed, Coil width 229 mm, Size: 200x200 mm</td>
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<tr>
<td>MO00240</td>
<td>Thickness: 0.03mm, Purity: 99.9%</td>
<td>Tempered: Annealed, Coil width 200 mm to 200x500 mm</td>
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<tr>
<td>MO00230</td>
<td>Thickness: 0.04mm, Purity: 99.9%</td>
<td>Tempered: Annealed, Coil width 0.7mm, Size: 100 mm, Temper: Annealed, Length: 0.5 m to 20 m</td>
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<tr>
<td>MO00250</td>
<td>Thickness: 0.05mm, Purity: 99.9%</td>
<td>Tempered: Annealed, Coil width 300 mm, Size: 150x150 mm to 300x300 mm</td>
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<tr>
<td>MO00270</td>
<td>Thickness: 0.0712mm, Purity: 99.9%</td>
<td>Tempered: Annealed, Size: 25x100 mm to 29x600 mm</td>
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<tr>
<td>MO00280</td>
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<td>Tempered: Annealed, Size: 25x25 mm to 300x300 mm</td>
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<tr>
<td>MO00310</td>
<td>Thickness: 0.1mm, Purity: 99.9%</td>
<td>Tempered: Annealed, Coil width 250 mm, Size: 25x25 mm to 250x300 mm</td>
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<tr>
<td>MO00330</td>
<td>Thickness: 0.125mm, Purity: 99.9%</td>
<td>Tempered: Annealed, Size: 25x25 mm to 300x300 mm</td>
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<tr>
<td>MO00350</td>
<td>Thickness: 0.15mm, Purity: 99.9%</td>
<td>Tempered: Annealed, Size: 25x25 mm to 300x300 mm</td>
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<td>MO00360</td>
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<td>MO00374</td>
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<td>Tempered: Annealed, Condition: Polished on both sides, Size: 50x50 mm to 100x100 mm</td>
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<tr>
<td>MO00371</td>
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<td>Tempered: Annealed, Size: 609x1000 mm</td>
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<td>MO00375</td>
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<td>Tempered: Annealed, Size: 25x25 mm to 300x300 mm</td>
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<td>MO00378</td>
<td>Thickness: 0.40mm, Purity: 99.9%</td>
<td>Tempered: Annealed, Size: 25x25 mm to 300x300 mm</td>
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## Metals

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<thead>
<tr>
<th>Metal Type</th>
<th>Material</th>
<th>Diameter</th>
<th>Purity</th>
<th>Temper</th>
<th>Condition</th>
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<tbody>
<tr>
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<td>MO005105</td>
<td>0.01mm</td>
<td>99.8+%</td>
<td>Hard</td>
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<tr>
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<td>MO005110</td>
<td>0.013mm</td>
<td>99.8+%</td>
<td>Hard</td>
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<td></td>
<td>MO005215</td>
<td>0.015mm</td>
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<td>Gold plated wire</td>
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<td>MO005120</td>
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<td>0.025mm</td>
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<td>Gold plated wire</td>
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<td>MO005122</td>
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<td>MO005125</td>
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<td>MO005129</td>
<td>0.100mm</td>
<td>99.95%</td>
<td>Annealed</td>
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<td></td>
<td>MO005130</td>
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<td>99.95%</td>
<td>Annealed</td>
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<td></td>
<td>MO005132</td>
<td>0.150mm</td>
<td>99.95%</td>
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<td>MO005133</td>
<td>0.170mm</td>
<td>99.95%</td>
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<td>MO005135</td>
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<td>MO005137</td>
<td>0.220mm</td>
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<td>MO005320</td>
<td>0.25mm</td>
<td>99.95%</td>
<td>Straight wire</td>
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<tr>
<td></td>
<td>MO005140</td>
<td>0.25mm</td>
<td>99.95%</td>
<td>Annealed</td>
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<td>MO005141</td>
<td>0.25mm</td>
<td>99.95%</td>
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<tr>
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<td>MO005330</td>
<td>0.28mm</td>
<td>99.8+ %</td>
<td>Straight wire, Tempered: Annealed</td>
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<tr>
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<td>MO005142</td>
<td>0.30mm</td>
<td>99.95%</td>
<td>Annealed</td>
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<td>MO005340</td>
<td>0.5mm</td>
<td>99.95%</td>
<td>Straight wire</td>
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<td></td>
<td>MO005150</td>
<td>0.5mm</td>
<td>99.95%</td>
<td>Annealed</td>
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<td></td>
<td>MO005151</td>
<td>0.635mm</td>
<td>99.95%</td>
<td>Annealed</td>
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<td></td>
<td>MO005152</td>
<td>0.7mm</td>
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<td>MO005153</td>
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<td>MO005155</td>
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<td>MO005350</td>
<td>1.0mm</td>
<td>99.95%</td>
<td>Straight wire</td>
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<td>MO005160</td>
<td>1.0mm</td>
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<td>MO005165</td>
<td>1.25mm</td>
<td>99.95%</td>
<td>Annealed</td>
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</tbody>
</table>

### Sheet

| MO005325 | Thickness: 25mm, Purity: 99.9%, Condition: Polished on both sides, Size: 50x50 mm to 100x100 mm |

### Sputtering Target

| MO009150 | Thickness: 1.5mm, Purity: 99.98%, Size: 50.8 mm to 76.2 mm |

### Mesh

| MO009030 | Thickness: 3.0mm, Purity: 99.9%, Size: 25 mm to 75 mm |
| MO009400 | Thickness: 4.0mm, Purity: 99.98%, Size: 50.8 mm |
| MO009600 | Thickness: 6.0mm, Purity: 99.9%, Size: 50 mm to 75 mm |
| MO009800 | Thickness: 14.0mm, Purity: 99.9%, Size: 22 mm |

### Wire: Molybdenum

| MO008700 | Nominal Aperture: 0.44mm, Wire diameter: 0.07mm, Wires/Inch: 50, Open area: 67%, Type: Plain weave mesh, Size: 50x50 mm to 150x150 mm |
| MO008710 | Nominal Aperture: 0.8mm, Wire diameter: 0.18mm, Wires/Inch: 26, Open area: 67%, Type: Plain weave mesh, Size: 50x50 mm to 150x150 mm |
### Metals

#### Insulated Wire

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Diameter</th>
<th>Purity</th>
<th>Condition</th>
<th>Inside Diameter</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>MO005825</td>
<td>Conductor</td>
<td>0.125mm</td>
<td>99.95%</td>
<td>Insulation</td>
<td>0.012mm</td>
<td>100 mm to 1000 mm</td>
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#### Rod

<table>
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<tr>
<th>Code</th>
<th>Description</th>
<th>Diameter</th>
<th>Purity</th>
<th>Condition</th>
<th>Inside Diameter</th>
<th>Length</th>
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<tbody>
<tr>
<td>MO007908</td>
<td>Diameter</td>
<td>1.25mm</td>
<td>99.9%</td>
<td>Centerless ground</td>
<td>100 mm to 1000 mm</td>
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#### Tube

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Outside Diameter</th>
<th>Wall Thickness</th>
<th>Purity</th>
<th>Inside Diameter</th>
<th>Length</th>
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<tr>
<td>MO007052</td>
<td>Outside</td>
<td>0.5mm</td>
<td>0.38mm</td>
<td>99.9%</td>
<td>0.38mm</td>
<td>100 mm to 300 mm</td>
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</tbody>
</table>

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Metals

Neodymium (Nd)

<table>
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<tr>
<th>Size</th>
<th>M3</th>
<th>M4</th>
<th>M5</th>
<th>M6</th>
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</thead>
<tbody>
<tr>
<td>Diameter</td>
<td>6.64 - 7.00mm</td>
<td>8.64 - 9.00mm</td>
<td>9.64 - 10.00mm</td>
<td>11.57 - 12.00mm</td>
</tr>
<tr>
<td>Inside Diameter</td>
<td>3.20 - 3.38mm</td>
<td>4.30 - 4.48mm</td>
<td>5.30 - 5.48mm</td>
<td>6.40 - 6.62mm</td>
</tr>
<tr>
<td>Thickness</td>
<td>0.45 - 0.55mm</td>
<td>0.70 - 0.90mm</td>
<td>0.90 - 1.10mm</td>
<td>1.40 - 1.80mm</td>
</tr>
</tbody>
</table>

Crucible

- MO008620: Shape: Cylindrical, Outside Diameter 33mm, Inside Diameter 31mm, Height 29mm, Capacity 20ml, Quantity: 1 pcs
- MO008625: Shape: Cylindrical, Outside Diameter 47mm, Inside Diameter 45mm, Height 22mm, Capacity 25ml, Quantity: 1 pcs
- MO008635: Shape: Cylindrical, Outside Diameter 47mm, Inside Diameter 45mm, Height 29mm, Capacity 35ml, Quantity: 1 pcs
- MO008645: Shape: Cylindrical, Outside Diameter 47mm, Inside Diameter 45mm, Height 34mm, Capacity 45ml, Quantity: 1 pcs
- MO008655: Shape: Cylindrical, Outside Diameter 47mm, Inside Diameter 45mm, Height 41mm, Capacity 55ml, Quantity: 1 pcs
- MO008680: Shape: Cylindrical, Outside Diameter 59mm, Inside Diameter 57mm, Height 45mm, Capacity 100ml, Quantity: 1 pcs

Foil

- ND000205: Thickness: 0.005mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm
- ND000200: Thickness: 0.025mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm to 100x100 mm
- ND000210: Thickness: 0.1mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm to 100x100 mm
- ND000250: Thickness: 0.5mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm to 100x100 mm

Sputtering Target

- ND009100: Thickness: 1.0mm, Purity: 99%, Size: 50 mm to 75 mm

Wire

- ND005110: Diameter: 1.0mm, Purity: 99.9%, Temper: Hard

Rod

- ND007902: Diameter: 2.0mm, Purity: 99%, Length: 50 mm
- ND007910: Diameter: 6.35mm, Purity: 99%, Condition: Cast, Length: 50 mm to 100 mm
- ND007940: Diameter: 12.5mm, Purity: 99%, Condition: Cast, Length: 50 mm to 100 mm

Powder

- ND006010: Max. Particle size: 250 micron, Purity: 99.9%

Lump

- ND006100: Max. Lump size: 25mm, Purity: 99%, Packing Note: Packaged in Oil

Nickel (Ni)

- MO002110: Oriented: (100), Thickness: 2mm, Diameter: 10mm, Purity: 99.999%, Condition: Polished on 1 side to 1 micron
- MO002110: Oriented: (100), Thickness: 2mm, Diameter: 10mm, Purity: 99.999%, Condition: Unpolished
- MO002129: Oriented: (100), Diameter: 12mm, Length: 10mm, Purity: 99.999%

Microfoil

- Ni004500: Thinness: 0.1 µm, Specific density: 9.34g.cm⁻², Purity: 99.999 + %, Support: Permanent Mylar 3.5mm, Diameter: 10 mm to 25 mm

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Metals

<table>
<thead>
<tr>
<th>Thickness</th>
<th>Specific density</th>
<th>Purity</th>
<th>Coil width</th>
<th>Length</th>
<th>Temper</th>
<th>Support</th>
<th>Diameter</th>
<th>Purity</th>
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<tbody>
<tr>
<td>NI004600</td>
<td>0.25μm</td>
<td>99.99%</td>
<td>250mm</td>
<td>10m</td>
<td>As rolled</td>
<td>Temporary Acrylic</td>
<td>10mm to 25 mm</td>
<td>99.0%</td>
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<tr>
<td>NI004700</td>
<td>0.5μm</td>
<td>99.99%</td>
<td>250mm</td>
<td>10m</td>
<td>As rolled</td>
<td>Temporary Acrylic</td>
<td>10mm to 25 mm</td>
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</tr>
<tr>
<td>NI004850</td>
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<td>99.99%</td>
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<td>10m</td>
<td>As rolled</td>
<td>Temporary Acrylic</td>
<td>10mm to 25 mm</td>
<td>99.0%</td>
</tr>
<tr>
<td>Foil</td>
<td>0.00025mm</td>
<td>99.99%</td>
<td>250mm</td>
<td>10m</td>
<td>As rolled</td>
<td>Temporary Acrylic</td>
<td>10mm to 25 mm</td>
<td>99.0%</td>
</tr>
</tbody>
</table>

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### Metals

<table>
<thead>
<tr>
<th>Reference</th>
<th>Thickness</th>
<th>Purity</th>
<th>Temper</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NI00610</td>
<td>1.0mm</td>
<td>99.98%</td>
<td>Annealed</td>
<td>Coated with 150 mm, Size: 25x25 mm to 150x300 mm</td>
</tr>
<tr>
<td>NI00615</td>
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</tr>
<tr>
<td>NI00612</td>
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<td>Condition: Flattened, Size: 50x50mm to 200x200 mm</td>
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<tr>
<td>NI00608</td>
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<td>Coated with 302 mm, Size: 25x25 mm to 300x300 mm</td>
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<tr>
<td>NI00621</td>
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<td>Size: 50x50 mm to 300x300 mm</td>
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<tr>
<td>NI00626</td>
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<td>99.0%</td>
<td>Mirror polished on both sides</td>
<td>Size: 50x50 mm to 300x300 mm</td>
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<tr>
<td>NI00622</td>
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<tr>
<td>NI00623</td>
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<td>Coated with 25x25 mm to 300x300 mm</td>
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<tr>
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<tr>
<td>NI00625</td>
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<td>As rolled</td>
<td>High Purity, Size: 50x50 mm to 200x200 mm</td>
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### Sputtering Target

<table>
<thead>
<tr>
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<tr>
<td>NI009300</td>
<td>3.2mm</td>
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<tr>
<td>NI09501</td>
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<td>Size: 31 mm</td>
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<tr>
<td>NI09600</td>
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<td>99.99%</td>
<td>Annealed</td>
<td>Size: 50 mm to 75 mm</td>
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### Foam

<table>
<thead>
<tr>
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<th>Thickness</th>
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<th>Description</th>
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</thead>
<tbody>
<tr>
<td>NI003840</td>
<td>0.9mm</td>
<td>99.9%</td>
<td>Bulk density: 0.62g.cm 3</td>
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<tr>
<td>NI003852</td>
<td>1.6mm</td>
<td>99.9%</td>
<td>Bulk density: 0.45g.cm 3, Pores/cm: 20</td>
</tr>
<tr>
<td>NI003860</td>
<td>6mm</td>
<td>99.9%</td>
<td>Bulk density: 0.45g.cm 3, Pores/cm: 4</td>
</tr>
<tr>
<td>NI003862</td>
<td>6mm</td>
<td>99.9%</td>
<td>Bulk density: 0.45g.cm 3, Pores/cm: 8</td>
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<tr>
<td>NI003864</td>
<td>6mm</td>
<td>99.9%</td>
<td>Bulk density: 0.45g.cm 3, Pores/cm: 16</td>
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### Mesh

<table>
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<tr>
<th>Reference</th>
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<tbody>
<tr>
<td>NI08705</td>
<td>0.04mm</td>
<td>0.004mm</td>
<td>Wire diameter: 0.011mm, Wire/inch: 500, Open area: 60%</td>
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<tr>
<td>NI08711</td>
<td>0.34mm</td>
<td>0.025mm</td>
<td>Wire diameter: 0.041mm, Wire/inch: 70, Open area: 83%</td>
</tr>
</tbody>
</table>

---

**Metals — Nickel**

- Thickness: NI000620 Thickness: 1.0mm, High Purity: 99.99%, Temper: As rolled, Size: 25x25 mm to 100x100 mm

---

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<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Diameter (mm)</th>
<th>Purity</th>
<th>Temper</th>
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<tbody>
<tr>
<td>NI005170</td>
<td>Diameter: 1.0mm, High Purity: 99.99 + %, Temper:</td>
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<td>99.99</td>
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<tr>
<td>NI005160</td>
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<tr>
<td>NI005161</td>
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<tr>
<td>NI005171</td>
<td>Diameter: 1.0mm, Purity: 99.98%, Temper: Hard</td>
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<tr>
<td>NI005181</td>
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<tr>
<td>NI005810</td>
<td>Conductor diameter: 0.025mm, Insulation thickness:</td>
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<tr>
<td>NI005825</td>
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<tr>
<td>NI007915</td>
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<td>99.99</td>
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<tr>
<td>NI007925</td>
<td>Diameter: 2.0mm, Purity: 99.0%, Temper: Annealed</td>
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<tr>
<td>NI007920</td>
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<tr>
<td>NI007930</td>
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<tr>
<td>NI007933</td>
<td>Diameter: 3.3mm, Purity: 99.99 + %, Length: 50 mm to 500 mm</td>
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<td>NI007935</td>
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<td>99.999</td>
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<tr>
<td>NI007940</td>
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<tr>
<td>NI007950</td>
<td>Diameter: 5.0mm, High Purity: 99.99 + %, Length: 50 mm to 500 mm</td>
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<tr>
<td>NI007955</td>
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<tr>
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<tr>
<td>NI007960</td>
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<tr>
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<td>99.99</td>
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<tr>
<td>NI007965</td>
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<tr>
<td>NI007980</td>
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<tr>
<td>NI007971</td>
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<tr>
<td>NI007985</td>
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<td>NI007986</td>
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<tr>
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</tr>
<tr>
<td>NI007990</td>
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<tr>
<td>Item Code</td>
<td>Outside Diameter (mm)</td>
<td>Wall Thickness (mm)</td>
<td>Purity</td>
<td>Temper</td>
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<tr>
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<tr>
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<tr>
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<tr>
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<tr>
<td>NI007225</td>
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</tr>
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<td>NI007280</td>
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<tr>
<td>NI007360</td>
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<td>99.0%</td>
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<td>99.5%</td>
<td>Hard</td>
</tr>
<tr>
<td>NI007650</td>
<td>5.9mm</td>
<td>0.125mm</td>
<td>99.5%</td>
<td>Hard</td>
</tr>
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</table>
### Metals

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Dimensions/Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>NI007658</td>
<td>Outside Diameter: 6.5mm, Wall Thickness: 0.5mm, Inside Diameter: 5.5mm, Purity: 99.5%</td>
<td>Hard: Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>NI007670</td>
<td>Outside Diameter: 7.11mm, Wall Thickness: 0.27mm, Inside Diameter: 6.57mm, Purity: 99.5%</td>
<td>Tempered: Length: 1000 mm to 1000 mm</td>
</tr>
<tr>
<td>NI007685</td>
<td>Outside Diameter: 7.8mm, Wall Thickness: 0.7mm, Inside Diameter: 6.4mm, Purity: 99.5%</td>
<td>Tempered: Length: 35 mm</td>
</tr>
<tr>
<td>NI007700</td>
<td>Outside Diameter: 8.4mm, Wall Thickness: 0.125mm, Inside Diameter: 8.15mm, Purity: 99.5%</td>
<td>Tempered: Length: 1000 mm to 1000 mm</td>
</tr>
<tr>
<td>NI007710</td>
<td>Outside Diameter: 9.5mm, Wall Thickness: 1.5mm, Inside Diameter: 6.5mm, Purity: 99.5%</td>
<td>Tempered: Annealed: Length: 100 mm to 1000 mm</td>
</tr>
</tbody>
</table>

**Crucible**

<table>
<thead>
<tr>
<th>Code</th>
<th>Shape: Cylindrical, Outside Diameter: 21mm, Inside Diameter: 19mm, Height: 19mm, Capacity: 5ml, Quantity: 1 pcs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NI008605</td>
<td>Shape: Cylindrical, Outside Diameter: 27mm, Inside Diameter: 25mm, Height: 22mm, Capacity: 10ml, Quantity: 1 pcs</td>
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</tr>
<tr>
<td>NI008610</td>
<td>Shape: Cylindrical, Outside Diameter: 33mm, Inside Diameter: 31mm, Height: 22mm, Capacity: 15ml, Quantity: 1 pcs</td>
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</tr>
<tr>
<td>NI008615</td>
<td>Shape: Cylindrical, Outside Diameter: 47mm, Inside Diameter: 45mm, Height: 29mm, Capacity: 20ml, Quantity: 1 pcs</td>
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<tr>
<td>NI008620</td>
<td>Shape: Cylindrical, Outside Diameter: 47mm, Inside Diameter: 45mm, Height: 22mm, Capacity: 25ml, Quantity: 1 pcs</td>
<td></td>
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<td>NI008625</td>
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<tr>
<td>NI008630</td>
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<tr>
<td>NI008635</td>
<td>Shape: Cylindrical, Outside Diameter: 47mm, Inside Diameter: 45mm, Height: 41mm, Capacity: 55ml, Quantity: 1 pcs</td>
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<tr>
<td>NI008640</td>
<td>Shape: Cylindrical, Outside Diameter: 51mm, Inside Diameter: 49mm, Height: 41mm, Capacity: 75ml, Quantity: 1 pcs</td>
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<tr>
<td>NI008645</td>
<td>Shape: Cylindrical, Outside Diameter: 59mm, Inside Diameter: 57mm, Height: 45mm, Capacity: 100ml, Quantity: 1 pcs</td>
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<tr>
<td>NI008650</td>
<td>Shape: Cylindrical, Outside Diameter: 83mm, Inside Diameter: 81mm, Height: 57mm, Capacity: 250ml, Quantity: 1 pcs</td>
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<tr>
<td>NI008655</td>
<td>Shape: Cylindrical, Outside Diameter: 104mm, Inside Diameter: 102mm, Height: 63mm, Capacity: 500ml, Quantity: 1 pcs</td>
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<tr>
<td>NI008660</td>
<td>Shape: Cylindrical, Outside Diameter: 127mm, Inside Diameter: 125mm, Height: 89mm, Capacity: 1000ml, Quantity: 1 pcs</td>
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<tr>
<td>NI008665</td>
<td>Shape: Cylindrical, Outside Diameter: 152mm, Inside Diameter: 150mm, Height: 99mm, Capacity: 1500ml, Quantity: 1 pcs</td>
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**Powder**

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<tr>
<th>Code</th>
<th>Mean Particle size (FSSS): 3-7micron, Purity: 99.8%, Condition: Carbonyl</th>
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<tbody>
<tr>
<td>NI006021</td>
<td>Mean Particle size: 45micron, Purity: 99.5%</td>
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</tr>
<tr>
<td>NI006015</td>
<td>Mean Particle size: 150micron, High Purity: 99.99%</td>
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**Lump**

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<thead>
<tr>
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<th>Max. Lump size: 250micron, Purity: 99.5%</th>
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<tbody>
<tr>
<td>NI006010</td>
<td>Max. Lump size: 3.5mm, High Purity: 99.99%</td>
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<tr>
<td>NI006016</td>
<td>Max. Lump size: 5mm, High Purity: 99.99%</td>
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<td>NI006015</td>
<td>Max. Lump size: 10mm, High Purity: 99.99%</td>
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<td>NI006010</td>
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<tr>
<td>NI006017</td>
<td>Max. Lump size: 15mm, High Purity: 99.99%</td>
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<tr>
<td>NI006018</td>
<td>Max. Lump size: 20mm, High Purity: 99.99%</td>
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**Sphere**

<table>
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<tr>
<th>Code</th>
<th>Diameter: 0.76mm, Tolerance: ± 25.4μm, Sphericity: 5.08μm, Purity: 99.0%, Grade: Precision Sphere, Condition: Grade 200</th>
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<tbody>
<tr>
<td>NI006811</td>
<td>Diameter: 1.0mm, Tolerance: ± 25.4μm, Sphericity: 5.08μm, Purity: 99.0%, Grade: Precision Sphere, Condition: Grade 200</td>
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<tr>
<td>NI006840</td>
<td>Diameter: 3.0mm, Tolerance: ± 25.4μm, Sphericity: 5.08μm, Purity: 99.0%, Grade: Precision Sphere, Condition: Grade 200</td>
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**Single Crystal**

<table>
<thead>
<tr>
<th>Code</th>
<th>Oriented: (100), Diameter: 12mm, Length: 10mm, Purity: 99.999%</th>
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<tr>
<td>NI002129</td>
<td>Oriented: (100), Thickness: 2mm, Diameter: 12mm, Purity: 99.999%, Condition: Polished on 1 side to 1 micron</td>
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<tr>
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<tr>
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<td>Oriented: (100), Diameter: 12mm, Length: 25mm, Purity: 99.999%</td>
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<tr>
<td>NI002131</td>
<td>Oriented: (100), Diameter: 12mm, Length: 50mm, Purity: 99.999%</td>
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<tr>
<td>NI002115</td>
<td>Oriented: (110), Diameter: 12mm, Length: 10mm, Purity: 99.999%</td>
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<tr>
<td>NI002120</td>
<td>Oriented: (110), Diameter: 12mm, Length: 25mm, Purity: 99.999%</td>
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<tr>
<td>NI002122</td>
<td>Oriented: (110), Diameter: 12mm, Length: 30mm, Purity: 99.999%</td>
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<tr>
<td>NI002121</td>
<td>Oriented: (110), Diameter: 12mm, Length: 50mm, Purity: 99.999%</td>
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<tr>
<td>NI002181</td>
<td>Oriented: (111), Thickness: 2mm, Diameter: 10mm, Purity: 99.999%, Condition: Polished on 1 side to 1 micron</td>
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<td>NI002138</td>
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<tr>
<td>NI002140</td>
<td>Oriented: (111), Diameter: 12mm, Length: 25mm, Purity: 99.999%</td>
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<tr>
<td>NI002141</td>
<td>Oriented: (111), Diameter: 12mm, Length: 50mm, Purity: 99.999%</td>
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<tr>
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<td>Oriented: (123), Thickness: 1mm, Diameter: 5mm, Purity: 99.999%, Condition: Polished on 1 side to 1 micron</td>
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<td>NI002160</td>
<td>Oriented: (123), Thickness: 1mm, Diameter: 5mm, Purity: 99.999%, Condition: Unpolished</td>
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</tr>
</tbody>
</table>

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## Metals

### Nickel - Nanocrystalline (Ni)

- **Foil**
  - **Thickness:** 0.01mm, **Grain size:** 10-20nm nominal, **Support:** Permanent Copper, **Size:** 25x25 mm to 50x50 mm
  - **Thickness:** 0.015mm, **Support:** Permanent Copper, **Size:** 25x25 mm to 50x50 mm
  - **Thickness:** 0.02mm, **Support:** Permanent Copper, **Size:** 50x50 mm

- **Microfoil**
  - **Thickness:** 0.025mm, **Specific density:** 21µg·cm⁻³, **Purity:** 99.9%, **Support:** Permanent Mylar 3.5µm, **Diameter:** 10 mm to 25 mm

### Niobium (Nb)

- **Foil**
  - **Thickness:** 0.001mm, **Purity:** 99.9%, **Size:** 25x25 mm to 50x50 mm
  - **Thickness:** 0.002mm, **Purity:** 99.9%, **Size:** 25x25 mm to 50x50 mm
  - **Thickness:** 0.005mm, **Purity:** 99.9%, **Size:** 50x50 mm

- **Sputtering Target**
  - **Thickness:** 2.0mm, **Purity:** 99.9%, **Size:** 50.8 mm
  - **Thickness:** 3.0mm, **Purity:** 99.9%, **Size:** 75 mm to 150 mm

- **Wire**
  - **Diameter:** 0.05mm, **Purity:** 99.85%, **Temper:** As drawn
  - **Diameter:** 0.1mm, **Purity:** 99.9%, **Temper:** Annealed, **Condition:** Clean
  - **Diameter:** 0.125mm, **Purity:** 99.9%, **Temper:** Annealed
  - **Diameter:** 0.15mm, **Purity:** 99.9%, **Temper:** Annealed
  - **Diameter:** 0.2mm, **Purity:** 99.9%, **Size:** 100x100 mm to 150x150 mm
  - **Diameter:** 0.25mm, **Purity:** 99.9%, **Temper:** Annealed
### Metals

#### Insulated Wire

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Diameter</th>
<th>Purity</th>
<th>Temper</th>
<th>Minimum Length</th>
<th>Maximum Length</th>
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</thead>
<tbody>
<tr>
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<td>Conductor</td>
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<td>99.9%</td>
<td>As drawn</td>
<td>100 mm</td>
<td>500 mm</td>
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<tr>
<td>NB005850</td>
<td>Conductor</td>
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<td>99.9%</td>
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<td>200 mm</td>
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<td>NB005855</td>
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#### Rod

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<th>Temper</th>
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<th>Maximum Length</th>
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<td>NB007910</td>
<td>2.0mm</td>
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<td>As drawn</td>
<td>100 mm</td>
<td>1000 mm</td>
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<td>93 mm</td>
<td>935 mm</td>
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<td>NB007920</td>
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<td>1000 mm</td>
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<td>1000 mm</td>
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<td>100 mm</td>
<td>1000 mm</td>
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<td>500 mm</td>
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<td>100 mm</td>
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<td>As drawn</td>
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<td>100 mm</td>
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<td>As drawn</td>
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<td>100 mm</td>
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#### Tube

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<th>Wall Thickness</th>
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<tr>
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<td>1000 mm</td>
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<td>NB007300</td>
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<td>4.4mm</td>
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<td>99.9%</td>
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<td>As drawn</td>
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#### Bolt

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<th>Size</th>
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<th>Pitch</th>
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<th>Maximum Length</th>
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</thead>
<tbody>
<tr>
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<tr>
<td>NB00BO35</td>
<td>M3 x 30mm</td>
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<tr>
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#### Nut

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<th>Size</th>
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<th>Pitch</th>
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<th>Maximum Length</th>
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#### Washer

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<th>Part Number</th>
<th>Size</th>
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<th>Outside Diameter</th>
<th>Thickness</th>
<th>Minimum Length</th>
<th>Maximum Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>NB00WA03</td>
<td>M3</td>
<td>6.64 - 7.00mm</td>
<td>11.57 - 12.00mm</td>
<td>0.90 - 1.10mm</td>
<td>10 pcs</td>
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<tr>
<td>NB00WA04</td>
<td>M4</td>
<td>8.64 - 9.00mm</td>
<td>14.30 - 14.48mm</td>
<td>0.70 - 0.90mm</td>
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<tr>
<td>NB00WA05</td>
<td>M5</td>
<td>9.64 - 10.00mm</td>
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<td>0.90 - 1.10mm</td>
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<tr>
<td>NB00WA06</td>
<td>M6</td>
<td>11.57 - 12.00mm</td>
<td>18.64 - 19.00mm</td>
<td>1.40 - 1.80mm</td>
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#### Powder

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<th>Purity</th>
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<td>74 micron</td>
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</table>

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<table>
<thead>
<tr>
<th>Metals — Osmium</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lump</strong></td>
</tr>
<tr>
<td>NB006101</td>
</tr>
<tr>
<td>NB006100</td>
</tr>
<tr>
<td><strong>Sphere</strong></td>
</tr>
<tr>
<td>NB006840</td>
</tr>
<tr>
<td><strong>Single Crystal</strong></td>
</tr>
<tr>
<td>NB002111</td>
</tr>
<tr>
<td>NB002110</td>
</tr>
<tr>
<td>NB002059</td>
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<td>NB002114</td>
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<tr>
<td>NB002130</td>
</tr>
</tbody>
</table>

**Osmium (Os)**

| Powder |
| OS006010 | Max. Particle size: 500μm, Purity: 99.9% |

**Palladium (Pd)**

| Microfoil |
| PD004300 | Thickness: 0.05μm, Specific density: 63.66g.cm⁻², Purity: 99.99%, Support: Permanent Mylar 3.5μm, Diameter: 10 mm to 50 mm |
| PD004500 | Thickness: 0.1μm, Specific density: 119.2g.cm⁻², Purity: 99.99%, Support: Permanent Mylar 3.5μm, Diameter: 10 mm to 50 mm |
| PD004600 | Thickness: 0.25μm, Specific density: 303.4μg.cm⁻², Purity: 99.99%, Support: Permanent Mylar 3.5μm, Diameter: 10 mm to 50 mm |
| PD004700 | Thickness: 0.5μm, Specific density: 303.4μg.cm⁻², Purity: 99.99%, Support: Permanent Mylar 3.5μm, Diameter: 10 mm to 25 mm |

| Foil |
| PD000170 | Thickness: 0.0005mm, Purity: 99.75%, Size: 25x25 mm to 50x50 mm |
| PD000180 | Thickness: 0.00075mm, Purity: 99.75%, Support: Permanent Polyester, Size: 25x25 mm to 50x50 mm |
| PD000190 | Thickness: 0.001mm, Purity: 99.75%, Support: Permanent Polyester, Size: 25x25 mm to 50x50 mm |
| PD000201 | Thickness: 0.0015mm, Purity: 99.95%, Size: 25x25 mm |
| PD000202 | Thickness: 0.002mm, Purity: 99.95%, Size: 25x25 mm to 50x50 mm |
| PD000206 | Thickness: 0.0025mm, Purity: 99.95%, Size: 25x25 mm to 50x50 mm |
| PD000203 | Thickness: 0.003mm, Purity: 99.95%, Size: 25x25 mm to 50x50 mm |
| PD000204 | Thickness: 0.004mm, Purity: 99.95%, Size: 25x25 mm to 100x100 mm |
| PD000205 | Thickness: 0.005mm, Purity: 99.95%, Size: 25x25 mm to 100x100 mm |
| PD000209 | Thickness: 0.006mm, Purity: 99.95%, Size: 25x25 mm to 100x100 mm |
| PD000240 | Thickness: 0.008mm, Purity: 99.95%, Size: 25x25 mm to 100x100 mm |
| PD000241 | Thickness: 0.008mm, Purity: 99.95%, Size: 150x150 mm |
| PD000250 | Thickness: 0.0125mm, Purity: 99.95%, Size: 25x25 mm to 100x100 mm |
| PD000251 | Thickness: 0.0125mm, Purity: 99.95%, Size: 150x150 mm |
| PD000255 | Thickness: 0.02mm, Purity: 99.95%, Temper: As rolled, Size: 25x25 mm to 100x100 mm |
| PD000256 | Thickness: 0.02mm, Purity: 99.95%, Temper: As rolled, Size: 150x150 mm |
| PD000260 | Thickness: 0.025mm, Purity: 99.95%, Temper: As rolled, Size: 50x50 mm to 100x100 mm |
| PD000270 | Thickness: 0.025mm, High Purity: 99.99 + %, Temper: As rolled, Size: 25x25 mm to 100x100 mm |
| PD000263 | Thickness: 0.025mm, Purity: 99.95%, Temper: As rolled, Size: 150x150 mm |
| PD000261 | Thickness: 0.03mm, Purity: 99.95%, Temper: As rolled, Size: 25x25 mm to 100x100 mm |
| PD000264 | Thickness: 0.03mm, Purity: 99.95%, Temper: As rolled, Size: 150x150 mm |
| PD000262 | Thickness: 0.047mm, Purity: 99.95%, Temper: As rolled, Size: 25x25 mm to 100x100 mm |
| PD000272 | Thickness: 0.075mm, Purity: 99.95%, Temper: As rolled, Size: 25x25 mm to 100x100 mm |
| PD000276 | Thickness: 0.1mm, Coil width: 2mm, Purity: 99.95%, Temper: As rolled, Length: 0.05 m to 1 m |
| PD000275 | Thickness: 0.1mm, Purity: 99.95%, Temper: As rolled, Size: 25x25 mm to 100x100 mm |
| PD000278 | Thickness: 0.1mm, High Purity: 99.99 + %, Temper: As rolled, Size: 25x25 mm to 50x50 mm |
| PD000280 | Thickness: 0.125mm, Purity: 99.99 + %, Temper: As rolled, Size: 25x25 mm to 50x50 mm |
| PD000290 | Thickness: 0.125mm, Purity: 99.95%, Temper: As rolled, Size: 25x25 mm to 100x100 mm |
| PD000300 | Thickness: 0.25mm, Purity: 99.95%, Temper: As rolled, Size: 25x25 mm to 50x50 mm |
### Metals

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Diameter</th>
<th>Purity</th>
<th>Temper</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD000310</td>
<td>Thickness: 0.25mm, Purity: 99.99% + %, As rolled</td>
<td>25x25 to 50x50 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PD000350</td>
<td>Thickness: 0.50mm, Purity: 99.95%, As rolled</td>
<td>10x10 mm to 50x50 mm</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>PD000351</td>
<td>Thickness: 0.50mm, Purity: 99.99% + %, As rolled</td>
<td>10x10 mm to 25x25 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PD000360</td>
<td>Thickness: 0.60mm, Purity: 99.95%, As rolled</td>
<td>10x10 mm to 50x50 mm</td>
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<tr>
<td>PD000375</td>
<td>Thickness: 1.0mm, Purity: 99.95%</td>
<td>25x25 mm to 50x50 mm</td>
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<tr>
<td>PD000376</td>
<td>Thickness: 1.0mm, Purity: 99.99% + %, As rolled</td>
<td>25x25 mm to 50x50 mm</td>
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<tr>
<td>PD000500</td>
<td>Thickness: 2.0mm, Purity: 99.95%</td>
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#### Sputtering Target

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<tr>
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<th>Description</th>
<th>Diameter</th>
<th>Purity</th>
<th>Temper</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD009202</td>
<td>Thickness: 0.25mm, Purity: 99.95%</td>
<td>50 mm to 60 mm</td>
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<tr>
<td>PD009205</td>
<td>Thickness: 0.5mm, Purity: 99.95%</td>
<td>25 mm to 50 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PD009206</td>
<td>Thickness: 1.0mm, Purity: 99.95%</td>
<td>25 mm to 50 mm</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>PD009300</td>
<td>Thickness: 3mm, Purity: 99.95%</td>
<td>10 mm to 25 mm</td>
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#### Wire

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Diameter</th>
<th>Purity</th>
<th>Temper</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD005110</td>
<td>Diameter: 0.02mm, Purity: 99.95%</td>
<td>As drawn</td>
<td></td>
<td>As drawn</td>
<td></td>
</tr>
<tr>
<td>PD005113</td>
<td>Diameter: 0.025mm, Purity: 99.9%</td>
<td>As drawn</td>
<td></td>
<td>As drawn</td>
<td></td>
</tr>
<tr>
<td>PD005114</td>
<td>Diameter: 0.04mm, Purity: 99.95%</td>
<td>As drawn</td>
<td></td>
<td>As drawn</td>
<td></td>
</tr>
<tr>
<td>PD005116</td>
<td>Diameter: 0.05mm, Purity: 99.9%</td>
<td>As drawn</td>
<td></td>
<td>As drawn</td>
<td></td>
</tr>
<tr>
<td>PD005120</td>
<td>Diameter: 0.125mm, Purity: 99.95%</td>
<td>As drawn</td>
<td></td>
<td>As drawn</td>
<td></td>
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<tr>
<td>PD005140</td>
<td>Diameter: 0.25mm, Purity: 99.99% + %, As drawn</td>
<td>Hard</td>
<td></td>
<td>As drawn</td>
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</tr>
<tr>
<td>PD005130</td>
<td>Diameter: 0.25mm, Purity: 99.95%</td>
<td>As drawn</td>
<td></td>
<td>As drawn</td>
<td></td>
</tr>
<tr>
<td>PD005146</td>
<td>Diameter: 0.5mm, Purity: 99.95%</td>
<td>As drawn</td>
<td></td>
<td>As drawn</td>
<td></td>
</tr>
<tr>
<td>PD005150</td>
<td>Diameter: 1.0mm, Purity: 99.95%</td>
<td>As drawn</td>
<td></td>
<td>As drawn</td>
<td></td>
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<tr>
<td>PD005155</td>
<td>Diameter: 1.0mm, Purity: 99.99% + %, As drawn</td>
<td>Hard</td>
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<td>As drawn</td>
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#### Rod

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Diameter</th>
<th>Purity</th>
<th>Temper</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD007920</td>
<td>Diameter: 2.0mm, Purity: 99.95%</td>
<td>25 mm to 100 mm</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>PD007940</td>
<td>Diameter: 4.0mm, Purity: 99.95%</td>
<td>25 mm to 100 mm</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>PD007950</td>
<td>Diameter: 6.0mm, Purity: 99.95%</td>
<td>10 mm to 50 mm</td>
<td></td>
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#### Tube

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Diameter</th>
<th>Purity</th>
<th>Temper</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD007100</td>
<td>Outside Diameter: 1.0mm, Wall Thickness: 0.1mm</td>
<td>0.1mm, Inside Diameter: 0.8mm</td>
<td>99.95%</td>
<td>As drawn, Length: 50 mm</td>
<td></td>
</tr>
<tr>
<td>PD007130</td>
<td>Outside Diameter: 1.59mm, Wall Thickness: 0.45mm</td>
<td>Inside Diameter: 0.69mm</td>
<td>99.95%</td>
<td>As drawn, Length: 50 mm to 200 mm</td>
<td></td>
</tr>
<tr>
<td>PD007150</td>
<td>Outside Diameter: 2.0mm, Wall Thickness: 0.2mm</td>
<td>Inside Diameter: 1.6mm</td>
<td>99.95%</td>
<td>As drawn, Length: 50 mm to 200 mm</td>
<td></td>
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</table>

#### Phantom

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Diameter</th>
<th>Purity</th>
<th>Temper</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD007250</td>
<td>Outside Diameter: 5.0mm, Wall Thickness: 0.3mm</td>
<td>Inside Diameter: 4.4mm</td>
<td>99.95%</td>
<td>As drawn, Length: 50 mm to 200 mm</td>
<td></td>
</tr>
<tr>
<td>PD007260</td>
<td>Outside Diameter: 6.0mm, Wall Thickness: 0.5mm</td>
<td>Inside Diameter: 5mm</td>
<td>99.95%</td>
<td>As drawn, Length: 120 mm</td>
<td></td>
</tr>
<tr>
<td>PD007265</td>
<td>Outside Diameter: 6.6mm, Wall Thickness: 0.125mm</td>
<td>Inside Diameter: 6.35mm</td>
<td>99.95%</td>
<td>As drawn, Length: 50 mm to 200 mm</td>
<td></td>
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</tbody>
</table>

#### Powder

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Particle size</th>
<th>Purity</th>
<th>Support</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD006016</td>
<td>Max. Particle size: 3micron</td>
<td>99.95%</td>
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<td></td>
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<tr>
<td>PD006015</td>
<td>Max. Particle size: 10micron</td>
<td>99.95%</td>
<td></td>
<td></td>
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<tr>
<td>PD006012</td>
<td>Max. Particle size: 150micron</td>
<td>99.95%</td>
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#### Lump

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Lump size</th>
<th>Purity</th>
<th>Support</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD006100</td>
<td>Max. Lump size: 6mm</td>
<td>99.95%</td>
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#### Single Crystal

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Condition</th>
<th>Purity</th>
<th>Support</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD002121</td>
<td>Oriented: (100)</td>
<td>Polished on 1 side</td>
<td>99.95%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PD002120</td>
<td>Oriented: (100)</td>
<td>Unpolished</td>
<td>99.95%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PD002110</td>
<td>Oriented: (100)</td>
<td>12mm</td>
<td>99.95%</td>
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</tr>
<tr>
<td>PD002131</td>
<td>Oriented: (111)</td>
<td>10mm</td>
<td>99.95%</td>
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</tr>
<tr>
<td>PD002130</td>
<td>Oriented: (111)</td>
<td>Unpolished</td>
<td>99.95%</td>
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</tbody>
</table>

#### Phosphorus (P)

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Condition</th>
<th>Purity</th>
<th>Support</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD001410</td>
<td>Thickness: 0.1mm</td>
<td>Black phosphorus</td>
<td>99.95%</td>
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#### Film

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Thickness: 2mm, Diameter: 10mm</th>
<th>Purity</th>
<th>Support</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>P 001410</td>
<td>Thickness: 2mm, Diameter: 10mm</td>
<td>100mm</td>
<td></td>
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</table>

#### Platinum (Pt)

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Specific density: 300g.cm⁻²</th>
<th>Purity</th>
<th>Support</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT004500</td>
<td>Thickness: 0.25mm</td>
<td>99.99%</td>
<td></td>
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</tr>
<tr>
<td>PT004600</td>
<td>Thickness: 0.25mm</td>
<td>99.99%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT004700</td>
<td>Thickness: 0.5mm</td>
<td>99.99%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT004800</td>
<td>Thickness: 0.75mm</td>
<td>99.99%</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>PT004850</td>
<td>Thickness: 1.0mm</td>
<td>99.99%</td>
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</tbody>
</table>

#### Microfoil

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Purity</th>
<th>Support</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT000170</td>
<td>Thickness: 0.0005mm</td>
<td>99.85%</td>
<td></td>
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</tr>
<tr>
<td>PT000180</td>
<td>Thickness: 0.00075mm</td>
<td>99.85%</td>
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</tbody>
</table>

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Metals

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Thickness</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT000190</td>
<td>0.001mm, Purity: 99.85%, Support: Permanent Polyester, Size: 23x23 mm to 25x25 mm</td>
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<tr>
<td>PT000200</td>
<td>0.001mm, Purity: 99.95%, Temper: As rolled, Size: 25x25 mm</td>
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</tr>
<tr>
<td>PT000201</td>
<td>0.00125mm, Purity: 99.95%, Temper: As rolled, Size: 25x25 mm to 50x50 mm</td>
<td></td>
</tr>
<tr>
<td>PT000202</td>
<td>0.0015mm, Purity: 99.95%, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
<td></td>
</tr>
<tr>
<td>PT000203</td>
<td>0.002mm, Purity: 99.95%, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
<td></td>
</tr>
<tr>
<td>PT000206</td>
<td>0.0025mm, Purity: 99.95%, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
<td></td>
</tr>
<tr>
<td>PT000204</td>
<td>0.003mm, Purity: 99.95%, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
<td></td>
</tr>
<tr>
<td>PT000207</td>
<td>0.004mm, Purity: 99.95%, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
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<tr>
<td>PT000208</td>
<td>0.005mm, Purity: 99.95%, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
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<tr>
<td>PT000210</td>
<td>0.0075mm, Purity: 99.95%, Temper: As rolled, Size: 25x25 mm to 150x150 mm</td>
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</tr>
<tr>
<td>PT000215</td>
<td>0.01mm, Purity: 99.95%, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
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</tr>
<tr>
<td>PT000220</td>
<td>0.0125mm, Purity: 99.95%, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
<td></td>
</tr>
<tr>
<td>PT000228</td>
<td>0.025mm, Coil width: 0.4mm, Purity: 99.95%, Temper: As rolled, Length: 0.05 m to 0.5 m</td>
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<tr>
<td>PT000233</td>
<td>0.025mm, Coil width: 0.85mm, Purity: 99.95%, Temper: As rolled, Length: 0.05 m to 0.5 m</td>
<td></td>
</tr>
<tr>
<td>PT000229</td>
<td>0.025mm, Purity: 99.95%, Temper: As rolled, Diameter: 1.2 mm</td>
<td></td>
</tr>
<tr>
<td>PT000235</td>
<td>0.025mm, Coil width: 1.2mm, Purity: 99.95%, Temper: As rolled, Length: 0.05 m to 0.5 m</td>
<td></td>
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<tr>
<td>PT000234</td>
<td>0.025mm, Coil width: 1.6mm, Purity: 99.95%, Temper: As rolled, Length: 0.05 m to 0.5 m</td>
<td></td>
</tr>
<tr>
<td>PT000237</td>
<td>0.025mm, Coil width: 2mm, Purity: 99.95%, Temper: As rolled, Length: 0.05 m to 0.5 m</td>
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<tr>
<td>PT000232</td>
<td>0.025mm, Coil width: 5mm, Purity: 99.95%, Temper: As rolled, Length: 0.05 m to 0.5 m</td>
<td></td>
</tr>
<tr>
<td>PT000236</td>
<td>0.025mm, Coil width: 8mm, Purity: 99.95%, Temper: As rolled, Length: 0.05 m to 0.5 m</td>
<td></td>
</tr>
<tr>
<td>PT000230</td>
<td>0.025mm, Purity: 99.95%, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
<td></td>
</tr>
<tr>
<td>PT000240</td>
<td>0.025mm, High Purity: 99.99 + %, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
<td></td>
</tr>
<tr>
<td>PT000231</td>
<td>0.025mm, Purity: 99.95%, Temper: As rolled, Size: 150x150 mm</td>
<td></td>
</tr>
<tr>
<td>PT000242</td>
<td>0.029mm, Coil width: 0.34mm, Purity: 99.99%, Temper: Annealed, Length: 0.05 m to 1 m</td>
<td></td>
</tr>
<tr>
<td>PT000227</td>
<td>0.030mm, Coil width: 0.7mm, Purity: 99.95%, Temper: As rolled, Length: 0.05 m to 0.5 m</td>
<td></td>
</tr>
<tr>
<td>PT000246</td>
<td>0.045mm, Coil width: 0.75mm, Purity: 99.95%, Temper: As rolled, Length: 0.05 m to 0.5 m</td>
<td></td>
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<tr>
<td>PT000249</td>
<td>0.05mm, Coil width: 1mm, Purity: 99.99%, Temper: As rolled, Length: 0.05 m to 0.5 m</td>
<td></td>
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<tr>
<td>PT000247</td>
<td>0.05mm, Coil width: 5mm, Purity: 99.95%, Temper: As rolled, Length: 0.05 m to 0.2 m</td>
<td></td>
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<tr>
<td>PT000248</td>
<td>0.05mm, Purity: 99.95%, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
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<tr>
<td>PT000261</td>
<td>0.1mm, Purity: 99.95%, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
<td></td>
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<tr>
<td>PT000260</td>
<td>0.1mm, High Purity: 99.99 + %, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
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<tr>
<td>PT000262</td>
<td>0.1mm, High Purity: 99.99 + %, Temper: As rolled, Size: 150x150 mm</td>
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</tr>
<tr>
<td>PT000252</td>
<td>0.125mm, Coil width: 2.5mm, Purity: 99.99%, Temper: As rolled, Length: 0.05 m to 0.2 m</td>
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<tr>
<td>PT000251</td>
<td>0.125mm, Purity: 99.95%, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
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<tr>
<td>PT000250</td>
<td>0.125mm, High Purity: 99.99 + %, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
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<tr>
<td>PT000263</td>
<td>0.15mm, Coil width: 0.9mm, Purity: 99.99%, Temper: As rolled, Length: 0.05 m to 0.2 m</td>
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<tr>
<td>PT000255</td>
<td>0.15mm, Purity: 99.95%, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
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<tr>
<td>PT000265</td>
<td>0.2mm, Coil width: 5mm, Purity: 99.95%, Temper: As rolled, Length: 0.05 m to 0.1 m</td>
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<tr>
<td>PT000264</td>
<td>0.2mm, Purity: 99.95%, Temper: As rolled, Size: 15x15 mm to 60x60 mm</td>
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<tr>
<td>PT000271</td>
<td>0.25mm, High Purity: 99.99%, Temper: As rolled, Size: 25x25 mm</td>
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<tr>
<td>PT000272</td>
<td>0.25mm, Purity: 99.95%, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
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<tr>
<td>PT000270</td>
<td>0.25mm, High Purity: 99.99 + %, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
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<tr>
<td>PT000300</td>
<td>0.5mm, Purity: 99.95%, Temper: As rolled, Size: 10x10 mm to 50x50 mm</td>
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<tr>
<td>PT000320</td>
<td>1.0mm, Purity: 99.95%, Temper: As rolled, Size: 10x10 mm to 50x50 mm</td>
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<tr>
<td>PT000321</td>
<td>1.0mm, Purity: 99.95%, Temper: As rolled, Condition: Polished on 1 side, Size: 5x10 mm to 10x10 mm</td>
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<tr>
<td>PT000350</td>
<td>2.0mm, Purity: 99.95%, Temper: As rolled, Size: 10x10 mm to 50x50 mm</td>
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</tbody>
</table>

**Sputtering Target**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Thickness</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT009100</td>
<td>0.1mm, Tolerance: 15%, Purity: 99.95%, Size: 25 mm to 57 mm</td>
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</tr>
<tr>
<td>PT009202</td>
<td>0.2mm, Purity: 99.95%, Size: 25 mm to 57 mm</td>
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<tr>
<td>PT009205</td>
<td>0.5mm, Purity: 99.95%, Size: 25 mm to 54 mm</td>
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<tr>
<td>PT009206</td>
<td>1.0mm, Purity: 99.95%, Size: 25.4 mm to 76.2 mm</td>
<td></td>
</tr>
<tr>
<td>PT009210</td>
<td>2.0mm, Purity: 99.95%, Size: 25.4 mm to 76.2 mm</td>
<td></td>
</tr>
</tbody>
</table>

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Goodfellow Corporation
125 Hookstown Grade Road, Coraopolis, PA 15108-9302, USA
Tel 1-800-821-2870
Fax 1-800-283-2020
February 2017
<table>
<thead>
<tr>
<th>Mesh</th>
<th>Diameter: PT008720</th>
<th>Nominal Aperture: 0.12mm, Wire diameter: 0.04mm, Wires/inch: 152, Open area: 56%, Purity: 99.9%, Type: Plain weave mesh, Size: 20x20 mm to 100x100 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diameter: PT008710</td>
<td>Nominal Aperture: 0.25mm, Wire diameter: 0.06mm, Wires/inch: 82x82, Open area: 65%, Purity: 99.9%, Type: Plain weave mesh, Size: 20x20 mm to 100x100 mm</td>
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<tr>
<td>Diameter: PT008705</td>
<td>Nominal Aperture: 0.4mm, Wire diameter: 0.1mm, Wires/inch: 52, Open area: 63%, Purity: 99.9%, Type: Plain weave mesh, Size: 100x100 mm</td>
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<table>
<thead>
<tr>
<th>Wire</th>
<th>Diameter: PT005101</th>
<th>Diameter: 0.0006mm, Purity: 99.9%, Condition: Wollaston wire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diameter: PT005102</td>
<td>Diameter: 0.001mm, Purity: 99.9%, Condition: Wollaston wire</td>
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<tr>
<td>Diameter: PT005103</td>
<td>Diameter: 0.002mm, Purity: 99.9%, Condition: Wollaston wire</td>
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<tr>
<td>Diameter: PT005105</td>
<td>Diameter: 0.005mm, Purity: 99.9%, Condition: Wollaston wire</td>
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<tr>
<td>Diameter: PT005106</td>
<td>Diameter: 0.006mm, Purity: 99.9%, Condition: Wollaston wire</td>
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<tr>
<td>Diameter: PT005107</td>
<td>Diameter: 0.01mm, Purity: 99.9%, Temper: Hard</td>
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<tr>
<td>Diameter: PT005108</td>
<td>Diameter: 0.0125mm, Purity: 99.9%, Temper: Hard</td>
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<tr>
<td>Diameter: PT005122</td>
<td>Diameter: 0.015mm, Purity: 99.99%, Temper: Annealed</td>
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<tr>
<td>Diameter: PT005110</td>
<td>Diameter: 0.02mm, Purity: 99.9%, Temper: As drawn</td>
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<tr>
<td>Diameter: PT005113</td>
<td>Diameter: 0.025mm, Purity: 99.9%, Temper: Hard</td>
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<tr>
<td>Diameter: PT005114</td>
<td>Diameter: 0.025mm, Purity: 99.99%, Temper: Annealed, Thermocouple wire: May be used as one component of a Thermocouple</td>
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<tr>
<td>Diameter: PT005124</td>
<td>Diameter: 0.04mm, Purity: 99.99%, Temper: Annealed, Thermocouple wire: May be used as one component of a Thermocouple</td>
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<tr>
<td>Diameter: PT005116</td>
<td>Diameter: 0.05mm, Purity: 99.99%, Temper: Annealed, Thermocouple wire: May be used as one component of a Thermocouple</td>
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<tr>
<td>Diameter: PT005115</td>
<td>Diameter: 0.05mm, Purity: 99.99%, Temper: Hard</td>
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<tr>
<td>Diameter: PT005112</td>
<td>Diameter: 0.063mm, Purity: 99.9%, Temper: Hard</td>
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<tr>
<td>Diameter: PT005123</td>
<td>Diameter: 0.08mm, Purity: 99.9%, Temper: Hard</td>
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<tr>
<td>Diameter: PT005127</td>
<td>Diameter: 0.1mm, Purity: 99.99%, Temper: Hard</td>
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<tr>
<td>Diameter: PT005327</td>
<td>Diameter: 0.1mm, Purity: 99.99%, Temper: Hard, Condition: Straight wire</td>
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<tr>
<td>Diameter: PT005117</td>
<td>Diameter: 0.125mm, Purity: 99.95%, Temper: As drawn</td>
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<tr>
<td>Diameter: PT005118</td>
<td>Diameter: 0.125mm, Purity: 99.99%, Temper: Annealed, Thermocouple wire: May be used as one component of a Thermocouple</td>
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<tr>
<td>Diameter: PT005119</td>
<td>Diameter: 0.15mm, Purity: 99.99%, Temper: Annealed, Thermocouple wire: May be used as one component of a Thermocouple</td>
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</table>

<table>
<thead>
<tr>
<th>Insulated Wire</th>
<th>Diameter: PT005805</th>
<th>Conductor diameter: 0.015mm, Insulation thickness: 0.002mm, Purity: 99.99%, Insulation: Polyimide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diameter: PT005808</td>
<td>Conductor diameter: 0.018mm, Insulation thickness: 0.002mm, Purity: 99.99%, Insulation: Polyester</td>
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<tr>
<td>Diameter: PT005820</td>
<td>Conductor diameter: 0.025mm, Insulation thickness: 0.005mm, Purity: 99.99%, Insulation: Polyester</td>
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<tr>
<td>Diameter: PT005821</td>
<td>Conductor diameter: 0.025mm, Insulation thickness: 0.005mm, Purity: 99.99%, Insulation: Polyimide</td>
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<tr>
<td>PT005825</td>
<td>Conductor diameter: 0.025mm, Insulation thickness: 0.001mm, Purity: 99.999%, Insulation: PTFE (Polytetrafluoroethylene)</td>
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<tr>
<td>PT005830</td>
<td>Conductor diameter: 0.050mm, Insulation thickness: 0.0075mm, Purity: 99.99%, Insulation: Polyester</td>
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<tr>
<td>PT005835</td>
<td>Conductor diameter: 0.050mm, Insulation thickness: 0.009mm, Purity: 99.99%, Insulation: PTFE (Polytetrafluoroethylene)</td>
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<td>PT005840</td>
<td>Conductor diameter: 0.125mm, Insulation thickness: 0.014mm, Purity: 99.99%, Insulation: Polyester</td>
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<tr>
<td>PT005810</td>
<td>Conductor diameter: 0.125mm, Insulation thickness: 0.016mm, Purity: 99.99%, Insulation: PTFE (Polytetrafluoroethylene)</td>
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<tr>
<td>PT007910</td>
<td>Diameter: 1.0mm, Purity: 99.95%, Length: 25 mm to 200 mm</td>
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<tr>
<td>PT007913</td>
<td>Diameter: 1.25mm, Purity: 99.95%, Length: 25 mm to 100 mm</td>
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<td>PT007916</td>
<td>Diameter: 1.6mm, Purity: 99.95%, Length: 25 mm to 100 mm</td>
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<td>PT007920</td>
<td>Diameter: 2.0mm, Purity: 99.95%, Length: 15 mm to 50 mm</td>
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<td>PT007921</td>
<td>Diameter: 2.0mm, Purity: 99.95%, Length: 2 mm</td>
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<tr>
<td>PT007930</td>
<td>Diameter: 3.0mm, Purity: 99.95%, Length: 10 mm to 50 mm</td>
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<tr>
<td>PT007940</td>
<td>Diameter: 4.0mm, Purity: 99.95%, Length: 10 mm to 50 mm</td>
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<tr>
<td>PT007950</td>
<td>Diameter: 5.0mm, Purity: 99.95%, Length: 10 mm to 50 mm</td>
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<tr>
<td>PT007960</td>
<td>Diameter: 6.35mm, Purity: 99.95%, Length: 10 mm to 50 mm</td>
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<tr>
<td>PT007961</td>
<td>Diameter: 6.0mm, High Purity: 99.99+%, Length: 6.5 mm</td>
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<td>PT007981</td>
<td>Diameter: 8.0mm, Purity: 99.95%, Length: 10 mm to 25 mm</td>
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<tr>
<td>PT007995</td>
<td>Diameter: 12.0mm, Purity: 99.95%, Length: 11 mm to 25 mm</td>
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<tr>
<td>PT007050</td>
<td>Outside Diameter: 0.29mm, Wall Thickness: 0.11mm, Inside Diameter: 0.07mm, Purity: 99.95%, Temper: As drawn, Length: 100 mm to 500 mm</td>
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<tr>
<td>PT007100</td>
<td>Outside Diameter: 0.4mm, Wall Thickness: 0.15mm, Inside Diameter: 0.11mm, Purity: 99.95%, Temper: As drawn, Length: 100 mm to 1000 mm</td>
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<tr>
<td>PT007105</td>
<td>Outside Diameter: 0.40mm, Wall Thickness: 0.12mm, Inside Diameter: 0.16mm, Purity: 99.95%, Temper: As drawn, Length: 50 mm to 500 mm</td>
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<tr>
<td>PT007115</td>
<td>Outside Diameter: 0.48mm, Wall Thickness: 0.16mm, Inside Diameter: 0.16mm, Purity: 99.95%, Temper: As drawn, Length: 25 mm</td>
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<tr>
<td>PT007120</td>
<td>Outside Diameter: 0.5mm, Wall Thickness: 0.24mm, Inside Diameter: 0.42mm, Purity: 99.95%, Temper: As drawn, Length: 100 mm to 1000 mm</td>
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<tr>
<td>PT007199</td>
<td>Outside Diameter: 0.60mm, Wall Thickness: 0.20mm, Inside Diameter: 0.2mm, Purity: 99.95%, Temper: As drawn, Length: 7.3 mm</td>
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<tr>
<td>PT007125</td>
<td>Outside Diameter: 0.6mm, Wall Thickness: 0.05mm, Inside Diameter: 0.5mm, Purity: 99.95%, Temper: As drawn, Length: 100 mm to 1000 mm</td>
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<tr>
<td>PT007124</td>
<td>Outside Diameter: 0.6mm, Wall Thickness: 0.04mm, Inside Diameter: 0.52mm, Purity: 99.95%, Temper: As drawn, Length: 100 mm to 200 mm</td>
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<tr>
<td>PT007150</td>
<td>Outside Diameter: 0.7mm, Wall Thickness: 0.15mm, Inside Diameter: 0.4mm, Purity: 99.95%, Temper: As drawn, Length: 50 mm to 500 mm</td>
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<tr>
<td>PT007190</td>
<td>Outside Diameter: 0.95mm, Wall Thickness: 0.175mm, Inside Diameter: 0.60mm, Purity: 99.95%, Temper: As drawn, Length: 50 mm to 500 mm</td>
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<tr>
<td>PT007200</td>
<td>Outside Diameter: 1.0mm, Wall Thickness: 0.1mm, Inside Diameter: 0.8mm, Purity: 99.95%, Temper: As drawn, Length: 50 mm to 500 mm</td>
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<tr>
<td>PT007220</td>
<td>Outside Diameter: 1.2mm, Wall Thickness: 0.1mm, Inside Diameter: 1.0mm, Purity: 99.95%, Temper: As drawn, Length: 50 mm to 500 mm</td>
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<tr>
<td>PT007250</td>
<td>Outside Diameter: 2.0mm, Wall Thickness: 0.2mm, Inside Diameter: 1.6mm, Purity: 99.95%, Temper: As drawn, Length: 50 mm to 200 mm</td>
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<tr>
<td>PT007300</td>
<td>Outside Diameter: 3.0mm, Wall Thickness: 0.1mm, Inside Diameter: 2.8mm, Purity: 99.95%, Temper: As drawn, Length: 50 mm to 200 mm</td>
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<tr>
<td>PT007500</td>
<td>Outside Diameter: 6mm, Wall Thickness: 0.2mm, Inside Diameter: 5.6mm, Purity: 99.95%, Temper: As drawn, Length: 25 mm to 50 mm</td>
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<tr>
<td>PT006021</td>
<td>Max. Particle size: 3.5micron, Purity: 99.95%</td>
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<tr>
<td>PT006015</td>
<td>Max. Particle size: 45micron, Purity: 99.95%</td>
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<tr>
<td>PT006016</td>
<td>Max. Particle size: 150micron, Purity: 99.95%</td>
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<tr>
<td>PT006101</td>
<td>Max. Lump size: 6mm, Purity: 99.95%, Condition: Pellets</td>
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<tr>
<td>PT006102</td>
<td>Max. Lump size: 8mm, Purity: 99.95%, Condition: Granular</td>
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<tr>
<td>PT002123</td>
<td>Oriented: (100), Thickness: 1mm, Diameter: 6mm, Purity: 99.999%, Condition: Polished on 1 side to 1 micron</td>
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<tr>
<td>PT002121</td>
<td>Oriented: (100), Thickness: 1mm, Diameter: 10mm, Purity: 99.999%, Condition: Polished on 1 side to 1 micron</td>
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<tr>
<td>PT002120</td>
<td>Oriented: (100), Thickness: 1mm, Diameter: 10mm, Purity: 99.999%, Condition: Unpolished</td>
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<tr>
<td>PT002125</td>
<td>Oriented: (100), Diameter: 2mm, Length: 10mm, Purity: 99.999%</td>
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<tr>
<td>PT002150</td>
<td>Oriented: (110), Thickness: 1mm, Diameter: 6mm, Purity: 99.999%, Condition: Polished on both sides to 1 micron</td>
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</tr>
<tr>
<td>PT002141</td>
<td>Oriented: (110), Thickness: 1mm, Diameter: 10mm, Purity: 99.999%, Condition: Polished on 1 side to 1 micron</td>
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<tr>
<td>PT002140</td>
<td>Oriented: (110), Thickness: 1mm, Diameter: 10mm, Purity: 99.999%, Condition: Unpolished</td>
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<tr>
<td>PT002131</td>
<td>Oriented: (111), Thickness: 1mm, Diameter: 10mm, Purity: 99.999%, Condition: Polished on 1 side to 1 micron</td>
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<tr>
<td>PT002130</td>
<td>Oriented: (111), Thickness: 1mm, Diameter: 10mm, Purity: 99.999%, Condition: Unpolished</td>
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</tbody>
</table>
Metals

Potassium (K)

Rod
K007910 Diameter: 10mm, Purity: 99.97%, Length: 23 mm

Lump
K006100 Max. Lump size: 25mm, Purity: 99.97%

Praseodymium (Pr)

Foil
PR00050 Thickness: 0.005mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm to 50x50 mm
PR00100 Thickness: 0.01mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm to 50x50 mm
PR00150 Thickness: 0.015mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm to 50x50 mm
PR00200 Thickness: 0.025mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm to 50x50 mm
PR00210 Thickness: 0.1mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm to 50x50 mm
PR00230 Thickness: 0.25mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm to 50x50 mm
PR00240 Thickness: 0.50mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm to 50x50 mm
PR00250 Thickness: 1.0mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm to 50x50 mm

Sputtering Target
PR009100 Thickness: 1.0mm, Purity: 99%, Size: 50 mm to 75 mm
PR009300 Thickness: 3.0mm, Purity: 99%, Size: 50 mm to 75 mm

Wire
PR005110 Diameter: 1.0mm, Purity: 99.9%, Temper: Hard

Rod
PR007910 Diameter: 6.35mm, Purity: 99%, Condition: Cast, Length: 50 mm to 100 mm
PR007920 Diameter: 10.0mm, Purity: 99%, Condition: Cast, Length: 25 mm to 100 mm

Powder
PR006010 Max. Particle size: 250micron, Purity: 99.9%

Lump
PR006100 Max. Lump size: 25mm, Purity: 99%, Packing Note: Packaged in Oil

Rhenium (Re)

Foil
RE00200 Thickness: 0.0125mm, Purity: 99.99%, Temper: Annealed, Size: 25x25 mm to 50x50 mm
RE00214 Thickness: 0.025mm, Purity: 99.99%, Temper: Annealed, Size: 25x25 mm to 50x50 mm
RE00210 Thickness: 0.025mm, Tolerance: 25%, Purity: 99.99%, Temper: Annealed, Size: 25x25 mm to 50x50 mm

Sputtering Target
RE009100 Thickness: 1.0mm, Purity: 99.99%, Size: 50.8 mm
RE009106 Thickness: 1.6mm, Purity: 99.99%, Size: 25.4 mm

Wire
RE005105 Diameter: 0.076mm, Purity: 99.97%, Temper: Annealed
RE005106 Diameter: 0.10mm, Purity: 99.97%, Temper: Annealed
RE005108 Diameter: 0.125mm, Purity: 99.97%, Temper: Annealed
RE005110 Diameter: 0.15mm, Purity: 99.97%, Temper: Annealed
RE005112 Diameter: 0.178mm, Purity: 99.97%, Temper: Annealed
RE005115 Diameter: 0.2mm, Purity: 99.97%, Temper: Annealed
RE005120 Diameter: 0.25mm, Purity: 99.97%, Temper: Annealed
RE005125 Diameter: 0.3mm, Purity: 99.97%, Temper: Annealed
RE005130 Diameter: 0.5mm, Purity: 99.97%, Temper: Annealed
RE005140 Diameter: 1.0mm, Purity: 99.97%, Temper: Annealed

Rod
RE007905 Diameter: 1.5mm, Purity: 99.99%, Temper: Annealed, Length: 25 mm to 100 mm
RE007920 Diameter: 5.0mm, Purity: 99.99%, Length: 25 mm to 50 mm
Metals

Rhodium (Rh)

**Microfoil**
- RH004500: Thickness: 0.1μm, Specific density: 124μg.cm⁻², Purity: 99.9%, Support: Permanent Mylar 3.5μm, Diameter: 10 mm to 25 mm
- RH004600: Thickness: 0.25μm, Specific density: 310μg.cm⁻², Purity: 99.99%, Support: Permanent Mylar 3.5μm, Diameter: 10 mm to 25 mm
- RH004700: Thickness: 0.50μm, Specific density: 620μg.cm⁻², Purity: 99.99%, Support: Permanent Mylar 3.5μm, Diameter: 10 mm

**Foil**
- RH000180: Thickness: 0.00025mm, Purity: 99.9%, Support: Permanent Polyester, Size: 25x25 mm to 50x50 mm
- RH000170: Thickness: 0.0005mm, Purity: 99.95%, Support: Permanent Polyester, Size: 25x25 mm to 50x50 mm
- RH000180: Thickness: 0.00075mm, Purity: 99.85%, Support: Permanent Polyester, Size: 25x25 mm to 50x50 mm
- RH000190: Thickness: 0.001mm, Purity: 99.85%, Support: Permanent Polyester, Size: 25x25 mm to 50x50 mm
- RH000203: Thickness: 0.006mm, Purity: 99.9%, Temper: As rolled, Size: 25x25 mm to 50x50 mm
- RH000205: Thickness: 0.012mm, Purity: 99.9%, Temper: As rolled, Size: 10x10 mm to 50x50 mm
- RH000200: Thickness: 0.025mm, Purity: 99.9%, Temper: As rolled, Size: 50x50 mm
- RH000201: Thickness: 0.025mm, Purity: 99.9%, Temper: As rolled, Condition: X-ray quality, Size: 25x25 mm
- RH000210: Thickness: 0.05mm, Purity: 99.9%, Temper: As rolled, Size: 10x15 mm to 50x50 mm
- RH000212: Thickness: 0.05mm, Purity: 99.9%, Temper: As rolled, Condition: X-ray quality, Size: 25x25 mm
- RH000213: Thickness: 0.05mm, Purity: 99.9%, Temper: As rolled, Condition: X-ray quality, Size: 50x50 mm
- RH000220: Thickness: 0.075mm, Purity: 99.9%, Temper: As rolled, Size: 25x25 mm to 50x50 mm
- RH000225: Thickness: 0.1mm, Purity: 99.9%, Temper: As rolled, Size: 25x25 mm to 50x50 mm

**Sputtering Target**
- RH000301: Thickness: 3.0mm, Purity: 99.9%, Size: 25 mm to 50 mm
- RH000300: Thickness: 3.0mm, Purity: 99.9%, Size: 10 mm
- RH000301: Thickness: 3.0mm, Purity: 99.9%, Size: 10 mm

**Rod**
- RH000190: Diameter: 1.0mm, Purity: 99.9%, Temper: As drawn
- RH000190: Diameter: 1.0mm, Purity: 99.9%, Temper: As drawn
- RH000190: Diameter: 1.0mm, Purity: 99.9%, Temper: As drawn

**Powder**

**Single Crystal**
- RE002110 Oriented: (0001), Diameter: 8mm, Length: 1mm, Purity: 99.999%, Condition: Polished on 1 side to 1 micron
- RE002110 Oriented: (0001), Diameter: 8mm, Length: 1mm, Purity: 99.999%, Condition: Unpolished

**Rubidium (Rb)**

**Lump**
- RB006100 Max. Lump size: 5mm, Purity: 99.9%

**Ruthenium (Ru)**

**Microfoil**
- RU004200: Thickness: 0.025μm, Specific density: 30.5μg.cm⁻², Purity: 99.9%, Support: Permanent Mylar 3.5μm, Diameter: 10 mm
- RU004500: Thickness: 0.1μm, Specific density: 122μg.cm⁻², Purity: 99.9%, Support: Permanent Mylar 3.5μm, Diameter: 10 mm
| Metals — Samarium |

<table>
<thead>
<tr>
<th>Foil</th>
<th>Sputtering Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>RU00220 Thickness: 1.0mm, Purity: 99.9%, Size: 6x6 mm to 50x50 mm</td>
<td>SM009100 Thickness: 1.0mm, Purity: 99%, Size: 50 mm to 75 mm</td>
</tr>
<tr>
<td>RU00250 Thickness: 3.0mm, Purity: 99.9%, Size: 25x25 mm</td>
<td>Rod</td>
</tr>
<tr>
<td>RU009100 Thickness: 2.0mm, Purity: 99.9%, Size: 25 mm to 50 mm</td>
<td>SM007910 Diameter: 6.35mm, Purity: 99%, Condition: Cast, Length: 50 mm to 100 mm</td>
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<tr>
<td>RU009200 Thickness: 3.0mm, Purity: 99.9%, Size: 25 mm to 50 mm</td>
<td>Powder</td>
</tr>
<tr>
<td>RU009600 Thickness: 6.35mm, Purity: 99.9%, Size: 25.4 mm</td>
<td>SM006010 Max. Particle size: 500micron, Purity: 99.9%</td>
</tr>
<tr>
<td>Rod</td>
<td>Lump</td>
</tr>
<tr>
<td>RU007910 Diameter: 12.7mm, Purity: 99.9%, Length: 12.7 mm</td>
<td>SM006100 Max. Lump size: 25mm, Purity: 99.9%</td>
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<tr>
<td>Bar</td>
<td>Scandium (Sc)</td>
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<tr>
<td>RU008010 Side Length: 2mm, Side Length (of longer side): 2mm, Purity: 99.9%, Length: 25 mm to 50 mm</td>
<td>Foil</td>
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<tr>
<td>Powder</td>
<td>SC00205 Thickness: 0.0125mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm</td>
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<tr>
<td>RU006012 Max. Particle size: 450micron, Purity: 99.9%</td>
<td>SC00200 Thickness: 0.025mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm</td>
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<tr>
<td>RU006020 Max. Particle size: 850micron, Purity: 99.9%</td>
<td>SC00210 Thickness: 0.1mm, Tolerance: 20%, Purity: 99%, Temper: As rolled, Size: 25x25 mm to 50x50 mm</td>
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<tr>
<td>Lump</td>
<td>SC00211 Thickness: 0.12mm, Purity: 99%, Temper: As rolled, Size: 24x25 mm</td>
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<tr>
<td>RU006100 Max. Lump size: 10mm, Purity: 99.9%, Condition: Pellets</td>
<td>SC00230 Thickness: 0.3mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm to 50x50 mm</td>
</tr>
<tr>
<td>RU006101 Max. Lump size: 10mm, Purity: 99.9%, Condition: Pellets</td>
<td>Powder</td>
</tr>
<tr>
<td>Single Crystal</td>
<td>SC006010 Max. Particle size: 250micron, Purity: 99.9%</td>
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<tr>
<td>RU002130 Oriented: (0001), Diameter: 10mm, Length: 5mm, Purity: 99.999%</td>
<td>Lump</td>
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<tr>
<td>RU002111 Oriented: (0001), Thickness: 1mm, Diameter: 8mm, Purity: 99.999%, Condition: Polished on 1 side to 1 microm</td>
<td>SC006100 Max. Lump size: 25.4mm, Purity: 96 + %</td>
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<tr>
<td>RU002110 Oriented: (0001), Thickness: 1mm, Diameter: 8mm, Purity: 99.999%, Condition: Unpolished</td>
<td>Selenium (Se)</td>
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<tr>
<td>RU002121 Oriented: (0001), Thickness: 1mm, Diameter: 10mm, Purity: 99.999%, Condition: Polished on 1 side to 1 microm</td>
<td>Foil</td>
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<tr>
<td>RU002120 Oriented: (0001), Thickness: 1mm, Diameter: 10mm, Purity: 99.999%, Condition: Unpolished</td>
<td>SE000500 Thickness: 3mm, Purity: 99.95%, Size: 25x25 mm</td>
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<tr>
<td>RU002131 Oriented: (0001), Diameter: 10mm, Length: 10mm, Purity: 99.999%</td>
<td>Sputtering Target</td>
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<tr>
<td>Samarium (Sm)</td>
<td>SE009300 Thickness: 3mm, Size: 50 mm</td>
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<tr>
<td>Foil</td>
<td>Powder</td>
</tr>
<tr>
<td>SM00205 Thickness: 0.005mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm</td>
<td>SE006010 Max. Particle size: 250micron, Purity: 99.95%</td>
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<tr>
<td>SM00200 Thickness: 0.025mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm to 50x50 mm</td>
<td>Lump</td>
</tr>
<tr>
<td>SM00210 Thickness: 0.1mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm to 50x50 mm</td>
<td>SE006110 Max. Lump size: 3mm, High Purity: 99.999%, Condition: Pellets</td>
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<tr>
<td>SM00220 Thickness: 0.2mm, Purity: 99%, Temper: As rolled, Diameter: 15 mm</td>
<td>Silicon (Si)</td>
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<tr>
<td>SM00220 Thickness: 0.2mm, Purity: 99%, Temper: As rolled, Diameter: 15 mm</td>
<td>Sheet</td>
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<tr>
<td>SM00230 Thickness: 0.25mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm to 50x50 mm</td>
<td>SI003050 Thickness: 0.38mm, Purity: 99.999%, Condition: Single crystal, Diameter: 13 mm</td>
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<tr>
<td>SM00250 Thickness: 0.5mm, Purity: 99%, Temper: As rolled, Diameter: 15 mm</td>
<td>SI003051 Thickness: 0.38mm, Purity: 99.999%, Condition: Single crystal, Oriented: (100), Electrical type: N-Type, Diameter: 15.9 mm</td>
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<td>SM00264 Thickness: 0.7mm, Purity: 99%, Temper: As rolled, Diameter: 15 mm</td>
<td>SI003052 Thickness: 0.38mm, Purity: 99.999%, Condition: Single crystal, Oriented: (111), Electrical type: N-Type, Diameter: 15.9 mm</td>
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<tr>
<td>SI003077 Thickness: 0.5mm, Purity: 99.999%, Condition: Single crystal, Oriented: (100), Electrical type: N-Type, Size: 10x10 mm</td>
<td>Please visit <a href="http://www.goodfellow.com">www.goodfellow.com</a> or <a href="http://www.goodfellowusa.com">www.goodfellowusa.com</a> for latest prices</td>
</tr>
<tr>
<td>Part Number</td>
<td>Thickness</td>
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<tr>
<td>SI003075</td>
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<tr>
<td>SI003076</td>
<td>0.5mm</td>
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<tr>
<td>SI003077</td>
<td>0.6mm</td>
</tr>
<tr>
<td>SI003080</td>
<td>0.65mm</td>
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<tr>
<td>SI003103</td>
<td>1.0mm</td>
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<tr>
<td>SI003120</td>
<td>1.0mm</td>
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<tr>
<td>SI003140</td>
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<tr>
<td>SI003165</td>
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**Sputtering Target**

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<thead>
<tr>
<th>Part Number</th>
<th>Thickness</th>
<th>Purity</th>
<th>Condition</th>
<th>Electrical Type</th>
<th>Size</th>
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<tbody>
<tr>
<td>SI009300</td>
<td>3.0mm</td>
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<td>Single crystal, Oriented: (110)</td>
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<td>SI009400</td>
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<td>SI009600</td>
<td>6.0mm</td>
<td>99.99%</td>
<td>Condition</td>
<td>Single crystal, Oriented: (110)</td>
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<tr>
<td>SI009210</td>
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<td>SI009211</td>
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<tr>
<td>SI009800</td>
<td>8.0mm</td>
<td>99.99%</td>
<td>Condition</td>
<td>Single crystal, Oriented: (110)</td>
<td>Electrical type: N-Type</td>
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**Powder**

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<tr>
<th>Part Number</th>
<th>Particle Size</th>
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<th>Condition</th>
<th>Electrical Type</th>
<th>Size</th>
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<tbody>
<tr>
<td>SI006015</td>
<td>45micron</td>
<td>99.5%</td>
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<td>Electrical type: N-Type</td>
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<tr>
<td>SI006031</td>
<td>45micron</td>
<td>99.95%</td>
<td>Condition</td>
<td>Single crystal, Oriented: (110)</td>
<td>Electrical type: N-Type</td>
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<td>SI006030</td>
<td>45micron</td>
<td>99.98%</td>
<td>Condition</td>
<td>Single crystal, Oriented: (110)</td>
<td>Electrical type: N-Type</td>
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<tr>
<td>SI006010</td>
<td>150micron</td>
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<td>Electrical type: N-Type</td>
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**Lump**

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<th>Condition</th>
<th>Electrical Type</th>
<th>Size</th>
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<tbody>
<tr>
<td>SI006103</td>
<td>5mm</td>
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<tr>
<td>SI006102</td>
<td>25mm</td>
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<td>Condition</td>
<td>Polycrystalline</td>
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<td>SI006101</td>
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<td>Condition</td>
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<td>SI006100</td>
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**Sphere**

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<th>Part Number</th>
<th>Diameter</th>
<th>Tolerance</th>
<th>Sphericity</th>
<th>Grade</th>
<th>Condition</th>
<th>Size</th>
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<tbody>
<tr>
<td>SI006805</td>
<td>0.48mm</td>
<td>± 2.5μm</td>
<td>0.625μm</td>
<td>Grade</td>
<td>Precision Sphere</td>
<td>Grade: 25</td>
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<tr>
<td>SI006820</td>
<td>2.0mm</td>
<td>± 2.5μm</td>
<td>0.625μm</td>
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<td>Precision Sphere</td>
<td>Grade: 25</td>
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**Single Crystal**

<table>
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<tr>
<th>Part Number</th>
<th>Thickness</th>
<th>Purity</th>
<th>Condition</th>
<th>Electrical Type</th>
<th>Size</th>
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<td>0.38mm</td>
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<td>Single crystal, Oriented: (110)</td>
<td>Diameter: 76.2mm</td>
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<td>SI002012</td>
<td>0.38mm</td>
<td>99.99%</td>
<td>Condition</td>
<td>Single crystal, Oriented: (110)</td>
<td>Diameter: 76.2mm</td>
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<tr>
<td>SI002090</td>
<td>2.0mm</td>
<td>99.99%</td>
<td>Condition</td>
<td>Single crystal, Oriented: (110)</td>
<td>Diameter: 76.2mm</td>
</tr>
<tr>
<td>SI002015</td>
<td>0.65mm</td>
<td>99.99%</td>
<td>Condition</td>
<td>Single crystal, Oriented: (110)</td>
<td>Diameter: 150mm</td>
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<tr>
<td>SI002014</td>
<td>0.4mm</td>
<td>99.99%</td>
<td>Condition</td>
<td>Single crystal, Oriented: (110)</td>
<td>Diameter: 50.8mm</td>
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<tr>
<td>Material</td>
<td>Description</td>
<td>Purity</td>
<td>Coil width</td>
<td>Length</td>
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<tr>
<td>Microfoil</td>
<td><strong>Silver (Ag)</strong></td>
<td>AG004500</td>
<td>99.95%</td>
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<td>10 mm to 25 mm</td>
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<td></td>
<td><strong>Thinness: 0.1μm, Specific density: 110g.cm⁻²</strong></td>
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<td><strong>Purity: 99.95 + %, Support: Permanent Mylar 3.5μm, Diameter: 10 mm to 25 mm</strong></td>
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<tr>
<td>Foil</td>
<td><strong>Thinness: 0.00075mm, Purity: 99.97%</strong></td>
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<td></td>
<td><strong>Support: Temporary Acrylic, Size: 25x25 mm to 50x50 mm</strong></td>
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<td><strong>AG000100</strong></td>
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<tr>
<th>Thickness</th>
<th>AG000420</th>
<th>0.20mm</th>
<th>99.95%</th>
<th>Annealed</th>
<th>25x25 mm to 150x150 mm</th>
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<tbody>
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<td>0.25mm</td>
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<td>Thickness</td>
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<td>99.99%</td>
<td>Annealed</td>
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<td>Thickness</td>
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<td>0.5mm</td>
<td>99.95%</td>
<td>Annealed</td>
<td>19 mm</td>
</tr>
<tr>
<td>Thickness</td>
<td>AG000465</td>
<td>0.5mm</td>
<td>99.95%</td>
<td>Annealed</td>
<td>25x25 mm to 150x150 mm</td>
</tr>
<tr>
<td>Thickness</td>
<td>AG000470</td>
<td>0.5mm</td>
<td>99.99%</td>
<td>Annealed</td>
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<tr>
<td>Thickness</td>
<td>AG000467</td>
<td>0.5mm</td>
<td>99.95%</td>
<td>Annealed</td>
<td>50x50 mm to 100x200 mm</td>
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<tr>
<td>Thickness</td>
<td>AG000468</td>
<td>0.5mm</td>
<td>99.95%</td>
<td>Annealed</td>
<td>200x200 mm to 200x1000 mm</td>
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<tr>
<td>Thickness</td>
<td>AG000475</td>
<td>1.0mm</td>
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<td>Thickness</td>
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<td>Thickness</td>
<td>AG000501</td>
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<td>99.95%</td>
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<td>Thickness</td>
<td>AG000500</td>
<td>2.0mm</td>
<td>99.95%</td>
<td>Annealed</td>
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<tr>
<td>Thickness</td>
<td>AG000530</td>
<td>3.0mm</td>
<td>99.95%</td>
<td>Annealed</td>
<td>50x50 mm to 100x100 mm</td>
</tr>
<tr>
<td>Thickness</td>
<td>AG000550</td>
<td>6.0mm</td>
<td>99.95%</td>
<td>Annealed</td>
<td>50x50 mm to 100x100 mm</td>
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**Sputtering Target**

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<thead>
<tr>
<th>Thickness</th>
<th>AG009300</th>
<th>3.0mm</th>
<th>99.99%</th>
<th>Annealed</th>
<th>As rolled, Size: 25x25 mm to 150x150 mm</th>
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<tbody>
<tr>
<td>Thickness</td>
<td>AG009500</td>
<td>5.0mm</td>
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<tr>
<td>Thickness</td>
<td>AG009600</td>
<td>6.0mm</td>
<td>99.99%</td>
<td>Annealed</td>
<td>As rolled, Size: 25x25 mm to 150x150 mm</td>
</tr>
</tbody>
</table>

**Mesh**

| Thickness | AG000710 | 0.25mm | Wire diameter: 0.06mm, Wire/5inch: 82x82, Open area: 65%, Type: Plain weave mesh, Size: 20x20 mm to 100x100 mm |
|-----------|--------|--------|----------|------------------------|

**Wire**

<table>
<thead>
<tr>
<th>Diameter</th>
<th>AG005102</th>
<th>0.0125mm</th>
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<tbody>
<tr>
<td>Diameter</td>
<td>AG005104</td>
<td>0.015mm</td>
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</tr>
<tr>
<td>Diameter</td>
<td>AG005106</td>
<td>0.015mm</td>
<td>99.99%</td>
<td>Annealed</td>
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<tr>
<td>Diameter</td>
<td>AG005105</td>
<td>0.025mm</td>
<td>99.99%</td>
<td>Annealed</td>
</tr>
<tr>
<td>Diameter</td>
<td>AG005107</td>
<td>0.025mm</td>
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<td>AG005220</td>
<td>0.050mm</td>
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<tr>
<td>Diameter</td>
<td>AG005110</td>
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**Insulated Wire**

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<tr>
<th>Diameter</th>
<th>AG005816</th>
<th>0.025mm</th>
<th>Insulation thickness: 0.005mm, Purity: 99.99%, Insulation: Polyurethane</th>
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<tbody>
<tr>
<td>Diameter</td>
<td>AG005815</td>
<td>0.025mm</td>
<td>Insulation thickness: 0.005mm, Purity: 99.99%, Insulation: Polyester</td>
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<tr>
<td>Diameter</td>
<td>AG005820</td>
<td>0.04mm</td>
<td>Insulation thickness: 0.007mm, Purity: 99.99%, Insulation: Polyethylene, Condition: Butyl rubber coating 0.005 mm thick</td>
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<tr>
<td>Diameter</td>
<td>AG005825</td>
<td>0.05mm</td>
<td>Insulation thickness: 0.0075mm, Purity: 99.99%, Insulation: Polyester</td>
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<tr>
<td>Diameter</td>
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<td>Diameter</td>
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<td>0.125mm</td>
<td>Insulation thickness: 0.015mm, Purity: 99.99%, Insulation: Polyfluoroethylene</td>
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<tr>
<td>Diameter</td>
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<tr>
<td>Diameter</td>
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<td>Diameter</td>
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<tr>
<td>Diameter</td>
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<td>0.25mm</td>
<td>Insulation thickness: 0.024mm, Purity: 99.99%, Insulation: Polyfluoroethylene</td>
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## Metals

### Rod

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<tr>
<th>Diameter</th>
<th>Purity</th>
<th>Temper</th>
<th>Length</th>
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</thead>
<tbody>
<tr>
<td>AG007902</td>
<td>1.0mm, 99.95 + %</td>
<td>As drawn</td>
<td>100 mm to 1000 mm</td>
</tr>
<tr>
<td>AG007905</td>
<td>1.5mm, 99.95 + %</td>
<td>As drawn</td>
<td>100 mm to 1000 mm</td>
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<tr>
<td>AG007910</td>
<td>2.0mm, 99.95 + %</td>
<td>As drawn</td>
<td>100 mm to 1000 mm</td>
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<tr>
<td>AG007912</td>
<td>3.0mm, High Purity</td>
<td>As drawn</td>
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<tr>
<td>AG007915</td>
<td>3.5mm, 99.95 + %</td>
<td>As drawn</td>
<td>100 mm to 1000 mm</td>
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<tr>
<td>AG007920</td>
<td>5.0mm, 99.95 + %</td>
<td>As drawn</td>
<td>100 mm to 1000 mm</td>
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<tr>
<td>AG007928</td>
<td>6.0mm, 99.95 + %</td>
<td>As drawn</td>
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<td>AG007936</td>
<td>7.0mm, 99.95 + %</td>
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<td>AG007935</td>
<td>7.0mm, High Purity</td>
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<td>AG007938</td>
<td>8.0mm, 99.99%</td>
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<td>AG007940</td>
<td>10.0mm, 99.95 + %</td>
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<tr>
<td>AG007942</td>
<td>12.7mm, 99.95 + %</td>
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<td>AG007945</td>
<td>16mm, 99.95 + %</td>
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<td>AG007950</td>
<td>20.0mm, 99.95 + %</td>
<td>As drawn</td>
<td>25 mm to 100 mm</td>
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<td>AG007955</td>
<td>25mm, 99.95 + %</td>
<td>As drawn</td>
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<tr>
<td>AG007958</td>
<td>35mm, 99.95 + %</td>
<td>As drawn</td>
<td>25 mm to 100 mm</td>
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<td>AG007959</td>
<td>40.0mm, 99.95 + %</td>
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<td>12 mm to 50 mm</td>
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<td>AG007960</td>
<td>50.0mm, 99.95 + %</td>
<td>As drawn</td>
<td>25 mm to 100 mm</td>
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### Tube

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<tr>
<th>Diameter</th>
<th>Wall Thickness</th>
<th>Length</th>
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<tr>
<td>AG007050</td>
<td>0.7mm, 99.95 + %</td>
<td>As drawn</td>
</tr>
<tr>
<td>AG007100</td>
<td>1.1mm, 99.95 + %</td>
<td>As drawn</td>
</tr>
<tr>
<td>AG007130</td>
<td>1.64mm, 99.95 + %</td>
<td>As drawn</td>
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<tr>
<td>AG007150</td>
<td>1.75mm, 99.95 + %</td>
<td>As drawn</td>
</tr>
<tr>
<td>AG007200</td>
<td>2.0mm, 99.95 + %</td>
<td>As drawn</td>
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<tr>
<td>AG007220</td>
<td>2.8mm, 99.95 + %</td>
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### Powder

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<tr>
<th>Diameter</th>
<th>Particle size</th>
<th>Purity</th>
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<tr>
<td>AG006030</td>
<td>2 micron</td>
<td>99.97 + %</td>
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<tr>
<td>AG006023</td>
<td>45 micron</td>
<td>99.99%</td>
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### Lump

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<th>Diameter</th>
<th>Purity</th>
<th>Condition</th>
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<tbody>
<tr>
<td>AG006100</td>
<td>3mm, 99.999%</td>
<td>Shot</td>
</tr>
<tr>
<td>AG006105</td>
<td>6mm, 99.99%</td>
<td>Pellets</td>
</tr>
<tr>
<td>AG006110</td>
<td>10mm, 99.99%</td>
<td>Shot</td>
</tr>
<tr>
<td>AG006106</td>
<td>20mm, 99.99%</td>
<td>Pellets</td>
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### Sphere

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<th>Tolerance</th>
<th>Grade</th>
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### Single Crystal

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<td>AG002113</td>
<td>(100), 12.7mm</td>
<td>2mm, Unpolished</td>
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<td>AG002118</td>
<td>(100), 12mm</td>
<td>5mm, Unpolished</td>
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<td>AG002111</td>
<td>(100), 10mm</td>
<td>2mm, Polished on 1 side to 1 micron</td>
</tr>
<tr>
<td>AG002110</td>
<td>(100), 10mm</td>
<td>2mm, Unpolished</td>
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</tbody>
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February 2017

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<table>
<thead>
<tr>
<th>Metal</th>
<th>Description</th>
<th>Thickness</th>
<th>Diameter</th>
<th>Length</th>
<th>Purity</th>
<th>Condition</th>
<th>Notes</th>
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<td>Sodium (Na)</td>
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<td>Lump</td>
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<tr>
<td>Tantalum (Ta)</td>
<td>Microfoil</td>
<td>TA004500</td>
<td>Thinness: 0.1g/m, Specific density: 166g/cm³</td>
<td>Purity: 99.9%, Support: Permanent Mylar 3.5µm</td>
<td>Diameter: 10 mm to 25 mm</td>
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<td>Foil</td>
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<td>Thickness: 0.075mm</td>
<td>Purity: 99.9%, Size: 152.4 mm, Annealed, 25x25 mm to 150x300 mm</td>
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<td></td>
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<td>TA000411</td>
<td>Thickness: 0.1mm</td>
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<td>TA000410</td>
<td>Thickness: 0.1mm</td>
<td>Purity: 99.9%, Size: 62mm, Annealed, Length: 0.15 m to 2 m</td>
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<td>TA000424</td>
<td>Thickness: 0.125mm</td>
<td>Purity: 99.9%, Size: 25x25 mm to 150x150 mm</td>
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<td></td>
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<td>TA000450</td>
<td>Thickness: 0.15mm</td>
<td>Purity: 99.9%, Size: 25x25 mm to 150x150 mm</td>
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<td>TA000451</td>
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<td>TA000452</td>
<td>Thickness: 0.15mm</td>
<td>Purity: 99.9%, Size: 150x150 mm, Annealed, Condition: Flattened, Size: 100x100 mm to 300x300 mm</td>
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<td></td>
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<td>TA000460</td>
<td>Thickness: 0.20mm</td>
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<td>TA000461</td>
<td>Thickness: 0.20mm</td>
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<td></td>
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<td>TA000470</td>
<td>Thickness: 0.25mm</td>
<td>Purity: 99.9%, Size: 25x25 mm to 100x100 mm</td>
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Goodfellow Cambridge Limited
125 Hookstown Grade Road, Coraopolis, PA 15108-9302. USA
Tel 1-800-821-2870
Fax 1-800-283-2020

February 2017
| TA000510 | Diameter: 0.025mm, Purity: 99.9%, Temper: As drawn |
| TA005110 | Diameter: 0.05mm, Purity: 99.9%, Temper: Annealed |
| TA005120 | Diameter: 0.125mm, Purity: 99.9%, Temper: Annealed |
| TA005130 | Diameter: 0.25mm, Purity: 99.9%, Temper: Annealed |
| TA005135 | Diameter: 0.30mm, Purity: 99.9%, Temper: Annealed |
| TA005140 | Diameter: 0.40mm, Purity: 99.9%, Temper: Annealed |
| TA005150 | Diameter: 0.5mm, Purity: 99.9%, Temper: Annealed |
| TA005350 | Diameter: 0.5mm, Purity: 99.9%, Temper: Annealed, Condition: Straight wire |
| TA005152 | Diameter: 0.6mm, Purity: 99.9% |
| TA005155 | Diameter: 0.8mm, Purity: 99.9%, Temper: Annealed |
| TA005160 | Diameter: 1.0mm, Purity: 99.9%, Temper: Annealed |

**Wire**

| TA007910 | Diameter: 1.0mm, Purity: 99.9%, Length: 100 mm to 1000 mm |
| TA007915 | Diameter: 1.5mm, Purity: 99.9%, Temper: Annealed, Length: 100 mm to 1000 mm |
| TA007917 | Diameter: 1.7mm, Purity: 99.9%, Temper: Annealed, Length: 100 mm to 1000 mm |
| TA007920 | Diameter: 2.0mm, Purity: 99.9%, Temper: Annealed, Length: 100 mm to 1000 mm |
| TA007924 | Diameter: 2.5mm, Purity: 99.9%, Temper: Annealed, Length: 100 mm to 1000 mm |
| TA007926 | Diameter: 3.0mm, Purity: 99.9%, Temper: Annealed, Length: 100 mm to 500 mm |
| TA007930 | Diameter: 5.0mm, Purity: 99.9%, Temper: Annealed, Length: 100 mm to 500 mm |
| TA007935 | Diameter: 6.35mm, Purity: 99.9%, Temper: Annealed, Length: 50 mm to 200 mm |
| TA007940 | Diameter: 10.0mm, Purity: 99.9%, Temper: Annealed, Length: 50 mm to 200 mm |
| TA007941 | Diameter: 10.0mm, Purity: 99.9%, Condition: Forged, Temper: Unannealed, Length: 50 mm to 200 mm |
| TA007942 | Diameter: 12.7mm, Purity: 99.9%, Temper: Annealed, Length: 50 mm to 200 mm |
| TA007945 | Diameter: 16mm, Purity: 99.9%, Temper: As drawn, Length: 25 mm to 100 mm |
| TA007948 | Diameter: 18mm, Purity: 99.9%, Temper: Annealed, Length: 25 mm to 100 mm |
| TA007950 | Diameter: 20.0mm, Purity: 99.9%, Temper: Annealed, Length: 25 mm to 200 mm |
| TA007955 | Diameter: 25mm, Purity: 99.9%, Length: 100 mm |
| TA007961 | Diameter: 30mm, Purity: 99.9%, Temper: Annealed, Length: 25 mm to 500 mm |
| TA007960 | Diameter: 30.0mm, Purity: 99.9%, Condition: Forged, Temper: Unannealed, Length: 25 mm to 50 mm |
| TA007970 | Diameter: 40.0mm, Purity: 99.9%, Condition: Forged, Temper: Unannealed, Length: 50 mm to 200 mm |
### Metals — Tantalum

<table>
<thead>
<tr>
<th>Item</th>
<th>Diameter</th>
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<th>Temper</th>
<th>Length</th>
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<tr>
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<td>TA007975</td>
<td>75mm</td>
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<td>100 mm</td>
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<td>TA007995</td>
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#### Tube

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<th>Temper</th>
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<tr>
<td>TA007030</td>
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<td>0.06mm</td>
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<td>0.15mm</td>
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<tr>
<td>TA007060</td>
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<td>0.08mm</td>
<td>0.86mm</td>
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<td>4.4mm</td>
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<td>1mm</td>
<td>4.35mm</td>
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#### Bolt

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<th>Quantity</th>
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<td>TA00BO50</td>
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<td>M5 x 30mm</td>
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<td>Hexagonal</td>
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#### Nut

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<th>Quantity</th>
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<td>TA00NU03</td>
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<td>TA00NU04</td>
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# Metals

## Single Crystal

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<tr>
<th>TA002106</th>
<th>Oriented: (100), Diameter: 10mm, Length: 2mm, Purity: 99.999%, Condition: Polished on 1 side to 1 micron</th>
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<tbody>
<tr>
<td>TA002105</td>
<td>Oriented: (100), Diameter: 10mm, Length: 2mm, Purity: 99.999%, Condition: Unpolished</td>
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<tr>
<td>TA002107</td>
<td>Oriented: (100), Diameter: 18mm, Length: 2mm, Purity: 99.999%, Condition: Unpolished</td>
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<td>TA002119</td>
<td>Oriented: (100), Diameter: 12mm, Length: 10mm, Purity: 99.999%</td>
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<td>TA002120</td>
<td>Oriented: (100), Diameter: 12mm, Length: 25mm, Purity: 99.999%</td>
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<tr>
<td>TA002121</td>
<td>Oriented: (100), Diameter: 12mm, Length: 50mm, Purity: 99.999%</td>
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<tr>
<td>TA002112</td>
<td>Oriented: (110), Thickness: 2mm, Diameter: 10mm, Purity: 99.999%, Condition: Unpolished</td>
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<td>TA002113</td>
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<td>TA002059</td>
<td>Oriented: (110), Diameter: 6mm, Length: 10mm, Purity: 99.999%</td>
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<td>TA002109</td>
<td>Oriented: (110), Diameter: 12mm, Length: 10mm, Purity: 99.999%</td>
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<td>TA002114</td>
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<td>TA002115</td>
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<td>TA002110</td>
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<td>TA002061</td>
<td>Oriented: (110), Diameter: 6mm, Length: 50mm, Purity: 99.999%</td>
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<td>TA002111</td>
<td>Oriented: (110), Diameter: 12mm, Length: 50mm, Purity: 99.999%</td>
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<td>TA002132</td>
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<tr>
<td>TA002131</td>
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## Tellurium (Te)

### Powder

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<tr>
<th>TA006016</th>
<th>Mean Particle size (FSSS): 1-3micron, Purity: 99.9%</th>
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<tbody>
<tr>
<td>TA006030</td>
<td>Max. Particle size: 75micron, Purity: 99.9%</td>
</tr>
<tr>
<td>TA006015</td>
<td>Max. Particle size: 150micron, Min. Particle size: 45micron, Purity: 99.9%</td>
</tr>
<tr>
<td>TA006010</td>
<td>Max. Particle size: 350micron, Min. Particle size: 45micron, Purity: 99.9%</td>
</tr>
</tbody>
</table>

### Sputtering Target

| TE009300 | Thickness: 3mm, Size: 50 mm |

### Powder

| TE006010 | Max. Particle size: 75micron, Purity: 99.5% |

### Lump

<table>
<thead>
<tr>
<th>TE006015</th>
<th>Max. Lump size: 25mm, Purity: 99.95%, Condition: Broken ingot</th>
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<tbody>
<tr>
<td>TE006100</td>
<td>Max. Lump size: 25mm, High Purity: 99.999%, Condition: Broken ingot</td>
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### Metals

#### Terbium (Tb)

<table>
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<th>Material</th>
<th>Type</th>
<th>Thickness</th>
<th>Purity</th>
<th>Condition</th>
<th>Size</th>
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</thead>
<tbody>
<tr>
<td>Foil</td>
<td>TM000210</td>
<td>0.02mm</td>
<td>99%</td>
<td>As rolled</td>
<td>25x25 mm to 50x50 mm</td>
</tr>
<tr>
<td>Wire</td>
<td>TB005110</td>
<td>1.0mm</td>
<td>96.9%</td>
<td>Tempered</td>
<td>50 mm to 75 mm</td>
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<tr>
<td>Sputtering Target</td>
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<td>1.0mm</td>
<td>99%</td>
<td>Natural</td>
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</tr>
<tr>
<td>Wire</td>
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<td>2.0mm</td>
<td>99%</td>
<td>Length</td>
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<td>Wire</td>
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<td>99%</td>
<td>Condition</td>
<td>Cast, Length: 50 mm to 100 mm</td>
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#### Thorium (Th)

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<th>Condition</th>
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<tbody>
<tr>
<td>Foil</td>
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<td>0.0125mm</td>
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<td>Natural, Size: 25x25 mm to 100x100 mm</td>
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<tr>
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<td>TH000210</td>
<td>0.025mm</td>
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#### Thulium (Tm)

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<td>Temper</td>
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#### Tin (Sn)

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February 2017
### Metals

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**Tin**

- **Sheet**
  - SN003005: Thickness: 15mm, Purity: 99.99% +, Diameter: 100 mm
- **Sputtering Target**
  - SN009300: Thickness: 3.0mm, Purity: 99.99%, Size: 25 mm to 75 mm
- **Wire**
  - SN009600: Thickness: 6.0mm, Purity: 99.99%, Size: 25 mm to 75 mm
- **Rod**
  - SN007910: Diameter: 2.0mm, Purity: 97.75%, Condition: Extruded, Length: 100 mm to 1000 mm
Metals

**Metals — Titanium**

**Foil**
- **TI000205** Thickness: 0.001mm, High Purity: 99.99 %, Temper: As rolled, Size: 25x25 mm to 50x50 mm
- **TI00090** Thickness: 0.002mm, Purity: 99.6 %, Size: 25x25 mm to 50x50 mm
- **TI00206** Thickness: 0.002mm, High Purity: 99.99 %, Temper: As rolled, Size: 25x25 mm to 50x50 mm
- **TI00100** Thickness: 0.0025mm, Purity: 99.6 %, Size: 25x25 mm to 50x50 mm
- **TI00110** Thickness: 0.003mm, Purity: 99.6 %, Size: 25x25 mm to 50x50 mm
- **TI00121** Thickness: 0.004mm, Purity: 99.6 %, Size: 25x25 mm to 100x100 mm
- **TI00210** Thickness: 0.005mm, Purity: 99.6 %, Size: 25x25 mm to 100x100 mm
- **TI00208** Thickness: 0.005mm, High Purity: 99.99 %, Temper: As rolled, Size: 25x25 mm to 100x100 mm
- **TI00140** Thickness: 0.006mm, Purity: 99.6 %, Size: 25x25 mm to 100x100 mm
- **TI00150** Thickness: 0.007mm, Purity: 99.6 %, Size: 25x25 mm to 150x150 mm
- **TI00211** Thickness: 0.008mm, Coil width: 104mm, Purity: 99.6 %, Length: 0.2 m to 0.3 m
- **TI00160** Thickness: 0.008mm, Purity: 99.6 %, Size: 25x25 mm to 150x150 mm
- **TI00170** Thickness: 0.009mm, Purity: 99.6 %, Size: 25x25 mm to 150x150 mm
- **TI00213** Thickness: 0.010mm, Purity: 99.6 %, Coil width: 150 mm, Size: 100x100 mm to 200x200 mm
- **TI00212** Thickness: 0.01mm, High Purity: 99.99 %, Temper: As rolled, Size: 50x50 mm to 100x100 mm
- **TI00215** Thickness: 0.012mm, Purity: 99.6 %, Size: 203 mm, Purity: 99.6 %, Size: 100x100 mm to 200x200 mm
- **TI00220** Thickness: 0.0125mm, Purity: 99.6 %, Size: 203 mm, Purity: 99.6 %, Size: 100x100 mm to 279x300 mm
- **TI00230** Thickness: 0.015mm, Purity: 99.6 %, Size: 203 mm, Purity: 99.6 %, Size: 100x100 mm to 279x300 mm
- **TI00251** Thickness: 0.02mm, Purity: 99.6 + %, Size: 25x25 mm to 300x300 mm
- **TI00295** Thickness: 0.025mm, High Purity: 99.99 %, Temper: As rolled, Size: 25x25 mm to 100x100 mm
- **TI00290** Thickness: 0.025mm, Purity: 99.6 + %, Temper: Annealed, Size: 25x25 mm to 100x100 mm
- **TI00300** Thickness: 0.03mm, Purity: 99.6 + %, Temper: Annealed, Size: 25x25 mm to 200x300 mm
- **TI00315** Thickness: 0.05mm, High Purity: 99.99 %, Temper: As rolled, Size: 25x25 mm to 100x100 mm
- **TI00310** Thickness: 0.05mm, Purity: 99.6 + %, Temper: Annealed, Size: 25x25 mm to 300x300 mm
- **TI00351** Thickness: 0.075mm, Purity: 99.6 + %, Temper: Annealed, Condition: Flattened, Size: 150x200 mm to 200x300 mm
- **TI00350** Thickness: 0.075mm, Purity: 99.6 + %, Temper: Annealed, Size: 25x25 mm to 300x300 mm

**Powder**
- **SN006020** Max. Particle size: 45 micron, Purity: 99.9%
- **SN006031** Max. Particle size: 150 micron, High Purity: 99.995%

**Lump**
- **SN006102** Max. Lump size: 4mm, High Purity: 99.995%, Condition: Pellets
- **SN006101** Max. Lump size: 5mm, High Purity: 99.995%, Condition: Pellets
- **SN006110** Max. Lump size: 5mm, High Purity: 99.995%, Condition: Shot
- **SN006100** Max. Lump size: 10mm, High Purity: 99.995%, Condition: Pellets

**Single Crystal**
- **SN002110** Oriented: (100), Thickness: 2mm, Diameter: 10mm, Purity: 99.999%, Condition: Unpolished

**Titanium (Ti)**

**Microfoil**
- **TI004500** Thickness: 0.1um, Specific density: 42.8ug.cm⁻², Purity: 99.6 + %, Support: Permanent Mylar 3.5mm, Diameter: 10 mm to 25 mm
- **TI004600** Thickness: 0.25um, Specific density: 112.6ug.cm⁻², Purity: 99.6 + %, Support: Permanent Mylar 3.5mm, Diameter: 10 mm to 25 mm
- **TI004700** Thickness: 0.5um, Specific density: 225.4ug.cm⁻², Purity: 99.6 + %, Support: Permanent Mylar 3.5mm, Diameter: 10 mm to 25 mm
- **TI004850** Thickness: 1.0um, Specific density: 429ug.cm⁻², Purity: 99.6 + %, Support: Permanent Mylar 3.5mm, Diameter: 10 mm to 25 mm

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<table>
<thead>
<tr>
<th>Thickness</th>
<th>Purity</th>
<th>Temper</th>
<th>Condition</th>
<th>Size: 25x25 mm to 500x500 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>TI000371</td>
<td>0.10mm</td>
<td>99.6+ %</td>
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<td>Flattened</td>
</tr>
<tr>
<td>TI000370</td>
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<td>150x200 mm to 200x300 mm</td>
</tr>
<tr>
<td>TI000385</td>
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<tr>
<td>TI000380</td>
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</tr>
<tr>
<td>TI000382</td>
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<td>TI000401</td>
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<td>50x50 mm to 200x300 mm</td>
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<tr>
<td>TI000400</td>
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</tr>
<tr>
<td>TI000410</td>
<td>0.25mm</td>
<td>99.6+ %</td>
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<td>25x25 mm to 300x300 mm</td>
</tr>
<tr>
<td>TI000416</td>
<td>0.3mm</td>
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<td>Annealed</td>
<td>100x100 mm to 300x300 mm</td>
</tr>
<tr>
<td>TI000419</td>
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<td>100x100 mm</td>
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<tr>
<td>TI000423</td>
<td>0.5mm</td>
<td>99.6+ %</td>
<td>Condition:</td>
<td>Ion Implanted, 50x50 mm</td>
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<tr>
<td>TI000425</td>
<td>0.5mm</td>
<td>99.6+ %</td>
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<td>30x50 mm</td>
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<tr>
<td>TI000421</td>
<td>0.5mm</td>
<td>99.6+ %</td>
<td>Annealed</td>
<td>25x25 mm to 300x300 mm</td>
</tr>
<tr>
<td>TI000420</td>
<td>0.5mm</td>
<td>99.6+ %</td>
<td>Annealed</td>
<td>25x25 mm to 300x300 mm</td>
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<tr>
<td>TI000417</td>
<td>0.5mm</td>
<td>99.6+ %</td>
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<tr>
<td>TI000422</td>
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<td>25x25 mm to 300x300 mm</td>
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<tr>
<td>TI000432</td>
<td>1.0mm</td>
<td>High Purity: 99.99+ %</td>
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<tr>
<td>TI000433</td>
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<td>High Purity: 99.99+ %</td>
<td>Annealed</td>
<td>25x25 mm to 100x100 mm</td>
</tr>
<tr>
<td>TI000431</td>
<td>1.0mm</td>
<td>99.6+ %</td>
<td>Annealed</td>
<td>25x25 mm to 100x100 mm</td>
</tr>
<tr>
<td>TI000430</td>
<td>1.0mm</td>
<td>99.6+ %</td>
<td>Annealed</td>
<td>25x25 mm to 100x100 mm</td>
</tr>
<tr>
<td>TI000436</td>
<td>1.20mm</td>
<td>99.6+ %</td>
<td>Annealed</td>
<td>150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td>TI000437</td>
<td>1.5mm</td>
<td>99.6+ %</td>
<td>Annealed</td>
<td>25x25 mm to 300x300 mm</td>
</tr>
<tr>
<td>TI000441</td>
<td>2.0mm</td>
<td>99.6+ %</td>
<td>Annealed</td>
<td>25x25 mm to 100x100 mm</td>
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<td>99.6+ %</td>
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<td>25x25 mm to 500x500 mm</td>
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<tr>
<td>TI000460</td>
<td>3.0mm</td>
<td>99.6+ %</td>
<td>Annealed</td>
<td>50x50 mm to 300x300 mm</td>
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**Metals — Titanium**

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<th>Temper</th>
<th>Condition</th>
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</thead>
<tbody>
<tr>
<td>TI000500</td>
<td>3.2mm</td>
<td>High Purity: 99.99+ %</td>
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**Sheet**

<table>
<thead>
<tr>
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<th>Temper</th>
<th>Condition</th>
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</thead>
<tbody>
<tr>
<td>TI003150</td>
<td>5.0mm</td>
<td>Tolerance: 20 %</td>
<td>Purity: 99.6+ %</td>
<td>Annealed</td>
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**Sputtering Target**

<table>
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<th>Purity</th>
<th>Temper</th>
<th>Condition</th>
<th>Size: 150x150 mm to 300x300 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>TI009100</td>
<td>1.0mm</td>
<td>High Purity: 99.99+ %</td>
<td>Annealed</td>
<td>33 mm</td>
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**Mesh**

<table>
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<tr>
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<th>Temper</th>
<th>Condition</th>
<th>Size: 150x150 mm to 300x300 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>TI008710</td>
<td>Nominal Aperture: 0.19mm</td>
<td>Wire diameter: 0.23mm, Wires/inch: 60x60, Open area: 20%, Weave: Twill, Size: 50x50 mm to 150x150 mm</td>
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</tbody>
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**Wire**

<table>
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<tr>
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<th>Condition</th>
<th>Size: 25x25 mm to 300x300 mm</th>
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</thead>
<tbody>
<tr>
<td>TI005100</td>
<td>0.05mm</td>
<td>99.98%</td>
<td>Annealed</td>
<td>Hard</td>
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</tbody>
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<table>
<thead>
<tr>
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<th>Temper</th>
<th>Length</th>
<th>Material</th>
<th>Description</th>
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<tbody>
<tr>
<td>TI005129</td>
<td>1.0mm</td>
<td>99.6+ %</td>
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<td>100 mm to 1000 mm</td>
<td>Rod</td>
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<tr>
<td>TI005135</td>
<td>1.0mm</td>
<td>99.6+ %</td>
<td>Annealed</td>
<td>100 mm to 1000 mm</td>
<td>Rod</td>
</tr>
<tr>
<td>TI005140</td>
<td>1.5mm</td>
<td>99.6+ %</td>
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<td>100 mm to 1000 mm</td>
<td>Rod</td>
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<tr>
<td>TI005160</td>
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<td>99.6+ %</td>
<td>Annealed</td>
<td>100 mm to 1000 mm</td>
<td>Rod</td>
</tr>
<tr>
<td>TI007910</td>
<td>2mm</td>
<td>99.6+ %</td>
<td>Annealed</td>
<td>100 mm to 1000 mm</td>
<td>Tube</td>
</tr>
<tr>
<td>TI007911</td>
<td>2mm</td>
<td>99.99+ %</td>
<td>Annealed</td>
<td>100 mm to 1000 mm</td>
<td>Tube</td>
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<tr>
<td>TI007912</td>
<td>2.2mm</td>
<td>99.6+ %</td>
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<td>599 mm</td>
<td>Tube</td>
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<tr>
<td>TI007905</td>
<td>1.5mm</td>
<td>99.6+ %</td>
<td>Annealed</td>
<td>100 mm to 1000 mm</td>
<td>Tube</td>
</tr>
<tr>
<td>TI007915</td>
<td>3.0mm</td>
<td>99.6+ %</td>
<td>Annealed</td>
<td>100 mm to 1000 mm</td>
<td>Tube</td>
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<tr>
<td>TI007916</td>
<td>4mm</td>
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<td>100 mm to 1000 mm</td>
<td>Tube</td>
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<tr>
<td>TI007920</td>
<td>5mm</td>
<td>99.6+ %</td>
<td>Annealed</td>
<td>100 mm to 1000 mm</td>
<td>Tube</td>
</tr>
<tr>
<td>TI007921</td>
<td>6mm</td>
<td>99.6+ %</td>
<td>Annealed</td>
<td>100 mm to 1000 mm</td>
<td>Tube</td>
</tr>
<tr>
<td>TI007922</td>
<td>6.35mm</td>
<td>99.99+ %</td>
<td>Annealed</td>
<td>154 mm to 896 mm</td>
<td>Tube</td>
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<tr>
<td>TI007925</td>
<td>8.0mm</td>
<td>99.99+ %</td>
<td>Annealed</td>
<td>50 mm to 200 mm</td>
<td>Tube</td>
</tr>
<tr>
<td>TI007931</td>
<td>9.5mm</td>
<td>99.99+ %</td>
<td>Annealed</td>
<td>25 mm to 200 mm</td>
<td>Tube</td>
</tr>
<tr>
<td>TI007930</td>
<td>10mm</td>
<td>99.6+ %</td>
<td>Annealed</td>
<td>100 mm to 1000 mm</td>
<td>Tube</td>
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<tr>
<td>TI007937</td>
<td>16mm</td>
<td>99.6+ %</td>
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<td>100 mm to 1000 mm</td>
<td>Tube</td>
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<tr>
<td>TI007938</td>
<td>16mm</td>
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<td>Annealed</td>
<td>25 mm to 100 mm</td>
<td>Tube</td>
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<tr>
<td>TI007940</td>
<td>20mm</td>
<td>99.6+ %</td>
<td>Annealed</td>
<td>50 mm to 1000 mm</td>
<td>Tube</td>
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<tr>
<td>TI007941</td>
<td>20mm</td>
<td>99.99+ %</td>
<td>Annealed</td>
<td>25 mm to 100 mm</td>
<td>Tube</td>
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<td>TI007945</td>
<td>25mm</td>
<td>99.6+ %</td>
<td>Annealed</td>
<td>50 mm to 1000 mm</td>
<td>Tube</td>
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<tr>
<td>TI007946</td>
<td>25mm</td>
<td>99.99+ %</td>
<td>Annealed</td>
<td>25 mm to 50 mm</td>
<td>Tube</td>
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<tr>
<td>TI007947</td>
<td>30mm</td>
<td>99.6+ %</td>
<td>Annealed</td>
<td>50 mm to 1000 mm</td>
<td>Tube</td>
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<tr>
<td>TI007948</td>
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<td>99.6+ %</td>
<td>Annealed</td>
<td>50 mm to 1000 mm</td>
<td>Tube</td>
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<tr>
<td>TI007950</td>
<td>50mm</td>
<td>99.6+ %</td>
<td>Annealed</td>
<td>25 mm to 1000 mm</td>
<td>Tube</td>
</tr>
<tr>
<td>TI007955</td>
<td>50mm</td>
<td>99.99+ %</td>
<td>Annealed</td>
<td>10 mm to 25 mm</td>
<td>Tube</td>
</tr>
<tr>
<td>TI007975</td>
<td>75mm</td>
<td>99.6+ %</td>
<td>Annealed</td>
<td>25 mm to 1000 mm</td>
<td>Tube</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>TI007461</td>
<td>Outside Diameter: 10mm, Wall Thickness: 1.0mm, Inside Diameter: 8mm, Purity: 99.6+%, Temper: Annealed, Length: 100 mm to 1000 mm</td>
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<tr>
<td>TI007460</td>
<td>Outside Diameter: 10.3mm, Wall Thickness: 0.8mm, Inside Diameter: 8.7mm, Purity: 99.6+%, Temper: Annealed, Length: 100 mm to 1000 mm</td>
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<td>TI007500</td>
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<tr>
<td>TI007550</td>
<td>Outside Diameter: 25.4mm, Wall Thickness: 0.89mm, Inside Diameter: 23.62mm, Purity: 99.6+%, Temper: Annealed, Length: 100 mm to 1000 mm</td>
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<tr>
<td>TI006020</td>
<td>Max. Lump size: TI006020</td>
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<tr>
<td>TI002120</td>
<td>Diameter: TI002120</td>
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<tr>
<td>TI006021</td>
<td>Max. Particle size: 45 micron, Purity: 99.5%, Condition: Spherical</td>
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<tr>
<td>TI006022</td>
<td>Max. Particle size: 75 micron, Purity: 99.5%</td>
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<tr>
<td>TI006020</td>
<td>Max. Particle size: 150 micron, Purity: 99.5%</td>
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<tr>
<td>TI006104</td>
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<tr>
<td>TI006101</td>
<td>Max. Lump size: 4mm, High Purity: 99.99+%, Condition: Pellets</td>
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<tr>
<td>TI006102</td>
<td>Max. Lump size: 6mm, High Purity: 99.99+%, Condition: Pellets</td>
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<td>TI006111</td>
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<td>TI006100</td>
<td>Max. Lump size: 10mm, High Purity: 99.99+, Condition: Pellets</td>
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<td>TI006110</td>
<td>Max. Lump size: 10mm, High Purity: 99.999%, Condition: Pellets</td>
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<tr>
<td>TI006830</td>
<td>Diameter: 3mm, Purity: 99.6+</td>
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<tr>
<td>TI002122</td>
<td>Oriented: (0001), Thickness: 1mm, Condition: Unpolished, Size: 3x5</td>
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<tr>
<td>TI002120</td>
<td>Oriented: (0001), Thickness: 1mm, Diameter: 5mm, Condition: Unpolished</td>
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<tr>
<td>TI002121</td>
<td>Oriented: (0001), Thickness: 1mm, Diameter: 8mm, Condition: Unpolished</td>
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<tr>
<td>W 004300</td>
<td>Thiness: 0.05µm, Specific density: 966µg.cm², Purity: 99.95%, Support: Permanent Mylar 3.5µm, Diameter: 10 mm to 25 mm</td>
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<td>W 004500</td>
<td>Thiness: 0.1µm, Specific density: 182µg.cm², Purity: 99.95%, Support: Permanent Mylar 3.5µm, Diameter: 10 mm to 25 mm</td>
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<tr>
<td>W 004600</td>
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<td>W 000100</td>
<td>Thickness: 0.004mm, Purity: 99.95%, Size: 25x25 mm to 50x50 mm</td>
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## Metals — Tungsten

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<thead>
<tr>
<th>Material ID</th>
<th>Thickness</th>
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<th>Purity</th>
<th>Temper</th>
<th>Length</th>
<th>Condition</th>
<th>Size</th>
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</thead>
<tbody>
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<td>1.5mm</td>
<td>99.95%</td>
<td>As rolled</td>
<td>0.2 m to 5 m</td>
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<tr>
<td>W 000270</td>
<td>0.1mm</td>
<td>50x50 mm to 200x200 mm</td>
<td>99.95%</td>
<td>As rolled</td>
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<tr>
<td>W 000290</td>
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<tr>
<td>W 000310</td>
<td>0.15mm</td>
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<td>99.95%</td>
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<tr>
<td>W 000317</td>
<td>0.2mm</td>
<td>50x50 mm to 200x200 mm</td>
<td>99.95%</td>
<td>As rolled</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>W 000315</td>
<td>0.2mm</td>
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<td>99.95%</td>
<td>As rolled</td>
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<td></td>
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<tr>
<td>W 000316</td>
<td>0.2mm</td>
<td>50x50 mm to 200x200 mm</td>
<td>99.95%</td>
<td>As rolled</td>
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<td></td>
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<tr>
<td>W 000320</td>
<td>0.25mm</td>
<td>50x50 mm to 200x200 mm</td>
<td>99.95%</td>
<td>As rolled</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W 000327</td>
<td>0.3mm</td>
<td>50x50 mm to 200x200 mm</td>
<td>99.95%</td>
<td>As rolled</td>
<td></td>
<td></td>
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<tr>
<td>W 000325</td>
<td>0.3mm</td>
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<td>99.95%</td>
<td>As rolled</td>
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<td></td>
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<tr>
<td>W 000326</td>
<td>0.4mm</td>
<td>50x50 mm to 200x200 mm</td>
<td>99.95%</td>
<td>As rolled</td>
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<td></td>
<td></td>
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<tr>
<td>W 000330</td>
<td>0.5mm</td>
<td>50x50 mm to 200x200 mm</td>
<td>99.95%</td>
<td>As rolled</td>
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<tr>
<td>W 000331</td>
<td>0.5mm</td>
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<td>99.95%</td>
<td>As rolled</td>
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<tr>
<td>W 000335</td>
<td>0.6mm</td>
<td>50x50 mm to 200x200 mm</td>
<td>99.95%</td>
<td>As rolled</td>
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<tr>
<td>W 000346</td>
<td>1.0mm</td>
<td>50x50 mm to 200x200 mm</td>
<td>99.95%</td>
<td>As rolled</td>
<td></td>
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<td>W 000345</td>
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<td>50x50 mm to 200x200 mm</td>
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<td></td>
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<td>W 000395</td>
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### Sheet

<table>
<thead>
<tr>
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<th>Thickness</th>
<th>Purity</th>
<th>Condition</th>
<th>Lapped surface</th>
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<tbody>
<tr>
<td>W 003025</td>
<td>2.5mm</td>
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<td>Condition</td>
<td>70x99 mm</td>
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<tr>
<td>W 003100</td>
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<td>Condition</td>
<td>50x50 mm to 200x200 mm</td>
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<tr>
<td>W 003105</td>
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<td>Condition</td>
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<tr>
<td>W 003200</td>
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<td>Condition</td>
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### Wire

<table>
<thead>
<tr>
<th>Material ID</th>
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<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>W 005105</td>
<td>0.004mm</td>
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<td>Hard</td>
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<tr>
<td>W 005200</td>
<td>0.005mm</td>
<td>99.95%</td>
<td>Hard</td>
<td>Clean</td>
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</tr>
<tr>
<td>W 005110</td>
<td>0.005mm</td>
<td>99.95%</td>
<td>Hard</td>
<td>Clean</td>
<td></td>
</tr>
<tr>
<td>W 005112</td>
<td>0.0075mm</td>
<td>99.95%</td>
<td>Hard</td>
<td>Clean</td>
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<tr>
<td>W 005115</td>
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<td>Hard</td>
<td>Clean</td>
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</tr>
<tr>
<td>W 005210</td>
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<td>Hard</td>
<td>Clean</td>
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<td>W 005120</td>
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<tr>
<td>W 005220</td>
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<td>Hard</td>
<td>Clean</td>
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<tr>
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<tr>
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<td>Hard</td>
<td>Clean</td>
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<tr>
<td>W 005230</td>
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<td>Hard</td>
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<tr>
<td>W 005130</td>
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<tr>
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<td>W 005236</td>
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<td>Clean</td>
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</tr>
<tr>
<td>W 005131</td>
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<td>Hard</td>
<td>Clean</td>
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</tr>
<tr>
<td>W 005132</td>
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<td>Hard</td>
<td>Clean</td>
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<tr>
<td>W 005240</td>
<td>0.05mm</td>
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<td>Hard</td>
<td>Clean</td>
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<tr>
<td>W 005135</td>
<td>0.05mm</td>
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<td>Clean</td>
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<tr>
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<td>0.075mm</td>
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<td></td>
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</tr>
<tr>
<td>W 005137</td>
<td>0.08mm</td>
<td>99.95%</td>
<td>Condition</td>
<td>Clean</td>
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</table>
## Metals

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Diameter</th>
<th>Purity</th>
<th>Condition</th>
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<tbody>
<tr>
<td>W 005245</td>
<td>0.08mm</td>
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<td>Gold plated wire</td>
</tr>
<tr>
<td>W 005308</td>
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<tr>
<td>W 005250</td>
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<td>99.95%</td>
<td>Gold plated wire</td>
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<tr>
<td>W 005138</td>
<td>0.1mm</td>
<td>99.95%</td>
<td>Clean</td>
</tr>
<tr>
<td>W 005309</td>
<td>0.115mm</td>
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<td>Straight wire</td>
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<tr>
<td>W 005310</td>
<td>0.125mm</td>
<td>99.9+ %</td>
<td>Straight wire</td>
</tr>
<tr>
<td>W 005260</td>
<td>0.125mm</td>
<td>99.95%</td>
<td>Gold plated wire</td>
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<tr>
<td>W 005140</td>
<td>0.125mm</td>
<td>99.95%</td>
<td>Clean</td>
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<tr>
<td>W 005315</td>
<td>0.15mm</td>
<td>99.9+ %</td>
<td>Straight wire</td>
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<tr>
<td>W 005145</td>
<td>0.15mm</td>
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<td>W 005147</td>
<td>0.175mm</td>
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<td>Clean</td>
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<td>0.20mm</td>
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<td>Straight wire</td>
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<tr>
<td>W 005148</td>
<td>0.2mm</td>
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<td>W 005325</td>
<td>0.25mm</td>
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<td>Straight wire</td>
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<tr>
<td>W 005150</td>
<td>0.25mm</td>
<td>99.95%</td>
<td>Clean</td>
</tr>
<tr>
<td>W 005330</td>
<td>0.30mm</td>
<td>99.95%</td>
<td>Clean</td>
</tr>
<tr>
<td>W 005153</td>
<td>0.3mm</td>
<td>99.95%</td>
<td>Clean</td>
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<tr>
<td>W 005356</td>
<td>0.356mm</td>
<td>99.95%</td>
<td>Straight wire</td>
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<tr>
<td>W 005335</td>
<td>0.38mm</td>
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<tr>
<td>W 005155</td>
<td>0.38mm</td>
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<td>W 005457</td>
<td>0.457mm</td>
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<tr>
<td>W 005351</td>
<td>0.5mm</td>
<td>99.9+ %</td>
<td>Straight wire</td>
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<tr>
<td>W 005160</td>
<td>0.5mm</td>
<td>99.95%</td>
<td>Clean</td>
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<tr>
<td>W 005350</td>
<td>0.5mm</td>
<td>99.9+ %</td>
<td>Straight wire</td>
</tr>
<tr>
<td>W 005162</td>
<td>0.6mm</td>
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<td>Clean</td>
</tr>
<tr>
<td>W 005355</td>
<td>0.75mm</td>
<td>99.9+ %</td>
<td>Straight wire</td>
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<tr>
<td>W 005165</td>
<td>0.75mm</td>
<td>99.95%</td>
<td>Clean</td>
</tr>
<tr>
<td>W 005358</td>
<td>0.80mm</td>
<td>99.9+ %</td>
<td>Straight wire</td>
</tr>
<tr>
<td>W 005360</td>
<td>1.0mm</td>
<td>99.9+ %</td>
<td>Straight wire</td>
</tr>
<tr>
<td>W 005170</td>
<td>1.0mm</td>
<td>99.95%</td>
<td>Clean</td>
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<tr>
<td>W 005172</td>
<td>1.2mm</td>
<td>99.95%</td>
<td>Clean</td>
</tr>
<tr>
<td>W 005365</td>
<td>1.3mm</td>
<td>99.9+ %</td>
<td>Straight wire, Condition: Chromium plated</td>
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### Insulated Wire

<table>
<thead>
<tr>
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<th>Diameter</th>
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<th>Condition</th>
</tr>
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<tbody>
<tr>
<td>W 005362</td>
<td>1.5mm</td>
<td>99.9+ %</td>
<td>Straight wire</td>
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### Rod

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Diameter</th>
<th>Purity</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>W 007900</td>
<td>1.6mm</td>
<td>99.95%</td>
<td>Condition: Centerless ground, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>W 007910</td>
<td>2.0mm</td>
<td>99.95%</td>
<td>Condition: Centerless ground, Length: 100 mm to 1000 mm</td>
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<tr>
<td>W 007912</td>
<td>2.36mm</td>
<td>99.95%</td>
<td>Clean, Length: 100 mm to 300 mm</td>
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<td>W 007913</td>
<td>3.0mm</td>
<td>99.95%</td>
<td>Condition: Centerless ground, Length: 100 mm to 1000 mm</td>
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<tr>
<td>W 007915</td>
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<td>Condition: Centerless ground, Length: 100 mm to 1000 mm</td>
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<tr>
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<td>99.95%</td>
<td>Condition: Centerless ground, Length: 100 mm to 1000 mm</td>
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<tr>
<td>W 007925</td>
<td>6.35mm</td>
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<td>Condition: Centerless ground, Length: 100 mm to 1000 mm</td>
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<td>W 007928</td>
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<td>Condition: Centerless ground, Length: 50 mm to 500 mm</td>
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<td>W 007929</td>
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<td>99.95%</td>
<td>Condition: Centerless ground, Length: 8.25 mm</td>
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<tr>
<td>W 007930</td>
<td>10.0mm</td>
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<td>Condition: Centerless ground, Length: 50 mm to 500 mm</td>
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<td>W 007933</td>
<td>15mm</td>
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<td>Condition: Centerless ground, Length: 100 mm</td>
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<td>W 007935</td>
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<td>W 007938</td>
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<td>Condition: Centerless ground, Length: 81 mm</td>
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<tr>
<td>W 007940</td>
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<td>99.95%</td>
<td>Condition: Centerless ground, Length: 25 mm to 100 mm</td>
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<tr>
<td>W 007941</td>
<td>20.0mm</td>
<td>99.95%</td>
<td>Condition: Centerless ground, Length: 18 mm</td>
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<td>W 007950</td>
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<td>99.95%</td>
<td>Condition: Centerless ground, Length: 25 mm to 200 mm</td>
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<tr>
<td>W 007961</td>
<td>40mm</td>
<td>99.95%</td>
<td>Condition: Centerless ground, Length: 50 mm to 100 mm</td>
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<tr>
<td>W 007965</td>
<td>50mm</td>
<td>99.95%</td>
<td>Condition: Centerless ground, Length: 25 mm to 200 mm</td>
</tr>
</tbody>
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## Metals

### Tungsten

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Diameter</th>
<th>Purity</th>
<th>Condition</th>
</tr>
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<tbody>
<tr>
<td>W 007980</td>
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<td>W 007990</td>
<td>Diameter: 100mm, Purity: 99.95%, Centerless ground, Length: 100 mm</td>
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### Tube

<table>
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<tr>
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<th>Wall Thickness</th>
<th>Purity</th>
<th>Length</th>
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<tr>
<td>W 007200</td>
<td>1.6mm</td>
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### Bolt

<table>
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<tr>
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<th>Size</th>
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<th>Pitch</th>
<th>Diameter</th>
<th>Purity</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>W 00B30</td>
<td>M3 x 10mm</td>
<td>Hexagonal</td>
<td>1.0mm</td>
<td>5.7mm</td>
<td>99.99%</td>
<td>Unpolished</td>
</tr>
<tr>
<td>W 00B35</td>
<td>M3 x 20mm</td>
<td>Hexagonal</td>
<td>1.0mm</td>
<td>9.5mm</td>
<td>99.99%</td>
<td>Condition: Polished on 1 side to 1 micron</td>
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### Nut

<table>
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<tr>
<th>Code</th>
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<th>Style</th>
<th>Pitch</th>
<th>Diameter</th>
<th>Purity</th>
<th>Condition</th>
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</thead>
<tbody>
<tr>
<td>W 00NU03</td>
<td>M3</td>
<td>Hexagonal</td>
<td>1.0mm</td>
<td>5.0mm</td>
<td>99.99%</td>
<td>Condition: Polished on 1 side to 1 micron</td>
</tr>
<tr>
<td>W 00NU04</td>
<td>M4</td>
<td>Hexagonal</td>
<td>1.0mm</td>
<td>8.0mm</td>
<td>99.99%</td>
<td>Condition: Polished on 1 side to 1 micron</td>
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### Washer

<table>
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<th>Outside Diameter</th>
<th>Inside Diameter</th>
<th>Thickness</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>W 00WA03</td>
<td>M3</td>
<td>6.0mm</td>
<td>3.2mm</td>
<td>1.0mm</td>
<td>10 pcs</td>
</tr>
<tr>
<td>W 00WA04</td>
<td>M4</td>
<td>8.0mm</td>
<td>4.3mm</td>
<td>1.0mm</td>
<td>10 pcs</td>
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### Powder

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<tr>
<th>Code</th>
<th>Mean Particle size (FSSS)</th>
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<th>Description</th>
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<tbody>
<tr>
<td>W 006015</td>
<td>&lt; 1 micron</td>
<td>99.95%</td>
<td>Mean Particle size: 1.0mm, Purity: 99.95%</td>
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### Single Crystal

<table>
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<th>Oriented</th>
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<th>Diameter</th>
<th>Purity</th>
<th>Condition</th>
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</thead>
<tbody>
<tr>
<td>W 002051</td>
<td>(110)</td>
<td>1.0mm</td>
<td>5mm</td>
<td>99.99%</td>
<td>Unpolished</td>
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### Lump

<table>
<thead>
<tr>
<th>Code</th>
<th>Max. Lump size</th>
<th>Purity</th>
<th>Condition</th>
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<tbody>
<tr>
<td>W 006100</td>
<td>5mm</td>
<td>99.99%</td>
<td>Unpolished</td>
</tr>
</tbody>
</table>

### Centerless ground, Length: 100 mm, Diameter: 5.0mm, Inside Diameter: 0.6mm, Purity: 99.95%, Quantity: 10 pcs

### Wall Thickness: 0.8mm, Purity: 99.99%, Quantity: 10 pcs

<table>
<thead>
<tr>
<th>Code</th>
<th>Outside Diameter</th>
<th>Inside Diameter</th>
<th>Thickness</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>W 007980</td>
<td>75mm</td>
<td></td>
<td>1.0mm</td>
<td>10 pcs</td>
</tr>
</tbody>
</table>

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February 2017
Metals

**Uranium (U)**

<table>
<thead>
<tr>
<th>Metal</th>
<th>Thickness</th>
<th>Purity</th>
<th>Condition</th>
<th>Size</th>
<th>Temper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foil</td>
<td>0.025mm</td>
<td>99.9%</td>
<td>Condition: Natural</td>
<td>9x26 mm to 25x25 mm</td>
<td>As drawn</td>
</tr>
<tr>
<td>Foil</td>
<td>0.178mm</td>
<td>99.98%</td>
<td>Condition: Natural</td>
<td>6x12 mm to 47x50 mm</td>
<td>As rolled</td>
</tr>
<tr>
<td>Foil</td>
<td>0.5mm</td>
<td>99.9%</td>
<td>Condition: Natural</td>
<td>10x10 mm to 50x50 mm</td>
<td>As rolled</td>
</tr>
<tr>
<td>Foil</td>
<td>1.0mm</td>
<td>99.9%</td>
<td>Condition: Natural</td>
<td>25x25 mm to 50x50 mm</td>
<td>As rolled</td>
</tr>
</tbody>
</table>

**Sputtering Target**

<table>
<thead>
<tr>
<th>Size</th>
<th>Purity</th>
<th>Condition</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.0mm</td>
<td>99.9%</td>
<td>Depleted</td>
<td>Natural</td>
</tr>
<tr>
<td>6.0mm</td>
<td>99.9%</td>
<td>Depleted</td>
<td>Natural</td>
</tr>
</tbody>
</table>

**Wire**

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Purity</th>
<th>Condition</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5mm</td>
<td>99.9%</td>
<td>Natural</td>
<td></td>
</tr>
</tbody>
</table>

**Vanadium (V)**

**Microfoil**

<table>
<thead>
<tr>
<th>Thinness</th>
<th>Specific density</th>
<th>Purity</th>
<th>Support</th>
<th>Diameter</th>
<th>Temper</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1µm</td>
<td>60.8µg.cm²</td>
<td>99.8%</td>
<td>Permanent Mylar</td>
<td>3.5µm</td>
<td>As drawn</td>
</tr>
<tr>
<td>0.25µm</td>
<td>140.4µg.cm²</td>
<td>99.8%</td>
<td>Permanent Mylar</td>
<td>3.5µm</td>
<td>As drawn</td>
</tr>
<tr>
<td>1.0µm</td>
<td>611µg.cm²</td>
<td>99.8%</td>
<td>Permanent Mylar</td>
<td>3.5µm</td>
<td>As drawn</td>
</tr>
</tbody>
</table>

**Foil**

<table>
<thead>
<tr>
<th>Thickness</th>
<th>Purity</th>
<th>Size</th>
<th>Temper</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.001mm</td>
<td>99.8%</td>
<td>25x25 mm to 50x50 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.002mm</td>
<td>99.8%</td>
<td>25x25 mm to 50x50 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.003mm</td>
<td>99.8%</td>
<td>25x25 mm to 50x50 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.004mm</td>
<td>99.8%</td>
<td>25x25 mm to 50x50 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.005mm</td>
<td>99.8%</td>
<td>25x25 mm to 100x100 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.006mm</td>
<td>99.8%</td>
<td>25x25 mm to 100x100 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.007mm</td>
<td>99.8%</td>
<td>25x25 mm to 100x100 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.008mm</td>
<td>99.8%</td>
<td>25x25 mm to 100x100 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.009mm</td>
<td>99.8%</td>
<td>25x25 mm to 100x100 mm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sputtering Target**

<table>
<thead>
<tr>
<th>Thickness</th>
<th>Purity</th>
<th>Size</th>
<th>Temper</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0mm</td>
<td>99.8%</td>
<td>25 mm to 75 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.0mm</td>
<td>99.8%</td>
<td>25 mm to 75 mm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Wire**

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Purity</th>
<th>Length</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1mm</td>
<td>99.8%</td>
<td></td>
<td>As drawn</td>
</tr>
<tr>
<td>0.25mm</td>
<td>99.8%</td>
<td></td>
<td>Hard</td>
</tr>
<tr>
<td>0.5mm</td>
<td>99.8%</td>
<td></td>
<td>As drawn</td>
</tr>
<tr>
<td>1.0mm</td>
<td>99.8%</td>
<td></td>
<td>Stress relieved</td>
</tr>
</tbody>
</table>

**Rod**

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Purity</th>
<th>Length</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2mm</td>
<td>99.8%</td>
<td>100 mm to 1000 mm</td>
<td></td>
</tr>
<tr>
<td>1.4mm</td>
<td>99.8%</td>
<td>100 mm to 500 mm</td>
<td>As drawn</td>
</tr>
</tbody>
</table>

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| V 007902 | Diameter: 2.0mm, Purity: 99.8%, Temper: As drawn, Length: 100 mm to 500 mm |
| V 007910 | Diameter: 3.5mm, Purity: 99.8%, Length: 100 mm to 500 mm |
| V 007930 | Diameter: 5.0mm, Purity: 99.8%, Length: 50 mm to 500 mm |
| V 007935 | Diameter: 8.0mm, Purity: 99.8%, Length: 50 mm to 200 mm |
| V 007937 | Diameter: 11mm, Purity: 99.8%, Length: 25 mm to 100 mm |
| V 007960 | Diameter: 20.0mm, Purity: 99.8%, Length: 25 mm to 100 mm |
| V 007965 | Diameter: 25.0mm, Purity: 99.8%, Length: 25 mm to 100 mm |
| V 007980 | Diameter: 50.0mm, Purity: 99.8%, Length: 25 mm to 100 mm |

| YB000260 | Thickness: 0.80mm, Purity: 99%, Temper: As rolled, Size: 30x30 mm to 125x125 mm |

**Sputtering Target**

| YB009100 | Thickness: 1.0mm, Purity: 99%, Size: 50 mm to 75 mm |

**Wire**

| YB005111 | Diameter: 1.0mm, Purity: 99.9% |
| YB005110 | Diameter: 1.0mm, Purity: 99.9%, Condition: Square section wire |

**Rod**

| YB007905 | Diameter: 2.0mm, Purity: 99%, Condition: Cast, Length: 50 mm |
| YB007910 | Diameter: 6.35mm, Purity: 99%, Condition: Cast, Length: 50 mm to 100 mm |
| YB007920 | Diameter: 10.0mm, Purity: 99%, Condition: Cast, Length: 50 mm to 100 mm |

**Powder**

| YB006010 | Max. Particle size: 500micron, Purity: 99.9% |

**Lump**

| YB006100 | Max. Lump size: 25mm, Purity: 99.9% |

**Single Crystal**

| V 002110 | Oriented: (100), Thickness: 2mm, Diameter: 12mm, Purity: 99.99%, Condition: Polished on 1 side to 1 micron |
| V 002110 | Oriented: (110), Thickness: 2mm, Diameter: 12mm, Purity: 99.99%, Condition: Polished on 1 side to 1 micron |
| V 002109 | Oriented: (100), Diameter: 6mm, Length: 10mm, Purity: 99.99% |
| V 002119 | Oriented: (100), Diameter: 12mm, Length: 10mm, Purity: 99.99% |
| V 002113 | Oriented: (110), Thickness: 2mm, Diameter: 12mm, Purity: 99.99%, Condition: Polished on 1 side to 1 micron |
| V 002112 | Oriented: (110), Thickness: 2mm, Diameter: 12mm, Purity: 99.99%, Condition: Polished on 1 side to 1 micron |
| V 002100 | Oriented: (110), Diameter: 6mm, Length: 25mm, Purity: 99.99% |
| V 002120 | Oriented: (110), Diameter: 12mm, Length: 25mm, Purity: 99.99% |

**Yttrium (Y)**

| YB000205 | Thickness: 0.005mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm |
| YB002000 | Thickness: 0.025mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm to 100x100 mm |
| YB002015 | Thickness: 0.125mm, Purity: 99%, Temper: As rolled, Size: 25x25 mm to 100x100 mm |
| YB002030 | Thickness: 0.25mm, Tolerance: 20 %, Purity: 99%, Temper: As rolled, Size: 25x25 mm to 50x50 mm |
| YB000260 | Thickness: 0.80mm, Purity: 99%, Temper: As rolled, Size: 30x30 mm to 125x125 mm |

**Sputtering Target**

| YB009100 | Thickness: 1.0mm, Purity: 99%, Size: 50 mm to 75 mm |

**Wire**

| YB005111 | Diameter: 1.0mm, Purity: 99.9% |
| YB005110 | Diameter: 1.0mm, Purity: 99.9%, Condition: Square section wire |

**Rod**

| YB007905 | Diameter: 2.0mm, Purity: 99%, Condition: Cast, Length: 50 mm |
| YB007910 | Diameter: 6.35mm, Purity: 99%, Condition: Cast, Length: 50 mm to 100 mm |
| YB007930 | Diameter: 12.5mm, Purity: 99%, Condition: Cast, Length: 50 mm to 100 mm |
## Metals

### Zinc (Zn)

<table>
<thead>
<tr>
<th>Powder</th>
<th>Y 006010</th>
<th>Max. Particle size: 500μm, Purity: 99.9%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lump</td>
<td>Y 006100</td>
<td>Max. Lump size: 50mm, Purity: 99.9%</td>
</tr>
</tbody>
</table>

- **Foil**
  - ZN000060 Thickness: 0.001mm, Purity: 99.9%, Size: 25x25 mm to 50x50 mm
  - ZN000080 Thickness: 0.0025mm, Purity: 99.9%, Size: 25x25 mm to 100x100 mm
  - ZN000110 Thickness: 0.005mm, Purity: 99.9%, Size: 25x25 mm to 100x100 mm
  - ZN000160 Thickness: 0.01mm, Purity: 99.9%, Size: 25x25 mm to 100x100 mm
  - ZN000180 Thickness: 0.015mm, Purity: 99.9%, Size: 25x25 mm to 100x100 mm
  - ZN000190 Thickness: 0.02mm, Purity: 99.9%, Size: 25x25 mm to 100x100 mm
  - ZN000220 Thickness: 0.025mm, Purity: 99.95 +%, Temper: As rolled, Size: 150x150 mm
  - ZN000225 Thickness: 0.025mm, High Purity: 99.99 +%, Temper: As rolled, Size: 100x100 mm to 150x150 mm
  - ZN000235 Thickness: 0.05mm, High Purity: 99.99 +%, Temper: As rolled, Size: 25x25 mm to 100x100 mm
  - ZN000230 Thickness: 0.05mm, Purity: 99.95 +%, Temper: As rolled, Size: 150x150 mm
  - ZN000240 Thickness: 0.075mm, Purity: 99.95 +%, Temper: As rolled, Size: 25x25 mm to 150x150 mm
  - ZN000250 Thickness: 0.1mm, Purity: 99.95 +%, Temper: As rolled, Size: 25x25 mm to 300x300 mm
  - ZN000275 Thickness: 0.125mm, High Purity: 99.99 +%, Temper: As rolled, Size: 25x25 mm to 100x100 mm
  - ZN000270 Thickness: 0.125mm, Purity: 99.95 +%, Temper: As rolled, Size: 25x25 mm to 300x300 mm
  - ZN000280 Thickness: 0.15mm, Purity: 99.95 +%, Temper: As rolled, Size: 25x25 mm to 300x300 mm
  - ZN000290 Thickness: 0.175mm, Purity: 99.95 +%, Temper: As rolled, Size: 25x25 mm to 150x150 mm
  - ZN000295 Thickness: 0.2mm, Purity: 99.95 +%, Temper: As rolled, Size: 25x25 mm to 300x300 mm
  - ZN000305 Thickness: 0.25mm, Purity: 99.99 +%, Temper: As rolled, Size: 25x25 mm to 150x150 mm
  - ZN000301 Thickness: 0.25mm, Purity: 99.95 +%, Temper: As rolled, Size: 25x25 mm to 150x150 mm
  - ZN000308 Thickness: 0.35mm, Purity: 99.95 +%, Temper: As rolled, Size: 25x25 mm to 300x300 mm
  - ZN000315 Thickness: 0.5mm, Purity: 99.99 +%, Temper: As rolled, Size: 25x25 mm to 100x100 mm

<table>
<thead>
<tr>
<th>Sputtering Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZN000312 Thickness: 0.5mm, Purity: 99.95 +%, Temper: As rolled, Size: 25x25 mm to 300x300 mm</td>
</tr>
<tr>
<td>ZN000311 Thickness: 0.5mm, Purity: 99.7%, Temper: As rolled, Size: 100x100 mm to 600x1130 mm</td>
</tr>
<tr>
<td>ZN000322 Thickness: 1.0mm, Purity: 99.95 +%, Temper: As rolled, Size: 25x25 mm to 300x300 mm</td>
</tr>
<tr>
<td>ZN000325 Thickness: 1.0mm, High Purity: 99.99 +%, Temper: As rolled, Size: 25x25 mm to 300x300 mm</td>
</tr>
<tr>
<td>ZN000318 Thickness: 1.0mm, Purity: 99.7%, Temper: As rolled, Size: 200x200 mm to 500x1000 mm</td>
</tr>
<tr>
<td>ZN000330 Thickness: 1.25mm, High Purity: 99.998%, Temper: As rolled, Size: 50x145 mm</td>
</tr>
<tr>
<td>ZN000350 Thickness: 1.5mm, Purity: 99.95 +%, Temper: As rolled, Coil width 300 mm, Size: 25x25 mm to 300x300 mm</td>
</tr>
<tr>
<td>ZN000370 Thickness: 2.0mm, Purity: 99.95 +%, Temper: As rolled, Coil width 300 mm, Size: 25x25 mm to 300x300 mm</td>
</tr>
<tr>
<td>ZN000375 Thickness: 3mm, Purity: 99.99 +%, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
</tr>
<tr>
<td>ZN000380 Thickness: 6mm, High Purity: 99.99 +%, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
</tr>
<tr>
<td>ZN000381 Thickness: 6mm, High Purity: 99.99 +%, Temper: As rolled, Condition: Polished on both sides, Size: 50x50 mm to 100x100 mm</td>
</tr>
</tbody>
</table>

### Foams

| ZN003810 Thickness: 10mm, Bulk density: 0.28g.cm⁻³, Pores/cm³: 4, Purity: 99.99%, Condition: 99.99% Zinc deposited on a polyurethane foam, Maximum use temperature: 50°C, Size: 150x150 mm |
| ZN003811 Thickness: 10mm, Bulk density: 0.28g.cm⁻³, Pores/cm³: 4, Purity: 99.99%, Condition: 99.99% Zinc deposited on a polyurethane foam, Maximum use temperature: 50°C, Size: 300x300 mm |
| ZN003805 Thickness: 10mm, Bulk density: 0.95g.cm⁻³, Pores/cm³: 4, Purity: 99.99%, Condition: Closed cell, Size: 100x100 mm |
| ZN003812 Thickness: 20mm, Bulk density: 0.28g.cm⁻³, Pores/cm³: 4, Purity: 99.99%, Condition: 99.99% Zinc deposited on a polyurethane foam, Maximum use temperature: 50°C, Size: 150x150 mm |
| ZN003813 Thickness: 20mm, Bulk density: 0.28g.cm⁻³, Pores/cm³: 4, Purity: 99.99%, Condition: 99.99% Zinc deposited on a polyurethane foam, Maximum use temperature: 50°C, Size: 300x300 mm |

### Wire

<p>| ZN005080 Diameter: 0.025mm, Purity: 99.0%, Temper: As drawn |
| ZN005090 Diameter: 0.05mm, Purity: 99.0%, Temper: As drawn |</p>
<table>
<thead>
<tr>
<th>Metals — Zirconium</th>
<th>Zr0002111</th>
<th>Oriented: (001), Thickness: 2mm, Diameter: 12mm, Purity: 99.999%, Condition: Polished on 1 side to 1 micron</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zr0002110</td>
<td>Oriented: (001), Thickness: 2mm, Diameter: 12mm, Purity: 99.999%, Condition: Unpolished</td>
<td></td>
</tr>
<tr>
<td>Zr0002119</td>
<td>Oriented: (001), Diameter: 12mm, Length: 25mm, Purity: 99.999%</td>
<td></td>
</tr>
<tr>
<td>Zr0002120</td>
<td>Oriented: (001), Diameter: 12mm, Length: 50mm, Purity: 99.999%</td>
<td></td>
</tr>
</tbody>
</table>

### Zirconium (Zr)

#### Foil
- **Zr000070**: Thickness: 0.001mm, Purity: 99.2%, Size: 25x25 mm to 50x50 mm
- **Zr000080**: Thickness: 0.002mm, Purity: 99.2%, Size: 25x25 mm to 50x50 mm
- **Zr000090**: Thickness: 0.0025mm, Purity: 99.2%, Size: 25x25 mm to 50x50 mm
- **Zr000100**: Thickness: 0.003mm, Purity: 99.2%, Size: 25x25 mm to 100x100 mm
- **Zr000110**: Thickness: 0.004mm, Purity: 99.2%, Size: 25x25 mm to 100x100 mm
- **Zr000120**: Thickness: 0.005mm, Purity: 99.2%, Size: 25x25 mm to 100x100 mm
- **Zr000130**: Thickness: 0.006mm, Purity: 99.2%, Size: 25x25 mm to 150x150 mm
- **Zr000140**: Thickness: 0.007mm, Purity: 99.2%, Size: 150x150 mm
- **Zr000150**: Thickness: 0.008mm, Purity: 99.2%, Size: 150x150 mm
- **Zr000160**: Thickness: 0.009mm, Purity: 99.2%, Size: 150x150 mm
- **Zr000170**: Thickness: 0.01mm, Purity: 99.2%, Size: 25x25 mm to 100x100 mm
- **Zr000202**: Thickness: 0.01mm, Purity: 99.2%, Coil width 204 mm, Size: 25x25 mm to 200x200 mm
- **Zr000180**: Thickness: 0.0125mm, Purity: 99.2%, Size: 150x150 mm
- **Zr000190**: Thickness: 0.015mm, Purity: 99.2%, Size: 25x25 mm to 100x100 mm
- **Zr000205**: Thickness: 0.016mm, Purity: 99.2%, Coil width 110 mm, Size: 25x25 mm to 100x300 mm
- **Zr000200**: Thickness: 0.02mm, Purity: 99.2%, Coil width 200 mm, Size: 200x300 mm
- **Zr000210**: Thickness: 0.025mm, Purity: 99.2%, Temper: Annealed, Coil width 205 mm, Size: 25x25 mm to 200x300 mm
- **Zr000220**: Thickness: 0.05mm, Purity: 99.2%, Temper: Annealed, Coil width 305 mm, Size: 25x25 mm to 300x300 mm
- **Zr000240**: Thickness: 0.075mm, Purity: 99.2%, Temper: Annealed, Coil width 200 mm, Size: 25x25 mm to 200x300 mm
- **Zr000260**: Thickness: 0.1mm, Purity: 99.2%, Temper: Annealed, Coil width 200 mm, Size: 25x25 mm to 200x300 mm
- **Zr000270**: Thickness: 0.125mm, Purity: 99.2%, Temper: Annealed, Coil width 305 mm, Size: 25x25 mm to 300x300 mm
- **Zr000290**: Thickness: 0.2mm, Purity: 99.2%, Temper: Annealed, Size: 25x25 mm
- **Zr000300**: Thickness: 0.25mm, Purity: 99.2%, Temper: Annealed, Coil width 305 mm, Size: 25x25 mm to 300x300 mm

#### Rod
| Zr0007902 | Diameter: 2.0mm, High Purity: 99.999%, Length: 100 mm to 1000 mm |
| Zr0007906 | Diameter: 3.0mm, Purity: 99.999%, Length: 100 mm to 1000 mm |
| Zr0007908 | Diameter: 4.8mm, High Purity: 99.999%, Length: 100 mm to 1000 mm |
| Zr0007911 | Diameter: 7.0mm, High Purity: 99.999%, Condition: Cast, Length: 100 mm to 500 mm |
| Zr0007914 | Diameter: 7.62mm, Purity: 99.9%, Length: 100 mm to 1000 mm |
| Zr0007915 | Diameter: 8mm, High Purity: 99.999%, Length: 50 mm to 245 mm |
| Zr0007920 | Diameter: 10.0mm, Purity: 99.9%, Length: 100 mm to 1000 mm |
| Zr0007930 | Diameter: 10.0mm, High Purity: 99.999%, Length: 100 mm to 1000 mm |
| Zr0007936 | Diameter: 12.0mm, Purity: 99.9%, Length: 100 mm to 1000 mm |
| Zr0007940 | Diameter: 19mm, Purity: 99.9%, Condition: Cast, Length: 100 mm to 900 mm |
| Zr0007950 | Diameter: 19.0mm, High Purity: 99.999%, Condition: Cast, Length: 100 mm to 500 mm |

#### Powder
- **Zr000621**: Max. Particle size: 5micron, Min. Particle size: 1micron, Purity: 99.0%
- **Zr0006010**: Mean Particle size: 7.5micron, Purity: 98.8%
- **Zr0006040**: Max. Particle size: 150micron, Purity: 99.9%
- **Zr0006030**: Max. Particle size: 150micron, High Purity: 99.999%

#### Lump
- **Zr0006100**: Max. Lump size: 2mm, Purity: 99.98%, Condition: Shot
- **Zr0006110**: Max. Lump size: 6mm, High Purity: 99.9998%, Condition: Shot
- **Zr0006120**: Max. Lump size: 10mm, Purity: 99.99%
- **Zr0006125**: Max. Lump size: 10mm, Purity: 99.99%, Condition: Pellets

#### Single Crystal
| Zr0002118 | Oriented: (0001), Diameter: 12mm, Length: 10mm, Purity: 99.999% |

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## Metals

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Purity</th>
<th>Temper</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZR000310</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Annealed, Coil width 305 mm, Size: 25x25 mm to 300x300 mm</td>
</tr>
<tr>
<td>ZR000320</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 1.0mm, Annealed, Diameter: 50 mm</td>
</tr>
<tr>
<td>ZR000321</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 1.0mm, Annealed, Condition: Hafnium &gt; 0.2%, Size: 25x25 mm to 300x300 mm</td>
</tr>
<tr>
<td>ZR000350</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 2.0mm, Annealed, Size: 25x25 mm to 150x150 mm</td>
</tr>
<tr>
<td>ZR000370</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Thickness: ZR000310, Annealed, Size: 150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td>ZR000380</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Thickness: ZR000320, Annealed, Size: 150x150 mm to 200x500 mm</td>
</tr>
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### Sputtering Target

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Purity</th>
<th>Temper</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZR009300</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Condition: Hafnium &gt; 0.2%</td>
</tr>
<tr>
<td>ZR009512</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 6.0mm, Size: 25 mm to 50 mm</td>
</tr>
<tr>
<td>ZR009515</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 6.0mm, Purity: 99.2%, Size: 152.4 mm</td>
</tr>
<tr>
<td>ZR009520</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 6.0mm, Purity: 99.2%, Size: 203.2 mm</td>
</tr>
<tr>
<td>ZR009700</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 7.0mm, Purity: 99.2%, Size: 50 mm to 75 mm</td>
</tr>
</tbody>
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### Wire

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Purity</th>
<th>Temper</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZR005110</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 0.05mm, As drawn</td>
</tr>
<tr>
<td>ZR005120</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 0.125mm, Condition: Stress relieved</td>
</tr>
<tr>
<td>ZR005130</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 0.25mm, As drawn</td>
</tr>
<tr>
<td>ZR005134</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 0.28mm, Annealed</td>
</tr>
<tr>
<td>ZR005135</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 0.5mm, Annealed, Condition: Hafnium &gt; 0.2%</td>
</tr>
<tr>
<td>ZR005143</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 1.0mm, Tempered, Annealed, Condition: Hafnium &gt; 0.2%</td>
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### Rod

<table>
<thead>
<tr>
<th>Diameter</th>
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<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZR007905</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 1.5mm, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>ZR007910</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 2.0mm, Condition: Centerless ground, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>ZR007915</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 3.0mm, Condition: Centerless ground, Condition: Hafnium &gt; 0.2%, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>ZR007920</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 5.0mm, Condition: Centerless ground, Condition: Hafnium &gt; 0.2%, Length: 100 mm to 1000 mm</td>
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<tr>
<td>ZR007924</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 6.0mm, Condition: Centerless ground, Length: 100 mm to 1000 mm</td>
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<tr>
<td>ZR007930</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 9.5mm, Condition: Centerless ground, Condition: Hafnium &gt; 0.2%, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>ZR007931</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 10.0mm, Condition: Centerless ground, Condition: Hafnium &gt; 0.2%, Length: 100 mm to 1000 mm</td>
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<tr>
<td>ZR007935</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 12.7mm, Condition: Centerless ground, Condition: Hafnium &gt; 0.2%, Length: 100 mm to 1000 mm</td>
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<tr>
<td>ZR007938</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 16mm, Condition: Centerless ground, Condition: Hafnium &gt; 0.2%, Length: 100 mm to 1000 mm</td>
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<thead>
<tr>
<th>Diameter</th>
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<tr>
<td>ZR007940</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 19.0mm, Condition: Centerless ground, Condition: Hafnium &gt; 0.2%, Length: 50 mm to 1000 mm</td>
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<tr>
<td>ZR007960</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 50mm, Condition: Centerless ground, Length: 25 mm to 100 mm</td>
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### Tube

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<tr>
<th>Diameter</th>
<th>Purity</th>
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<th>Condition</th>
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<tr>
<td>ZR007160</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 1.6mm, Wall Thickness: 0.25mm, Inside Diameter: 1.1mm, Purity: 99.2%, Temper: Hard, Length: 100 mm to 1000 mm</td>
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<tr>
<td>ZR007200</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 2.0mm, Inside Diameter: 1.6mm, Purity: 99.2%, Temper: Annealed, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>ZR007400</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 6.35mm, Wall Thickness: 0.9mm, Inside Diameter: 4.55mm, Purity: 99.2%, Temper: Annealed, Length: 100 mm to 1000 mm</td>
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<tr>
<td>ZR007510</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 9.52mm, Inside Diameter: 6.32mm, Purity: 99.2%, Temper: Annealed, Length: 188 mm</td>
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<tr>
<td>ZR007620</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 12.7mm, Wall Thickness: 1.6mm, Inside Diameter: 9.5mm, Purity: 99.2%, Temper: Annealed, Length: 100 mm to 1000 mm</td>
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<tr>
<td>ZR007600</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Diameter: 12.7mm, Wall Thickness: 0.9mm, Inside Diameter: 10.9mm, Purity: 99.2%, Temper: Annealed, Length: 214 mm</td>
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### Crucible

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<th>Diameter</th>
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<th>Temper</th>
<th>Condition</th>
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<tbody>
<tr>
<td>ZR006065</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Shape: Cylindrical, Outside Diameter: 21mm, Inside Diameter: 19mm, Height: 19mm, Capacity: 5ml, Quantity: 1 pcs</td>
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<tr>
<td>ZR006110</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Shape: Cylindrical, Outside Diameter: 27mm, Inside Diameter: 25mm, Height: 22mm, Capacity: 10ml, Quantity: 1 pcs</td>
</tr>
<tr>
<td>ZR006155</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Shape: Cylindrical, Outside Diameter: 33mm, Inside Diameter: 31mm, Height: 22mm, Capacity: 15ml, Quantity: 1 pcs</td>
</tr>
<tr>
<td>ZR006220</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Shape: Cylindrical, Outside Diameter: 33mm, Inside Diameter: 31mm, Height: 29mm, Capacity: 20ml, Quantity: 1 pcs</td>
</tr>
<tr>
<td>ZR006255</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Shape: Cylindrical, Outside Diameter: 47mm, Inside Diameter: 45mm, Height: 22mm, Capacity: 25ml, Quantity: 1 pcs</td>
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<tr>
<td>ZR006335</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Shape: Cylindrical, Outside Diameter: 47mm, Inside Diameter: 45mm, Height: 29mm, Capacity: 35ml, Quantity: 1 pcs</td>
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<tr>
<td>ZR006455</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Shape: Cylindrical, Outside Diameter: 47mm, Inside Diameter: 45mm, Height: 34mm, Capacity: 45ml, Quantity: 1 pcs</td>
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<tr>
<td>ZR006555</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Shape: Cylindrical, Outside Diameter: 47mm, Inside Diameter: 45mm, Height: 41mm, Capacity: 55ml, Quantity: 1 pcs</td>
</tr>
<tr>
<td>ZR006755</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Shape: Cylindrical, Outside Diameter: 51mm, Inside Diameter: 49mm, Height: 41mm, Capacity: 75ml, Quantity: 1 pcs</td>
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<tr>
<td>ZR006805</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Shape: Cylindrical, Outside Diameter: 59mm, Inside Diameter: 57mm, Height: 45mm, Capacity: 100ml, Quantity: 1 pcs</td>
</tr>
<tr>
<td>ZR006885</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Shape: Cylindrical, Outside Diameter: 83mm, Inside Diameter: 81mm, Height: 57mm, Capacity: 250ml, Quantity: 1 pcs</td>
</tr>
<tr>
<td>ZR006900</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Shape: Cylindrical, Outside Diameter: 104mm, Inside Diameter: 102mm, Height: 63mm, Capacity: 500ml, Quantity: 1 pcs</td>
</tr>
<tr>
<td>ZR006995</td>
<td>99.2%</td>
<td>Tempered</td>
<td>Shape: Cylindrical, Outside Diameter: 127mm, Inside Diameter: 125mm, Height: 89mm, Capacity: 1000ml, Quantity: 1 pcs</td>
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</tbody>
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### Metals

<table>
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<tr>
<th>Item Code</th>
<th>Description</th>
<th>Shape</th>
<th>Outside Diameter</th>
<th>Inside Diameter</th>
<th>Height</th>
<th>Capacity</th>
<th>Quantity</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZR008698</td>
<td>Powder</td>
<td>Cylindrical</td>
<td>152mm</td>
<td>150mm</td>
<td>99mm</td>
<td>1500ml</td>
<td>1 pcs</td>
<td></td>
</tr>
<tr>
<td>ZR006015</td>
<td>Powder</td>
<td>Max. Particle size: 45micron, Purity: 99.2%, Condition: In aqueous suspension (min 30% water)</td>
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<tr>
<td>ZR006150</td>
<td>Lump</td>
<td>Max. Lump size: 4mm, Purity: 99.2%, Condition: Pellets - nominally 3mm diameter x 3mm length, Condition: Hafnium &gt; 0.2%</td>
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<tr>
<td>ZR006151</td>
<td>Lump</td>
<td>Max. Lump size: 8mm, Purity: 99.2%, Condition: Pellets - nominally 6.35mm diameter x 6.35mm length, Condition: Hafnium &gt; 0.2%</td>
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<tr>
<td>ZR006100</td>
<td>Lump</td>
<td>Max. Lump size: 25mm, Purity: 99.2%, Condition: Sponge</td>
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</table>
## Alloys

<table>
<thead>
<tr>
<th>Alloys</th>
<th>Description</th>
<th>Code</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Silver/Gold (Ag70/Au30)</strong></td>
<td>Lump</td>
<td>AG096100</td>
<td>Max. Lump size: 4mm</td>
</tr>
<tr>
<td><strong>Silver/Palladium (Ag70/Pd30)</strong></td>
<td>Foil</td>
<td>AG200300</td>
<td>Thickness: 0.15mm, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
</tr>
<tr>
<td><strong>Silver/Copper (Ag72/Cu28)</strong></td>
<td>Tube</td>
<td>AG207200</td>
<td>Outside Diameter: 2.2mm, Wall Thickness: 0.1mm, Inside Diameter: 2.0mm, Length: 100 mm to 500 mm</td>
</tr>
<tr>
<td><strong>Silver/Copper (Ag72/Cu28)</strong></td>
<td>Foil</td>
<td>AG060220</td>
<td>Thickness: 0.05mm, Coil width 100 mm, Size: 50x50 mm to 100x100 mm</td>
</tr>
<tr>
<td><strong>Silver/Copper (Ag72/Cu28)</strong></td>
<td>Foil</td>
<td>AG060250</td>
<td>Thickness: 0.25mm, Coil width 100 mm, Size: 50x50 mm to 100x100 mm</td>
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<tr>
<td><strong>Silver/Copper (Ag72/Cu28)</strong></td>
<td>Foil</td>
<td>AG060400</td>
<td>Thickness: 2.0mm, Size: 50x50 mm to 100x100 mm</td>
</tr>
<tr>
<td><strong>Silver/Copper (Ag85/Cu15)</strong></td>
<td>Wire</td>
<td>AG065120</td>
<td>Diameter: 0.25mm, Temper: As drawn</td>
</tr>
<tr>
<td><strong>Silver/Copper (Ag92.5/Cu 7.5)</strong></td>
<td>Wire</td>
<td>AA080210</td>
<td>Thickness: 0.007mm, Coil width: 0.1mm, Temper: As rolled, Length: 0.5 m to 10 m</td>
</tr>
<tr>
<td><strong>Silver/Copper (Ag92.5/Cu 7.5)</strong></td>
<td>Wire</td>
<td>AA150360</td>
<td>Thickness: 0.5mm, Temper: As rolled, Size: 25x25 mm to 150x150 mm</td>
</tr>
<tr>
<td><strong>Silver/Zirconium/Copper (Ag97/Zr 2/Cu 1)</strong></td>
<td>Powder</td>
<td>AA146010</td>
<td>Max. Particle size: 45micron, Condition: Atomized</td>
</tr>
<tr>
<td><strong>Silver/Antimony (Ag99/Sb 1)</strong></td>
<td>Wire</td>
<td>AA065150</td>
<td>Diameter: 0.5mm, Temper: As drawn</td>
</tr>
<tr>
<td><strong>Aluminum alloy EN AC 42100 (Al 91.7/Si 7/Mg 0.3)</strong></td>
<td>Foam</td>
<td>AB283821</td>
<td>Thickness: 20mm, Bulk density: 0.133g.cm⁻³, Pores/cm³: 4, Size: 200x200 mm</td>
</tr>
<tr>
<td><strong>Silver/Copper (Ag97/Zr 2/Cu 1)</strong></td>
<td>Powder</td>
<td>AG066015</td>
<td>Max. Particle size: 45micron</td>
</tr>
<tr>
<td><strong>Aluminum/Silicon (Al75/Si25)</strong></td>
<td>Powder</td>
<td>AL146010</td>
<td>Max. Particle size: 150micron, Condition: Alloy Pre-cursor</td>
</tr>
<tr>
<td><strong>Aluminum/Silicon (Al88/Si12)</strong></td>
<td>Foil</td>
<td>AL130700</td>
<td>Thickness: 1.0mm, Size: 50x50 mm to 150x150 mm</td>
</tr>
<tr>
<td><strong>Aluminum/Silicon (Al88/Si12)</strong></td>
<td>Wire</td>
<td>AL135040</td>
<td>Diameter: 0.4mm, Temper: As drawn</td>
</tr>
<tr>
<td><strong>Aluminum/Silicon (Al88/Si12)</strong></td>
<td>Rod</td>
<td>AL137910</td>
<td>Diameter: 10mm, Condition: Extruded, Length: 100 mm to 1000 mm</td>
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<tr>
<td><strong>Aluminium alloy EN 576 (Al 99.7)</strong></td>
<td>Foam</td>
<td>AX203821</td>
<td>Thickness: 20mm, Bulk density: 0.135g.cm⁻³, Pores/cm³: 4, Size: 220x220 mm</td>
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<tr>
<td><strong>Aluminum/Iron (Al50/Fe50)</strong></td>
<td>Powder</td>
<td>AL116010</td>
<td>Max. Particle size: 150micron, Purity: 99.999%, Condition: Alloy Pre-cursor</td>
</tr>
<tr>
<td><strong>Aluminium/Silicon (Al65.7/Si34.3)</strong></td>
<td>Powder</td>
<td>AL156010</td>
<td>Max. Particle size: 150micron, Condition: Alloy Pre-cursor</td>
</tr>
<tr>
<td><strong>Aluminum/Silicon (Al75/Si25)</strong></td>
<td>Powder</td>
<td>AL146010</td>
<td>Max. Particle size: 150micron, Condition: Alloy Pre-cursor</td>
</tr>
<tr>
<td><strong>Aluminum/Titanium (Al75/Ti25 (Atomic %))</strong></td>
<td>Lump</td>
<td>AD036100</td>
<td>Max. Lump size: 100mm</td>
</tr>
<tr>
<td><strong>Aluminum/Titanium (Al75/Ti25 (Atomic %))</strong></td>
<td>Wire</td>
<td>AL135040</td>
<td>Diameter: 0.4mm, Temper: As drawn</td>
</tr>
<tr>
<td><strong>Aluminum/Titanium (Al75/Ti25 (Atomic %))</strong></td>
<td>Rod</td>
<td>AL137910</td>
<td>Diameter: 10mm, Condition: Extruded, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td><strong>Aluminum/Nickel (Al50/Ni50)</strong></td>
<td>Powder</td>
<td>AL106020</td>
<td>Max. Particle size: 150micron, Purity: 99.999%, Condition: Alloy Pre-cursor</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Powder</th>
<th>AL136011 Max. Particle size: 150 micron, Condition: Atomized</th>
<th>AL136010 Max. Particle size: 150 micron, Condition: Alloy Pre-cursor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum/Silicon (Al90/Si10)</td>
<td>Sputtering Target</td>
<td>AL129050 Thickness: 5mm, Size: 62 mm</td>
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<tr>
<td>Aluminum alloy 7075</td>
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<tr>
<td>(Al90/Zn 5.5/Mg 2.5/Cu 1.5/Si 0.5)</td>
<td>Foil</td>
<td>AL200300 Thickness: 0.4mm, Temper: T6, Size: 150x150 mm to 300x300 mm</td>
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<td>AL200400 Thickness: 1.0mm, Temper: T6, Size: 150x150 mm to 300x300 mm</td>
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<tr>
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<td>AL200500 Thickness: 2.5mm, Temper: T6, Size: 100x100 mm to 300x300 mm</td>
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<tr>
<td>Aluminum alloy 2014</td>
<td></td>
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</tr>
<tr>
<td>(Al92/Cu 8/Mn 1/Si 1/Fe 0.5/Mg)</td>
<td>Foil</td>
<td>AB100550 Thickness: 1.50mm, Size: 150x150 mm to 300x300 mm</td>
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<td>AB100560 Thickness: 2.65mm, Size: 150x150 mm to 300x300 mm</td>
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<tr>
<td>Aluminum alloy 2011</td>
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</tr>
<tr>
<td>(Al93/Cu 5.3/Fe 0.7/Si 0.4/Pb 0.3/B)</td>
<td>Rod</td>
<td>AD200500 Diameter: 22.2mm, Length: 100 mm to 1000 mm</td>
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<tr>
<td>Aluminum alloy 2024</td>
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</tr>
<tr>
<td>(Al93.5/Cu 4.5/Mg 1.5/Mn 0.5)</td>
<td>Foil</td>
<td>AB200550 Thickness: 1.6mm, Temper: T3, Cladding: Aluminum, Size: 150x150 mm to 300x300 mm</td>
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<tr>
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<td>AB200400 Thickness: 2.5mm, Temper: T3, Cladding: Aluminum, Size: 150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AB200450 Thickness: 3.0mm, Temper: T3, Cladding: Aluminum, Size: 150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aluminum/Copper (Al94/Cu 6)</td>
<td>Foil</td>
<td>AD200500 Diameter: 22.2mm, Condition: Solution treated, Length: 92 mm to 500 mm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aluminum alloy 2319</td>
<td>Wire</td>
<td>AX155160 Diameter: 1.2mm</td>
</tr>
<tr>
<td>(Al94/Cu 6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aluminum/Nickel (Al94.3/Ni 5.7)</td>
<td>Rod</td>
<td>AD097920 Diameter: 8mm, Temper: As drawn, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td></td>
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<tr>
<td>Aluminum alloy 5056</td>
<td>Wire</td>
<td>AJ05120 Diameter: 0.05mm, Temper: Hard</td>
</tr>
<tr>
<td>(Al94.65/Mg 5/Mn 0.35)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dural® - Aluminum/Copper/</td>
<td>Tube</td>
<td>AL047105 Outside Diameter: 0.53mm, Wall Thickness: 0.051mm, Inside Diameter: 0.428mm, Temper: As drawn, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>Magnesium (Al95/Cu 4/Mg 1)</td>
<td></td>
<td>AL047110 Outside Diameter: 0.81mm, Wall Thickness: 0.051mm, Inside Diameter: 0.708mm, Temper: As drawn, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td>Aluminum alloy 5019</td>
<td>Wire</td>
<td>AB200500 Diameter: 0.05mm, Temper: Hard</td>
</tr>
<tr>
<td>(Al95/Mg 4.5/Mn 0.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aluminum alloy 5083</td>
<td>Wire</td>
<td>AB200500 Diameter: 0.05mm, Temper: Hard</td>
</tr>
<tr>
<td>(Al95/Mg 4.5/Mn 0.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aluminum/Magnesium (Al92.1/Mg 7.9)</td>
<td>Tube</td>
<td>AL197250 Outside Diameter: 24mm, Wall Thickness: 1mm, Inside Diameter: 22mm, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td>Aluminum alloy 2011</td>
<td>Wire</td>
<td>AB040390 Diameter: 1.0mm, Size: 150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td>(Al93/Cu 5.3/Fe 0.7/Si 0.4/Pb 0.3/B)</td>
<td>Foil</td>
<td>AB040400 Diameter: 1.2mm, Size: 150x150 mm to 300x300 mm</td>
</tr>
<tr>
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</tr>
<tr>
<td>Aluminum alloy 2024</td>
<td>Wire</td>
<td>AB200500 Diameter: 0.05mm, Temper: Hard</td>
</tr>
<tr>
<td>(Al93.5/Cu 4.5/Mg 1.5/Mn 0.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aluminum/Magnesium (Al95/Li 2.5/Cu 1.5/Mg 1)</td>
<td>Tube</td>
<td>AL197250 Outside Diameter: 6.35mm, Wall Thickness: 1mm, Inside Diameter: 6.35mm, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aluminum/Copper (Al94/Cu 6)</td>
<td>Wire</td>
<td>AL05130 Diameter: 0.4mm, Temper: Annealed</td>
</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>
### Alloys

**Aluminum/Silicon (Al96/Si 4)**

**Powder**

AB036010 Max. Particle size: 150 micron

**Aluminum/Magnesium/Manganese/Chromium**

(AI96.45/Mg 2.6/Mn 0.8/Cr 0.15)

**Tube**

AL067150 Outside Diameter: 2.1mm, Wall Thickness: 0.25mm, Inside Diameter: 1.6mm, Temp: As drawn, Length: 100 mm to 435 mm

**Aluminum alloy 5754 (AI97/Mg 3)**

**Foil**

AB180300 Thickness: 1mm, Temp: Annealed, Size: 150x150 mm to 600x600 mm

AB180350 Thickness: 2mm, Temp: Annealed, Size: 150x150 mm to 600x600 mm

**Foil**

AL010202 Thickness: 0.002mm, Size: 50x50 mm to 50x100 mm

AL010210 Thickness: 0.01mm, Coil width 220 mm, Size: 100x100 mm to 220x300 mm

AL010220 Thickness: 0.0125mm, Temp: As rolled, Coil width 220 mm, Size: 220x300 mm

AL010225 Thickness: 0.015mm, Temp: As rolled, Coil width 200 mm, Size: 25x25 mm to 200x200 mm

AL010230 Thickness: 0.03mm, Temp: As rolled, Coil width 200 mm, Size: 25x25 mm to 200x200 mm

AL010235 Thickness: 0.06mm, Temp: As rolled, Coil width 200 mm, Size: 25x25 mm to 200x200 mm

AL010240 Thickness: 0.1mm, Temp: As rolled, Coil width 150 mm, Size: 26x26 mm to 190x150 mm

AL010250 Thickness: 0.2mm, Temp: As rolled, Coil width 150 mm, Size: 25x25 mm to 190x150 mm

AL010260 Thickness: 0.25mm, Temp: As rolled, Coil width 150 mm, Size: 25x25 mm to 150x150 mm

AL010270 Thickness: 0.50mm, Temp: As rolled, Size: 25x25 mm to 150x150 mm

**Rod**

AL017920 Diameter: 20mm, Length: 100 mm to 1000 mm

**Rod**

AL017940 Diameter: 9.5mm, Condition: Extruded, Length: 100 mm to 1000 mm

**Aluminum alloy 6082**

(AI97.4/Si 1/Mg 0.9/Mn 0.7)

**Foil**

AL220300 Thickness: 1.0mm, Temp: T6, Size: 150x150 mm to 300x300 mm

**Foil**

AL227100 Thickness: 2mm, Temp: T6, Size: 150x150 mm to 300x300 mm

**Foil**

AL220350 Thickness: 0.5mm, Temp: H32, Size: 100x100 mm to 300x300 mm

**Wire**

AL215140 Diameter: 0.4mm, Temp: As drawn

AL215150 Diameter: 0.5mm, Temp: Annealed

**Aluminum/Silicon/Magnesium/Manganese**

(AI97.5/Si 1.0/Mg 0.8/Mn 0.7)

**Rod**

AL047940 Diameter: 9.5mm, Condition: Extruded, Length: 100 mm to 1000 mm

**Aluminum alloy 5251**

(AI97.7/Mg 2/Mn 0.3)

**Foil**

AL230750 Thickness: 1.5mm, Size: 50x50 mm to 300x300 mm

AL230751 Thickness: 1.5mm, Condition: Mirror polished on both sides, Size: 50x50 mm to 500x500 mm

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February 2017
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<tr>
<th>Alloys — Aluminum/Copper</th>
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</thead>
<tbody>
<tr>
<td><strong>Aluminum/Copper (Al98/Cu 2)</strong></td>
</tr>
<tr>
<td><strong>Lump</strong></td>
</tr>
<tr>
<td>AD156100 Max. Lump size: 6mm</td>
</tr>
<tr>
<td><strong>Aluminium alloy 6061 (Al98/Mg 1/Si 0.6)</strong></td>
</tr>
<tr>
<td><strong>Foil</strong></td>
</tr>
<tr>
<td>AB190300 Thickness: 1.0mm, Temper: Annealed, Size: 150x150 mm to 600x600 mm</td>
</tr>
<tr>
<td>AB190302 Thickness: 1.0mm, Temper: T6, Size: 150x150 mm to 600x600 mm</td>
</tr>
<tr>
<td>AB190350 Thickness: 2.0mm, Temper: Annealed, Size: 150x150 mm to 600x600 mm</td>
</tr>
<tr>
<td>AB190352 Thickness: 2.0mm, Temper: T6, Size: 150x150 mm to 600x600 mm</td>
</tr>
<tr>
<td>AB190400 Thickness: 3.0mm, Temper: T6, Size: 150x150 mm to 600x600 mm</td>
</tr>
<tr>
<td><strong>Aluminum/Magnesium/Silicon (Al98/Mg 1/Si 0.6)</strong></td>
</tr>
<tr>
<td><strong>Foil</strong></td>
</tr>
<tr>
<td>AL030200 Thickness: 0.03mm, Temper: As rolled, Size: 25x25 mm</td>
</tr>
<tr>
<td><strong>Wire</strong></td>
</tr>
<tr>
<td>AL035120 Diameter: 0.025mm, Temper: As drawn</td>
</tr>
<tr>
<td>AL035130 Diameter: 0.05mm, Temper: As drawn</td>
</tr>
<tr>
<td>AL035140 Diameter: 0.125mm, Temper: As drawn</td>
</tr>
<tr>
<td>AL035150 Diameter: 0.25mm, Temper: As drawn</td>
</tr>
<tr>
<td>AL035160 Diameter: 0.5mm, Temper: As drawn</td>
</tr>
<tr>
<td>AL035170 Diameter: 1.0mm, Temper: As drawn</td>
</tr>
<tr>
<td><strong>Aluminum/Magnesium/Silicon (Al98/Mg 1/Si 1)</strong></td>
</tr>
<tr>
<td><strong>Foil</strong></td>
</tr>
<tr>
<td>AL080330 Thickness: 0.7mm, Temper: Annealed, Size: 50x50 mm to 300x300 mm</td>
</tr>
<tr>
<td><strong>Tube</strong></td>
</tr>
<tr>
<td>AL087100 Outside Diameter: 6.35mm, Wall Thickness: 0.71mm, Inside Diameter: 4.93mm, Temper: Hard, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>AL087300 Outside Diameter: 12.7mm, Wall Thickness: 1.22mm, Inside Diameter: 10.26mm, Temper: Hard, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>AL087500 Outside Diameter: 25.4mm, Wall Thickness: 3.25mm, Inside Diameter: 18.9mm, Temper: Hard, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td><strong>Aluminum alloy 3003 (Al98/Mn 1/Fe 0.5/Si 0.5)</strong></td>
</tr>
<tr>
<td><strong>Honeycomb</strong></td>
</tr>
<tr>
<td>AB112500 Thickness: 20mm, Cell size: 6.35mm, Cell Wall: 0.0635mm, Core Density: 0.052g.cm⁻³, Condition: Non-perforated, Size: 300x300 mm to 600x600 mm</td>
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<tr>
<td>AB112600 Thickness: 20mm, Cell size: 12.7mm, Cell Wall: 0.07mm, Core Density: 0.037g.cm⁻³, Condition: Non-perforated, Size: 300x300 mm to 600x600 mm</td>
</tr>
<tr>
<td><strong>AB112800</strong></td>
</tr>
<tr>
<td><strong>Thickness:</strong> 100mm, Cell size: 6.35mm, Cell Wall: 0.0381mm, Core Density: 0.019g.cm⁻³, Condition: Non-perforated, Size: 300x300 mm to 600x600 mm</td>
</tr>
<tr>
<td><strong>Aluminum/Manganese (Al98/Mn 2 (Atomic %))</strong></td>
</tr>
<tr>
<td><strong>Lump</strong></td>
</tr>
<tr>
<td>AJ186100 Max. Lump size: 10mm</td>
</tr>
<tr>
<td><strong>Aluminum/Silicon (Al98/Si 2)</strong></td>
</tr>
<tr>
<td><strong>Powder</strong></td>
</tr>
<tr>
<td>AL166010 Max. Particle size: 150 micron, Condition: Alloy Pre-cursor</td>
</tr>
<tr>
<td><strong>Aluminum/Nickel (Al98.5/Ni 1.5)</strong></td>
</tr>
<tr>
<td><strong>Rod</strong></td>
</tr>
<tr>
<td>AL297920 Diameter: 8mm, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>AL297930 Diameter: 12.7mm, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>AL297940 Diameter: 14mm, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td><strong>Aluminum/Cobalt (Al99/Co 1 (Atomic %))</strong></td>
</tr>
<tr>
<td><strong>Wire</strong></td>
</tr>
<tr>
<td>AB235120 Diameter: 0.5mm</td>
</tr>
<tr>
<td><strong>Aluminum/Magnesium/Silicon (Al99/Mg 0.5/Si 0.5)</strong></td>
</tr>
<tr>
<td><strong>Wire</strong></td>
</tr>
<tr>
<td>AL185150 Diameter: 0.25mm, Temper: As drawn</td>
</tr>
<tr>
<td><strong>Rod</strong></td>
</tr>
<tr>
<td>AL187910 Diameter: 5.0mm, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td><strong>Aluminum/Silicon (Al99/Si 1)</strong></td>
</tr>
<tr>
<td><strong>Foil</strong></td>
</tr>
<tr>
<td>AL050600 Thickness: 0.075mm, Temper: As rolled, Size: 25x25 mm to 150x150 mm</td>
</tr>
<tr>
<td>AL050650 Thickness: 0.125mm, Temper: As rolled, Size: 25x25 mm to 150x150 mm</td>
</tr>
<tr>
<td>AL050350 Thickness: 0.25mm, Temper: As rolled, Size: 50x50 mm to 150x150 mm</td>
</tr>
<tr>
<td>AL050200 Thickness: 0.5mm, Temper: As rolled, Size: 50x50 mm to 150x150 mm</td>
</tr>
<tr>
<td><strong>Sputtering Target</strong></td>
</tr>
<tr>
<td>AL059300 Thickness: 0.125mm, Temper: Hard</td>
</tr>
<tr>
<td>AL059500 Thickness: 0.25mm, Temper: Hard</td>
</tr>
<tr>
<td>AL059700 Thickness: 0.5mm, Temper: Hard</td>
</tr>
</tbody>
</table>

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125 Hookstown Grade Road, Coraopolis, PA 15108-9302. USA
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Fax 1-800-283-2820
<table>
<thead>
<tr>
<th>Alloys — Aluminum/Manganese</th>
</tr>
</thead>
</table>

| AL055150 | Diameter: 0.25mm, Temper: Hard |
| AL055160 | Diameter: 0.5mm, Temper: Hard |
| AL055170 | Diameter: 1mm, Temper: Hard |
| AL057930 | Diameter: 3mm, High Purity: 99.998%, Length: 12 mm |
| AL057935 | Diameter: 5mm, Bulk density: 2.7g.cm⁻³, Length: 100 mm to 1000 mm |
| AL057960 | Diameter: 18mm, Temper: As drawn, Length: 100 mm to 500 mm |

**Aluminum/Manganese (Al99.35/Mn 0.65)**

- **Lump**
  - AD086100 Max. Lump size: 6mm, Condition: Granular

**Aluminum/Cobalt (Al99.5/Co 0.5)**

- **Wire**
  - AD195160 Diameter: 1.0mm, Temper: As drawn

**Aluminum/Manganese (Al99.7/Mn 0.3)**

- **Lump**
  - AD066100 Max. Lump size: 6mm, Condition: Granular

**Aluminum/Cobalt (Al99.9/Co 0.1)**

- **Wire**
  - AD205140 Diameter: 0.25mm, Temper: As drawn
  - AD205160 Diameter: 1.0mm, Temper: As drawn

**Gold/Silver (Au50/Ag50 (Atomic %))**

- **Rod**
  - AU217910 Diameter: 3.0mm, Temper: As drawn, Length: 10 mm to 25 mm

**Gold/Palladium (Au75/Pd25)**

- **Foil**
  - AU010300 Thickness: 0.2mm, Temper: As rolled, Size: 25x25 mm to 100x100 mm
  - **Tube**
  - AU017200 Outside Diameter: 3.0mm, Wall Thickness: 0.15mm, Inside Diameter: 2.7mm, Temper: As drawn, Length: 25 mm to 100 mm

**Gold/Palladium (Au80/Pd20)**

- **Sputtering Target**
  - AU189100 Thickness: 0.10mm, Tolerance: 15%, Size: 50 mm to 57 mm
  - AU189110 Thickness: 0.20mm, Tolerance: 15%, Size: 50 mm to 57 mm

**Gold/Tin (Au80/Sn20)**

- **Foil**
  - AU060220 Thickness: 0.025mm, Temper: As rolled, Size: 20x20 mm to 25x25 mm

**Gold/Nickel (Au82/Ni18)**

- **Nioro®**
  - **Foil**
  - AU050220 Thickness: 0.05mm, Temper: As rolled, Size: 25x25 mm to 50x50 mm
  - AU050250 Thickness: 0.25mm, Temper: As rolled, Size: 25x25 mm to 50x50 mm

**Gold/Germanium Eutectic (Au88/Ge12)**

- **Foil**
  - AU040250 Thickness: 0.025mm, Coil width: 1mm, Length: 0.2 m to 5 m
  - AU040260 Thickness: 0.025mm, Size: 25x25 mm to 50x100 mm

**Gold/Palladium (Au93/Pd 7)**

- **Wire**
  - AC015140 Diameter: 0.5mm, Temper: As drawn

**Gold/Tin (Au98/Sn 2)**

- **Wire**
  - AU085150 Diameter: 0.5mm

**Gold/Antimony (Au99/Sb 1)**

- **Wire**
  - AU145140 Diameter: 0.50mm, Temper: Annealed
  - AU145150 Diameter: 1.0mm, Temper: Annealed
# Alloys

## Gold/Germanium (Au99.5/Ge 0.5)
- **Wire**
  - AE035160 Diameter: 1.0mm

## Gold/Iron (Au99.93/Fe 0.07 (Atomic %))
- **Wire**
  - AU075125 Diameter: 0.025mm, Temper: Annealed
  - AU075150 Diameter: 0.050mm, Temper: Annealed

## Insulated Wire
- **AU075840**
  - Conductor diameter: 0.1mm, Insulation thickness: 0.01mm, Insulation: PTFE (Polytetrafluoroethylene)

## Woods Metal (Bi50/Pb25/Cd12.5/Sn12.5)
- **Lump**
  - BI026100 Max. Lump size: 100mm

## Roses Metal (Bi50/Pb28/Sn22)
- **Lump**
  - BI036100 Max. Lump size: 100mm

## Bismuth/Lead (Bi55.5/Pb44.5)
- **Lump**
  - BI076100 Max. Lump size: 100mm

## Bismuth/Indium/Tin (Bi57/In26/Sn17)
- **Lump**
  - BI166100 Max. Lump size: 100mm

## Bismuth/Antimony (Bi90/Sb10)
- **Lump**
  - BI196100 Max. Lump size: 6mm

## Cobalt/Chromium/Iron/Nickel/Molybdenum/Manganese (Co40/Cr20/Fe15/Ni15/Mo 7/Mn 2/C/Be)
- **Foil**
  - CO102040 Thickness: 0.10mm, Temper: Half hard, Coil width 65 mm, Size: 25x25 mm to 50x50 mm
- **Wire**
  - CO125140 Diameter: 0.25mm, Temper: Hard
  - CO125150 Diameter: 0.5mm, Temper: Hard
  - CO125160 Diameter: 1.0mm, Temper: Hard

## Havar® - High-Strength Non-Magnetic Alloy (Co42.5/Cr20/Ni13/Fe/W/Mo/Mn)
- **Foil**
  - CO010210 Thickness: 0.004mm, Temper: As rolled, Size: 25x25 mm to 50x50 mm
  - CO010215 Thickness: 0.0045mm, Temper: As rolled, Size: 25x25 mm to 100x100 mm
  - CO010220 Thickness: 0.005mm, Temper: As rolled, Size: 25x25 mm to 50x50 mm
  - CO010230 Thickness: 0.01mm, Temper: As rolled, Coil width 100 mm, Size: 25x25 mm to 100x100 mm
  - CO010240 Thickness: 0.0125mm, Temper: As rolled, Coil width 150 mm, Size: 25x25 mm to 150x150 mm
  - CO010245 Thickness: 0.02mm, Temper: As rolled, Coil width 100 mm, Size: 25x25 mm to 100x100 mm
  - CO010250 Thickness: 0.025mm, Temper: As rolled, Coil width 150 mm, Size: 25x25 mm to 150x150 mm
  - CO010260 Thickness: 0.035mm, Temper: As rolled, Coil width 150 mm, Size: 25x25 mm to 150x150 mm
  - CO010270 Thickness: 0.05mm, Temper: As rolled, Coil width 150 mm, Size: 25x25 mm to 150x150 mm
  - CO010300 Thickness: 0.075mm, Temper: As rolled, Coil width 200 mm, Size: 25x25 mm to 150x150 mm
  - CO010400 Thickness: 0.2mm, Temper: As rolled, Coil width 100 mm, Size: 25x25 mm to 100x100 mm
  - CO010410 Thickness: 0.5mm, Temper: As rolled, Coil width 212 mm, Size: 25x25 mm to 100x100 mm

## Permendur 49 (Co49/Fe49/V 2)
- **Foil**
  - CO150240 Thickness: 0.1mm, Temper: As rolled, Coil width 305 mm, Size: 25x25 mm to 300x300 mm
- **Sheet**
  - CO153025 Thickness: 0.25mm, Temper: As rolled, Size: 50x50 mm to 180x500 mm
  - CO153035 Thickness: 0.35mm, Temper: As rolled, Size: 60x100 mm to 195x200 mm
  - CO153050 Thickness: 0.50mm, Temper: As rolled, Size: 50x50 mm to 300x300 mm

## Rod
- **CO157912** Diameter: 12mm, Condition: Hot rolled (black), Length: 50 mm to 200 mm
- **CO157940** Diameter: 25.4mm, Condition: Hot rolled (black), Length: 50 mm to 100 mm
- **CO157945** Diameter: 37mm, Condition: Hot rolled (black), Length: 25 mm to 50 mm
- **CO157950** Diameter: 39mm, Condition: Hot rolled (black), Length: 88 mm
- **CO157960** Diameter: 61mm, Condition: Hot rolled (black), Length: 10 mm to 100 mm

## Cobalt/Chromium/Tungsten/Nickel/Iron/Manganese (Co50/Cr20/W 15/Ni10/Fe 3/Mn 2)
- **Foil**
  - CO10300 Thickness: 0.25mm, Coil width 300 mm, Size: 50x50 mm to 300x300 mm
<table>
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<tr>
<th>Alloys</th>
<th>Nickel Silver (Cu45/Zn43/Ni10/Pb2)</th>
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<td>Rod</td>
<td></td>
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<tr>
<td>CN01040</td>
<td></td>
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<tr>
<td>Rod</td>
<td></td>
</tr>
<tr>
<td>CN01792</td>
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<tr>
<td>Cobalt/Iron (Co50/Fe50 (Atomic %))</td>
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<tr>
<td>Cobalt/Tungsten (Co50/W 50)</td>
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<tr>
<td>Powder</td>
<td></td>
</tr>
<tr>
<td>CR156010 Max.Particle size: 150micron, Condition: Alloy Pre-cursor</td>
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</tr>
<tr>
<td>Cobalt/Titanium (Co94/Ti 6)</td>
<td></td>
</tr>
<tr>
<td>Powder</td>
<td></td>
</tr>
<tr>
<td>CR266010 Max. Particle size: 150micron, Condition: Alumized</td>
<td></td>
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<tr>
<td>Cobalt/Nickel (Cr50/Ni50)</td>
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<tr>
<td>Powder</td>
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</tr>
<tr>
<td>CR026010 Max. Particle size: 420micron</td>
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<tr>
<td>Chromium/Titanium (Cr70/Ti30)</td>
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<tr>
<td>Powder</td>
<td></td>
</tr>
<tr>
<td>CR016025 Max. Particle size: 300micron</td>
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<tr>
<td>Chromium/Aluminum (Cr80/Al20)</td>
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<tr>
<td>Powder</td>
<td></td>
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<tr>
<td>CR01040</td>
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<tr>
<td>Rod</td>
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<td>CN01792</td>
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</tr>
<tr>
<td>Cobalt/Iron (Co50/Fe50 (Atomic %))</td>
<td></td>
</tr>
<tr>
<td>Chromium/Aluminum (Cr70/Ti30)</td>
<td></td>
</tr>
<tr>
<td>Powder</td>
<td></td>
</tr>
<tr>
<td>CR156010 Max. Particle size: 150micron, Condition: Alloy Pre-cursor</td>
<td></td>
</tr>
<tr>
<td>Chromium/Aluminum (Cr80/Al20)</td>
<td></td>
</tr>
<tr>
<td>Powder</td>
<td></td>
</tr>
<tr>
<td>CR016025 Max. Particle size: 300micron</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Alloys — Cobalt/Iron</th>
<th>Nickel Silver (Cu45/Zn43/Ni10/Pb2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rod</td>
<td></td>
</tr>
<tr>
<td>CN01040</td>
<td></td>
</tr>
<tr>
<td>Rod</td>
<td></td>
</tr>
<tr>
<td>CN01792</td>
<td></td>
</tr>
<tr>
<td>Cobalt/Iron (Co50/Fe50 (Atomic %))</td>
<td></td>
</tr>
<tr>
<td>Cobalt/Tungsten (Co50/W 50)</td>
<td></td>
</tr>
<tr>
<td>Powder</td>
<td></td>
</tr>
<tr>
<td>CR156010 Max. Particle size: 150micron, Condition: Alloy Pre-cursor</td>
<td></td>
</tr>
<tr>
<td>Cobalt/Titanium (Co94/Ti 6)</td>
<td></td>
</tr>
<tr>
<td>Powder</td>
<td></td>
</tr>
<tr>
<td>CR266010 Max. Particle size: 150micron, Condition: Alumized</td>
<td></td>
</tr>
<tr>
<td>Cobalt/Nickel (Cr50/Ni50)</td>
<td></td>
</tr>
<tr>
<td>Powder</td>
<td></td>
</tr>
<tr>
<td>CR026010 Max. Particle size: 420micron</td>
<td></td>
</tr>
<tr>
<td>Chromium/Titanium (Cr70/Ti30)</td>
<td></td>
</tr>
<tr>
<td>Powder</td>
<td></td>
</tr>
<tr>
<td>CR016025 Max. Particle size: 300micron</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Alloys</th>
<th>Nickel Silver (Cu45/Zn43/Ni10/Pb2)</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
</tr>
<tr>
<td>Rod</td>
<td></td>
</tr>
<tr>
<td>CN01792</td>
<td></td>
</tr>
<tr>
<td>Cobalt/Iron (Co50/Fe50 (Atomic %))</td>
<td></td>
</tr>
<tr>
<td>Chromium/Aluminum (Cr70/Ti30)</td>
<td></td>
</tr>
<tr>
<td>Powder</td>
<td></td>
</tr>
<tr>
<td>CR026010 Max. Particle size: 420micron</td>
<td></td>
</tr>
<tr>
<td>Chromium/Aluminum (Cr80/Al20)</td>
<td></td>
</tr>
<tr>
<td>Powder</td>
<td></td>
</tr>
<tr>
<td>CR016025 Max. Particle size: 300micron</td>
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</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Alloys — Cobalt/Iron</th>
<th>Nickel Silver (Cu45/Zn43/Ni10/Pb2)</th>
</tr>
</thead>
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<td></td>
</tr>
<tr>
<td>Rod</td>
<td></td>
</tr>
<tr>
<td>CN01792</td>
<td></td>
</tr>
<tr>
<td>Cobalt/Iron (Co50/Fe50 (Atomic %))</td>
<td></td>
</tr>
<tr>
<td>Chromium/Aluminum (Cr70/Ti30)</td>
<td></td>
</tr>
<tr>
<td>Powder</td>
<td></td>
</tr>
<tr>
<td>CR026010 Max. Particle size: 420micron</td>
<td></td>
</tr>
<tr>
<td>Chromium/Aluminum (Cr80/Al20)</td>
<td></td>
</tr>
<tr>
<td>Powder</td>
<td></td>
</tr>
<tr>
<td>CR016025 Max. Particle size: 300micron</td>
<td></td>
</tr>
</tbody>
</table>
# Alloys

## Alloys — Copper/Titanium

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
<th>Condition</th>
<th>Wall Thickness</th>
<th>Inside Diameter</th>
<th>Temper</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU045150</td>
<td>0.5mm</td>
<td>Annealed</td>
<td>0.025mm, Insulation thickness: 0.009mm, Insulation: Polyurethane, Thermocouple wire. May be used as one component of a Thermocouple.</td>
<td>1.4mm, Inside Diameter: 1.16mm, Temper: As drawn, as Cold finished</td>
<td>100 mm to 1000 mm</td>
<td></td>
</tr>
<tr>
<td>CU045160</td>
<td>1.0mm</td>
<td>Annealed</td>
<td>0.025mm, Insulation thickness: 0.009mm, Insulation: Polyurethane, Thermocouple wire. May be used as one component of a Thermocouple.</td>
<td>1.7mm, Inside Diameter: 1.4mm, Temper: As drawn, as Cold finished</td>
<td>100 mm to 1000 mm</td>
<td></td>
</tr>
</tbody>
</table>

## Nickel Silver (Cu62/Ni18/Zn20)

<table>
<thead>
<tr>
<th>Code</th>
<th>Thickness</th>
<th>Condition</th>
<th>Wall Thickness</th>
<th>Inside Diameter</th>
<th>Temper</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU100400</td>
<td>0.30mm</td>
<td>Rolled, Size: 100x100 mm to 300x300 mm</td>
<td>0.06mm, Inside Diameter: 0.71mm, Temper: Hard, Length: 100 mm to 1000 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CU100450</td>
<td>0.60mm</td>
<td>Annealed, Size: 100x100 mm to 600x600 mm</td>
<td>0.06mm, Inside Diameter: 0.71mm, Temper: Hard, Length: 100 mm to 1000 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Insulated Wire

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
<th>Condition</th>
<th>Wall Thickness</th>
<th>Inside Diameter</th>
<th>Temper</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU045810</td>
<td>0.025mm</td>
<td>Annealed</td>
<td>0.025mm, Insulation thickness: 0.009mm, Insulation: Polyurethane, Thermocouple wire. May be used as one component of a Thermocouple.</td>
<td>1.4mm, Inside Diameter: 1.16mm, Temper: As drawn, as Cold finished</td>
<td>100 mm to 1000 mm</td>
<td></td>
</tr>
<tr>
<td>CU045820</td>
<td>0.05mm</td>
<td>Annealed</td>
<td>0.025mm, Insulation thickness: 0.009mm, Insulation: Polyurethane, Thermocouple wire. May be used as one component of a Thermocouple.</td>
<td>1.7mm, Inside Diameter: 1.4mm, Temper: As drawn, as Cold finished</td>
<td>100 mm to 1000 mm</td>
<td></td>
</tr>
</tbody>
</table>

## Tube

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
<th>Condition</th>
<th>Wall Thickness</th>
<th>Inside Diameter</th>
<th>Temper</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU107083</td>
<td>0.83mm</td>
<td>Annealed</td>
<td>0.06mm, Inside Diameter: 0.71mm, Temper: Hard, Length: 100 mm to 1000 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CU107100</td>
<td>0.91mm</td>
<td>Annealed</td>
<td>0.06mm, Inside Diameter: 0.71mm, Temper: Hard, Length: 100 mm to 1000 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CU107120</td>
<td>1.0mm</td>
<td>Annealed</td>
<td>0.06mm, Inside Diameter: 0.71mm, Temper: Hard, Length: 100 mm to 1000 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Rod

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
<th>Condition</th>
<th>Wall Thickness</th>
<th>Inside Diameter</th>
<th>Temper</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU047906</td>
<td>3.2mm</td>
<td>Annealed, Length: 100 mm to 1000 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CU047910</td>
<td>4.0mm</td>
<td>Annealed, Length: 100 mm to 1000 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CU047920</td>
<td>8mm</td>
<td>Annealed, Length: 100 mm to 1000 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CU047925</td>
<td>10mm</td>
<td>Annealed, Length: 100 mm to 1000 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CU047940</td>
<td>25.4mm</td>
<td>Condition: Cold finished, Length: 50 mm to 200 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Copper/Titanium (Cu56.4/Ti43.6)

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
<th>Condition</th>
<th>Wall Thickness</th>
<th>Inside Diameter</th>
<th>Temper</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU276010</td>
<td>45micron</td>
<td>Annealed, Length: 100 mm to 1000 mm</td>
<td></td>
<td></td>
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</table>

## Lead brass (Cu58/Zn39/Pb 3)

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
<th>Condition</th>
<th>Wall Thickness</th>
<th>Inside Diameter</th>
<th>Temper</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>CW147910</td>
<td>10.0mm</td>
<td>Annealed, Length: 100 mm to 1000 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CW147920</td>
<td>20.0mm</td>
<td>Annealed, Length: 100 mm to 1000 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Brass (Cu63/Zn37)

<table>
<thead>
<tr>
<th>Code</th>
<th>Thickness</th>
<th>Condition</th>
<th>Wall Thickness</th>
<th>Inside Diameter</th>
<th>Temper</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU020200</td>
<td>0.005mm</td>
<td>Annealed</td>
<td>0.005mm, Temper: As rolled, Coil width 100 mm, Size: 25x25 mm to 100x100 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Alloys

### Nickel Silver (Cu64/Ni12/Zn24)

**Foil**
- **CZ080300** Thickness: 0.125mm, Coil width 200 mm, Size: 25x25 mm to 200x200 mm

### Nickel Silver (18) (Cu65/Ni18/Zn17)

**Tube**
- **CZ057240** Outside Diameter: 1.6mm, Wall Thickness: 0.15mm, Inside Diameter: 1.3mm, Temper: Hard, Length: 100 mm to 1000 mm

---

### Wire

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
<th>Temper</th>
<th>Condition</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU020205</td>
<td>0.008mm</td>
<td>Hard</td>
<td></td>
<td>200 mm</td>
</tr>
<tr>
<td>CU020208</td>
<td>0.011mm</td>
<td>Hard</td>
<td></td>
<td>300 mm</td>
</tr>
<tr>
<td>CU020210</td>
<td>0.0125mm</td>
<td>Half hard</td>
<td></td>
<td>150 mm</td>
</tr>
<tr>
<td>CU020220</td>
<td>0.025mm</td>
<td>Hard</td>
<td></td>
<td>150 mm</td>
</tr>
<tr>
<td>CU020230</td>
<td>0.038mm</td>
<td>Hard</td>
<td></td>
<td>150 mm</td>
</tr>
<tr>
<td>CU020240</td>
<td>0.05mm</td>
<td>Half hard</td>
<td></td>
<td>150 mm</td>
</tr>
<tr>
<td>CU020250</td>
<td>0.075mm</td>
<td>Half hard</td>
<td></td>
<td>165 mm</td>
</tr>
<tr>
<td>CU020260</td>
<td>0.1mm</td>
<td>Hard</td>
<td></td>
<td>150 mm</td>
</tr>
<tr>
<td>CU020261</td>
<td>0.1mm</td>
<td>Hard, Condition</td>
<td>Flattened</td>
<td>300 mm</td>
</tr>
<tr>
<td>CU020270</td>
<td>0.125mm</td>
<td>Half hard</td>
<td></td>
<td>150 mm</td>
</tr>
<tr>
<td>CU020276</td>
<td>0.125mm</td>
<td>Half hard</td>
<td></td>
<td>300 mm</td>
</tr>
<tr>
<td>CU020280</td>
<td>0.15mm</td>
<td>Half hard</td>
<td></td>
<td>150 mm</td>
</tr>
<tr>
<td>CU020290</td>
<td>0.15mm</td>
<td>Hard</td>
<td></td>
<td>25 mm</td>
</tr>
<tr>
<td>CU020291</td>
<td>0.15mm</td>
<td>Hard</td>
<td></td>
<td>300 mm</td>
</tr>
<tr>
<td>CU020300</td>
<td>0.25mm</td>
<td>Half hard</td>
<td></td>
<td>150 mm</td>
</tr>
<tr>
<td>CU020301</td>
<td>0.25mm</td>
<td>Half hard</td>
<td></td>
<td>300 mm</td>
</tr>
<tr>
<td>CU020375</td>
<td>0.38mm</td>
<td>Half hard</td>
<td></td>
<td>150 mm</td>
</tr>
<tr>
<td>CU020400</td>
<td>0.5mm</td>
<td>Half hard</td>
<td></td>
<td>300 mm</td>
</tr>
<tr>
<td>CU020450</td>
<td>1.0mm</td>
<td>Half hard</td>
<td></td>
<td>50x50 mm</td>
</tr>
<tr>
<td>CU020500</td>
<td>1.42mm</td>
<td>Half hard</td>
<td></td>
<td>25 mm</td>
</tr>
<tr>
<td>CU020600</td>
<td>2.0mm</td>
<td>Half hard</td>
<td></td>
<td>50x50 mm</td>
</tr>
<tr>
<td>CU020620</td>
<td>3.0mm</td>
<td>Half hard</td>
<td></td>
<td>75x75 mm</td>
</tr>
<tr>
<td>CU020630</td>
<td>4.0mm</td>
<td>Size: 50x50 mm</td>
<td></td>
<td>200x410 mm</td>
</tr>
<tr>
<td>CU020650</td>
<td>6.0mm</td>
<td>Size: 75x75 mm</td>
<td></td>
<td>300 mm</td>
</tr>
</tbody>
</table>

**Outside Diameter:**
- 25x25 mm to 200x200 mm

**Side Length:**
- 12.7mm, Size: 100 mm to 1000 mm

**Wall Thickness:**
- 0.089mm, Side Diameter: 1.3mm, Temper: Hard, Length: 100 mm to 900 mm

---

### Tube

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
<th>Temper</th>
<th>Condition</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU027920</td>
<td>5.0mm</td>
<td>As drawn</td>
<td></td>
<td>100 mm</td>
</tr>
<tr>
<td>CU027930</td>
<td>10.0mm</td>
<td>Annealed</td>
<td></td>
<td>100 mm</td>
</tr>
</tbody>
</table>

**Outside Diameter:**
- 150 mm, Size: 25x25 mm to 150x150 mm

**Side Length:**
- 200 mm, Size: 25x25 mm to 200x200 mm

---

### Rod

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
<th>Temper</th>
<th>Condition</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU027910</td>
<td>2.0mm</td>
<td>As drawn</td>
<td></td>
<td>100 mm</td>
</tr>
<tr>
<td>CU027916</td>
<td>3.3mm</td>
<td>As drawn</td>
<td></td>
<td>100 mm</td>
</tr>
</tbody>
</table>

**Outside Diameter:**
- 200 mm, Size: 25x25 mm to 200x200 mm

**Side Length:**
- 200 mm, Size: 25x25 mm to 200x200 mm

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Please visit [www.goodfellow.com](http://www.goodfellow.com) or [www.goodfellowusa.com](http://www.goodfellowusa.com) for latest prices.
## Alloys

### Copper/Silver (Cu70/Ag30)
- **Rod**
  - CU197920 Diameter: 15mm, Temper: As drawn, Length: 50 mm to 200 mm

### Copper/Iron (Cu70/Fe30)
- **Powder**
  - CU036010 Max. Particle size: 150micron, Condition: Alloy Pre-cursor

### Copper/Nickel (Cu70/Ni30)
- **Foil**
  - CU130240 Thickness: 0.016mm, Coil width 192 mm, Size: 95x95 mm to 190x190 mm
- **Rod**
  - CU137920 Diameter: 12.7mm, Temper: As drawn, Length: 100 mm to 1000 mm
- **Tube**
  - CU137150 Outside Diameter: 0.4mm, Wall Thickness: 0.15mm, Inside Diameter: 0.1mm, Temper: Hard, Length: 100 mm to 1000 mm

### Copper/Titanium (Cu70/Ti30)
- **Powder**
  - CU266010 Max. Particle size: 45micron, Condition: Alloy Pre-cursor

### Brass (Cu70/Zn30)
- **Foil**
  - CU085510 Diameter: 0.025mm, Temper: As drawn
  - CU085520 Diameter: 0.05mm, Temper: As drawn
  - CU085300 Diameter: 0.6mm, Temper: As drawn
- **Tube**
  - CU087300 Outside Diameter: 3.56mm, Wall Thickness: 0.41mm, Inside Diameter: 2.74mm, Temper: As drawn, Length: 100 mm to 1000 mm
  - **Powder**
    - CU086011 Max. Particle size: 100micron, Condition: Atomized

### Copper/Lead (Cu80/Pb20)
- **Powder**
  - CU156010 Max. Particle size: 150micron, Condition: Alloy Pre-cursor

### Copper/Tin (Cu80/Sn20)
- **Powder**
  - CU226020 Max. Particle size: 53micron

### Copper/Silicon (Cu85/Si15)
- **Powder**
  - CU176011 Max. Particle size: 150micron

### Gilding Metal (Cu85/Zn15)
- **Wire**
  - CU115100 Diameter: 0.061mm, Temper: As drawn
  - CU115200 Diameter: 0.711mm, Temper: As drawn

### Manganin® - Resistance Alloy (Cu86/Mn12/Ni 2)
- **Foil**
  - CU060200 Thickness: 0.005mm, Size: 25x25 mm to 50x50 mm
  - CU060210 Thickness: 0.015mm, Temper: As rolled, Coil width 190 mm, Size: 190x300 mm
  - CU060220 Thickness: 0.02mm, Temper: As rolled, Coil width 200 mm, Size: 200x300 mm
  - CU060230 Thickness: 0.025mm, Temper: Annealed, Coil width 150 mm, Size: 25x25 mm to 150x150 mm
  - CU060240 Thickness: 0.04mm, Temper: Annealed, Coil width 200 mm, Size: 25x25 mm to 200x300 mm
  - CU060500 Thickness: 0.5mm, Temper: Annealed, Size: 50x50 mm to 300x1000 mm
  - CU060510 Thickness: 0.635mm, Coil width: 100mm, Temper: Annealed, Length: 0.1 m to 2 m
  - CU060550 Thickness: 1.0mm, Coil width: 50x50 mm to 300x1000 mm
### Alloys

<table>
<thead>
<tr>
<th>Description</th>
<th>Material Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Copper/Silver (Cu90/Ag10)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Rod</strong></td>
<td>CY277920 Diameter: 15mm, Temper: As drawn, Length: 50 mm to 200 mm</td>
</tr>
<tr>
<td><strong>Powder</strong></td>
<td>CU256011 Max. Particle size: 45micron, Condition: Atomized</td>
</tr>
<tr>
<td><strong>Phosphor Bronze (Cu92/Sn 8)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Wire</strong></td>
<td>CW165010 Diameter: 0.132mm, Temper: Annealed</td>
</tr>
<tr>
<td><strong>Phosphor Bronze (Cu94/Sn 6)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Foil</strong></td>
<td>CU050200 Thickness: 0.005mm, Temper: As rolled, Coil width 115 mm, Size: 25x25 mm to 115x150 mm</td>
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<tr>
<td><strong>Alloys — Copper/Zirconium</strong></td>
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<tr>
<td><strong>Copper/Zirconium (Cu87/Zr13)</strong></td>
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<tr>
<td><strong>Powder</strong></td>
<td>CU246010 Max. Particle size: 45micron, Condition: Alloy Pre-cursor</td>
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<tr>
<td><strong>Bronze (Cu89/Sn11)</strong></td>
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<tr>
<td><strong>Powder</strong></td>
<td>CU096010 Max. Particle size: 150micron, Condition: Atomized</td>
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<tr>
<td><strong>Insulated Wire</strong></td>
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<tr>
<td><strong>CU065805</strong></td>
<td>Conductor diameter: 0.030mm, Insulation thickness: 0.004mm, Insulation: Polyimide</td>
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<tr>
<td><strong>CU065810</strong></td>
<td>Conductor diameter: 0.055mm, Insulation thickness: 0.004mm, Insulation: Polyimide</td>
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<tr>
<td><strong>CU065815</strong></td>
<td>Conductor diameter: 0.125mm, Insulation thickness: 0.004mm, Insulation: Polyimide</td>
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<tr>
<td><strong>CU065820</strong></td>
<td>Conductor diameter: 0.125mm, Insulation thickness: 0.005mm, Insulation: Polyimide</td>
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<td><strong>CU065821</strong></td>
<td>Conductor diameter: 0.125mm, Insulation thickness: 0.01mm, Insulation: Polyimide</td>
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<tr>
<td><strong>CU065822</strong></td>
<td>Conductor diameter: 0.125mm, Insulation thickness: 0.015mm, Insulation: Polyimide</td>
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<tr>
<td><strong>CU065823</strong></td>
<td>Conductor diameter: 0.125mm, Insulation thickness: 0.02mm, Insulation: Polyimide</td>
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<tr>
<td><strong>Copper/Titanium (Cu90/Ti10)</strong></td>
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<tr>
<td><strong>Powder</strong></td>
<td>CU0605805 Max. Particle size: 50micron, Condition: Atomized</td>
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<tr>
<td><strong>CU0605810</strong></td>
<td>Max. Particle size: 420micron, Min. Particle size: 180micron</td>
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<tr>
<td><strong>Copper/Silver (Cu90/Ag10)</strong></td>
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<tr>
<td><strong>Wire</strong></td>
<td>CU0658055 Max. Particle size: 50micron, Condition: Atomized</td>
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<tr>
<td><strong>CU065810</strong></td>
<td>Max. Particle size: 420micron, Min. Particle size: 180micron</td>
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<th>Alloys — Copper/Silver</th>
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<td><strong>Insulated Wire</strong></td>
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<tr>
<td>CU055170 Diameter: 1.0mm, Temper: As drawn</td>
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<tr>
<td>CU055810 Conductor diameter: 0.025mm, Insulation thickness: 0.0025mm, Insulation: Polyimide</td>
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<tr>
<td>CU055830 Conductor diameter: 0.125mm, Insulation thickness: 0.01mm, Insulation: Polyimide</td>
</tr>
<tr>
<td>CU055840 Conductor diameter: 0.25mm, Insulation thickness: 0.018mm, Insulation: Polyimide</td>
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<tr>
<td><strong>Rod</strong></td>
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<tr>
<td>CU057910 Diameter: 12.7mm, Length: 100 mm to 1000 mm</td>
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<tr>
<td>CU057920 Diameter: 25.4mm, Length: 100 mm to 1000 mm</td>
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<tr>
<td>CU057940 Diameter: 50.8mm, Length: 100 mm to 500 mm</td>
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<tr>
<td><strong>Copper/Silver (Cu95/Ag 5)</strong></td>
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<tr>
<td>CY137920 Diameter: 15mm, Temper: As drawn, Length: 50 mm to 200 mm</td>
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<tr>
<td><strong>Copper/Gold (Cu95/Au 5)</strong></td>
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<tr>
<td>CV286100 Max. Lump size: 10mm</td>
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<tr>
<td><strong>Phosphor Bronze (Cu95/Sn 5)</strong></td>
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<tr>
<td>CW050225 Thickness: 0.025mm, Coil width: 0.2mm, Temper: As rolled, Length: 50 m</td>
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<tr>
<td><strong>Copper/Cobalt/Beryllium (Cu97/Co 2.5/Be 0.5)</strong></td>
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<tr>
<td>CY267910 Diameter: 6mm, Length: 100 mm to 1000 mm</td>
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<tr>
<td>CY267940 Diameter: 25mm, Length: 100 mm to 1000 mm</td>
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<tr>
<td>CY267945 Diameter: 28mm, Length: 100 mm to 1000 mm</td>
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<tr>
<td><strong>Copper/Silver (Cu98/Ag 2)</strong></td>
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<tr>
<td>CU186010 Max. Particle size: 45micron, Condition: Alloy Pre-cursor</td>
</tr>
<tr>
<td><strong>Copper/Beryllium (Cu98/Be 2)</strong></td>
</tr>
<tr>
<td>Brush 190*, Mallory*, Beryco*</td>
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<tr>
<td>CW070200 Thickness: 0.004mm, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
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<tr>
<td>CW070225 Thickness: 0.005mm, Temper: As rolled, Coil width 100 mm, Size: 25x25 mm to 100x100 mm</td>
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<tr>
<td>CW070230 Thickness: 0.0065mm, Temper: As rolled, Coil width 90 mm, Size: 90x150 mm</td>
</tr>
<tr>
<td>CW070250 Thickness: 0.0076mm, Temper: As rolled, Coil width 90 mm, Size: 90x150 mm</td>
</tr>
<tr>
<td>CW070260 Thickness: 0.01mm, Temper: As rolled, Coil width 220 mm, Size: 220x300 mm</td>
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<tr>
<td>CW070270 Thickness: 0.02mm, Temper: Half hard, Coil width 220 mm, Size: 25x25 mm to 200x200 mm</td>
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<tr>
<td>CW070275 Thickness: 0.02mm, Temper: As rolled, Coil width 200 mm, Size: 25x25 mm to 200x300 mm</td>
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<tr>
<td>CU070280 Thickness: 0.025mm, Temper: As rolled, Coil width 150 mm, Size: 25x25 mm to 150x150 mm</td>
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<tr>
<td>CU070301 Thickness: 0.05mm, Temper: Quarter hard, Coil width 190 mm, Size: 60x60 mm to 190x200 mm</td>
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<tr>
<td>CU070300 Thickness: 0.05mm, Temper: Half hard, Coil width 292 mm, Size: 25x25 mm to 150x150 mm</td>
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<tr>
<td>CU070330 Thickness: 0.075mm, Temper: Half hard, Coil width 150 mm, Size: 25x25 mm to 150x150 mm</td>
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<tr>
<td>CU070342 Thickness: 0.1mm, Coil width: 10mm, Temper: Half hard, Length: 0.5 m</td>
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<tr>
<td>CU070340 Thickness: 0.1mm, Temper: Half hard, Coil width 305 mm, Size: 25x25 mm to 300x300 mm</td>
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<tr>
<td>CU070350 Thickness: 0.125mm, Temper: Half hard, Coil width 305 mm, Size: 25x25 mm to 300x300 mm</td>
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<tr>
<td>CU070361 Thickness: 0.15mm, Coil width: 3mm, Temper: Half hard, Length: 0.5 m to 10 m</td>
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<tr>
<td>CU070360 Thickness: 0.15mm, Temper: Half hard, Coil width 305 mm, Size: 25x25 mm to 300x300 mm</td>
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<tr>
<td>CU070380 Thickness: 0.2mm, Temper: Annealed, Coil width 216 mm, Size: 25x25 mm to 150x150 mm</td>
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<tr>
<td>CU070381 Thickness: 0.2mm, Temper: Half hard, Coil width 305 mm, Size: 25x25 mm to 300x300 mm</td>
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<tr>
<td>CU070451 Thickness: 0.25mm, Temper: Half hard, Coil width 300 mm, Size: 25x25 mm to 300x300 mm</td>
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<tr>
<td>CU070450 Thickness: 0.25mm, Temper: Annealed, Size: 25x25 mm to 150x150 mm</td>
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<tr>
<td>CU070475 Thickness: 0.38mm, Temper: Annealed, Coil width 178 mm, Size: 25x25 mm to 178x178 mm</td>
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<tr>
<td>CU070500 Thickness: 0.45mm, Temper: Annealed, Size: 25x25 mm to 50x50 mm</td>
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<tr>
<td>CU070501 Thickness: 0.5mm, Temper: Half hard, Coil width 300 mm, Size: 25x25 mm to 300x300 mm</td>
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<tr>
<td>CU070525 Thickness: 0.75mm, Temper: Half hard, Coil width 305 mm, Size: 25x25 mm to 300x300 mm</td>
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<tr>
<td>CU070550 Thickness: 1.0mm, Temper: Annealed, Coil width 215 mm, Size: 25x25 mm to 200x200 mm</td>
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<tr>
<td>CU070600 Thickness: 3.0mm, Temper: Annealed, Coil width 215 mm, Size: 50x50 mm to 200x200 mm</td>
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<tr>
<td>CU070601 Thickness: 3.0mm, Temper: 1/4 Hard, Coil width 180 mm, Size: 90x90 mm to 180x180 mm</td>
</tr>
<tr>
<td>CU070650 Thickness: 6.35mm, Temper: Hard, Size: 50x50 mm to 100x100 mm</td>
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</tbody>
</table>

**Wire**

| CU075110 Diameter: 0.025mm, Temper: Hard |
| CU075111 Diameter: 0.030mm, Temper: Hard |
| CU075113 Diameter: 0.035mm, Temper: Hard |
| CU075115 Diameter: 0.05mm, Temper: Hard |
| CU075118 Diameter: 0.075mm, Temper: Hard |
| CU075119 Diameter: 0.1mm, Temper: Hard |
| CU075120 Diameter: 0.125mm, Temper: Hard |
| CU075131 Diameter: 0.25mm, Condition: Straight wire, Temper: Hard |
| CU075130 Diameter: 0.25mm, Temper: Hard |
| CU075132 Diameter: 0.30mm, Temper: Annealed |
| CU075320 Diameter: 0.5mm, Condition: Straight wire, Temper: Hard |
| CU075140 Diameter: 0.5mm, Temper: Hard |
| CU075340 Diameter: 1.0mm, Condition: Straight wire, Temper: Hard |
| CU075150 Diameter: 1.0mm, Temper: Hard |

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## Alloys

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<tr>
<th>Alloy Type</th>
<th>Description</th>
<th>Diameter</th>
<th>Condition</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Insulated Wire</strong></td>
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<tr>
<td>CU075160</td>
<td>Diameter: 1.63mm, Temper: Hard</td>
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<tr>
<td>CU075820</td>
<td>Conductor diameter: 0.025mm, Insulation thickness: 0.004mm, Insulation: Polyimide, Temper: Hard</td>
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<tr>
<td>CU075830</td>
<td>Conductor diameter: 0.075mm, Insulation thickness: 0.008mm, Insulation: Polyimide, Temper: Hard</td>
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<td>CU075835</td>
<td>Conductor diameter: 0.1mm, Insulation thickness: 0.01mm, Insulation: Polyimide, Temper: Hard</td>
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<tr>
<td><strong>Rod</strong></td>
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<tr>
<td>CU077903</td>
<td>Diameter: 1.8mm, Temper: Half hard, Condition: Centerless ground, Length: 100 mm to 1000 mm</td>
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<td>CU077905</td>
<td>Diameter: 2.0mm, Temper: Half hard, Length: 100 mm to 1000 mm</td>
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<td>CU077910</td>
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<td>CU077915</td>
<td>Diameter: 4.0mm, Temper: Hard, Length: 100 mm to 1000 mm</td>
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<tr>
<td>CU077920</td>
<td>Diameter: 4.8mm, Temper: Hard, Length: 100 mm to 1000 mm</td>
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<td>CU077925</td>
<td>Diameter: 6.35mm, Temper: Hard, Length: 100 mm to 1000 mm</td>
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<td>CU077930</td>
<td>Diameter: 9.5mm, Temper: As drawn, Length: 100 mm to 1000 mm</td>
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<td>CU077940</td>
<td>Diameter: 12.7mm, Temper: Hard, Length: 100 mm to 1000 mm</td>
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<td>CU077950</td>
<td>Diameter: 20mm, Temper: Hard, Length: 50 mm to 500 mm</td>
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<td>CU077955</td>
<td>Diameter: 25mm, Temper: Hard, Length: 50 mm to 200 mm</td>
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<td>CU077960</td>
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<tr>
<td>CU077980</td>
<td>Diameter: 50.8mm, Temper: Hard, Length: 25 mm to 100 mm</td>
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<tr>
<td><strong>Copper/Chromium/Zirconium (Cu98.9/Cr 1.0/Zr 0.1)</strong></td>
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<tr>
<td><strong>Rod</strong></td>
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<tr>
<td>CY257910</td>
<td>Diameter: 10mm, Length: 100 mm to 1000 mm</td>
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<tr>
<td>CY257925</td>
<td>Diameter: 25mm, Length: 100 mm to 1000 mm</td>
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<tr>
<td><strong>Copper/Tellurium (Cu99.5/Te 0.5)</strong></td>
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<tr>
<td><strong>Rod</strong></td>
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<tr>
<td>CY247905</td>
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<tr>
<td>CY247925</td>
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<tr>
<td><strong>Tinned Copper (CuSn)</strong></td>
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<tr>
<td><strong>Foil</strong></td>
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<tr>
<td>CU200225</td>
<td>Thickness: 0.025mm, Coil width: 0.72mm, Temper: Annealed, Condition: Sn60/Pb40 coated, Length: 1 m</td>
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<tr>
<td>CU200250</td>
<td>Thickness: 0.05mm, Coil width: 15mm, Temper: Annealed, Condition: Sn60/Pb40 coated, Length: 0.5 m to 20 m</td>
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<tr>
<td>CU200300</td>
<td>Thickness: 0.20mm, Coil width: 5mm, Temper: Annealed, Condition: Sn62/Pb36/Ag2 coated, Length: 0.5 m to 20 m</td>
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<tr>
<td><strong>Sheet</strong></td>
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<tr>
<td>FE042300</td>
<td>Thickness: 3.2mm, Temper: Annealed, Size: 100x100 mm to 300x300 mm</td>
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<th>Material</th>
<th>Description</th>
<th>Dimensions</th>
<th>Temper</th>
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### Alloys

#### Iron/Nickel (Fe61/Ni39)
- **Foil**
  - FK120275 Thickness: 0.25mm, Coil width 200 mm, Size: 50x50 mm to 200x200 mm

#### Iron/Nickel/Cobalt (Fe63/Ni32/Co 5)
- **Rod**
  - FK177910 Diameter: 10mm, Temper: As drawn, Length: 100 mm to 500 mm

#### Iron/Molybdenum (Fe64/Mo36)
- **Lump**
  - FK136100 Max. Lump size: 50 mm, Condition: Nominal 100g ingots

#### Invar® - Controlled Expansion Alloy (Fe64/Ni36)
- Invar 36®, Nilo® alloy 36, Nilvar, NS 36, Permalloy D®, Radio metal 36®, Vacodi 36®
  - **Foil**
    - FE020210 Thickness: 0.008mm, Size: 50x50 mm to 100x100 mm
    - FE020215 Thickness: 0.0125mm, Coil width 200 mm, Size: 25x25 mm to 150x150 mm
    - FE020220 Thickness: 0.02mm, Temper: As rolled, Coil width 200 mm, Size: 25x25 mm to 200x200 mm
    - FE020225 Thickness: 0.025mm, Coil width 200 mm, Size: 25x25 mm to 200x200 mm
    - FE020300 Thickness: 0.03mm, Temper: Hard, Coil width 200 mm, Size: 25x25 mm to 200x200 mm
    - FE020240 Thickness: 0.05mm, Temper: Annealed, Coil width 200 mm, Size: 25x25 mm to 200x200 mm
    - FE020245 Thickness: 0.08mm, Temper: Annealed, Coil width 200 mm, Size: 25x25 mm to 200x200 mm
    - FE020260 Thickness: 0.1mm, Temper: Annealed, Size: 25x25 mm to 100x100 mm
    - FE020265 Thickness: 0.125mm, Temper: Half hard, Coil width 152.4 mm, Size: 25x25 mm to 150x150 mm
    - FE020268 Thickness: 0.18mm, Temper: Hard, Coil width 200 mm, Size: 25x25 mm to 200x200 mm
    - FE020277 Thickness: 0.25mm, Coil width 50mm, Temper: Annealed, Length: 0.5 m to 10 m
    - FE020276 Thickness: 0.25mm, Temper: Annealed, Condition: Flattened, Size: 40x100 mm to 150x300 mm
    - FE020275 Thickness: 0.25mm, Temper: Annealed, Coil width 200 mm, Size: 25x25 mm to 200x200 mm
    - FE020350 Thickness: 0.5mm, Temper: Annealed, Size: 25x25 mm to 200x200 mm
    - FE020351 Thickness: 0.5mm, Temper: Annealed, Size: 300x300 mm to 600x900 mm
    - FE020375 Thickness: 0.75mm, Temper: Annealed, Size: 50x50 mm to 300x300 mm
    - FE020400 Thickness: 1.0mm, Temper: Annealed, Size: 50x50 mm to 300x300 mm
    - FE020450 Thickness: 1.5mm, Temper: Annealed, Size: 50x50 mm to 300x300 mm

#### Sheet
- FE023120 Thickness: 2.5mm, Temper: Annealed, Size: 100x100 mm to 150x150 mm

#### Wire
- FE025010 Diameter: 0.01mm, Temper: Annealed
- FE025100 Diameter: 0.05mm, Temper: Annealed
- FE025120 Diameter: 0.12mm, Temper: Annealed
- FE025250 Diameter: 0.25mm, Temper: Annealed
- FE025350 Diameter: 0.5mm, Temper: Annealed
- FE025360 Diameter: 0.6mm, Temper: Annealed
- FE025401 Diameter: 1mm, Temper: Annealed, Condition: Straight wire
- FE025402 Diameter: 1mm, Temper: Hard
- FE025400 Diameter: 1mm, Temper: Annealed
- FE025450 Diameter: 1.5mm, Temper: Annealed

#### Rod
- FE027902 Diameter: 1.6mm, Length: 100 mm to 1000 mm
- FE027903 Diameter: 2.0mm, Length: 100 mm to 1000 mm
- FE027904 Diameter: 3.0mm, Length: 349 mm
- FE027905 Diameter: 3.2mm, Length: 100 mm to 1000 mm
- FE027909 Diameter: 6.0mm, Length: 100 mm to 1000 mm
- FE027910 Diameter: 6.35mm, Length: 100 mm to 800 mm
- FE027920 Diameter: 10.0mm, Length: 100 mm to 1000 mm
- FE027925 Diameter: 12.7mm, Length: 100 mm to 1000 mm
- FE027930 Diameter: 16mm, Length: 100 mm to 500 mm
- FE027935 Diameter: 19mm, Length: 100 mm to 500 mm
- FE027940 Diameter: 21mm, Length: 100 mm to 500 mm
- FE027950 Diameter: 25mm, Length: 100 mm to 500 mm
- FE027953 Diameter: 30.0mm, Length: 310 mm
- FE027955 Diameter: 38.1mm, Length: 68 mm to 100 mm
- FE027956 Diameter: 40mm, Length: 50 mm to 200 mm
- FE027960 Diameter: 50mm, Length: 100 mm to 1000 mm
- FE027970 Diameter: 63mm, Length: 50 mm to 1000 mm
- FE027980 Diameter: 75mm, Length: 50 mm to 200 mm
- FE027990 Diameter: 100mm, Length: 50 mm to 200 mm
- FE027995 Diameter: 110mm, Length: 128 mm

#### Tube
- FE027200 Outside Diameter: 2.2mm, Wall Thickness: 0.16mm, Inside Diameter: 1.88mm, Length: 100 mm to 1000 mm
- FE027500 Outside Diameter: 5.0mm, Wall Thickness: 1.0mm, Inside Diameter: 3mm, Temper: Annealed, Length: 200 mm

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<table>
<thead>
<tr>
<th>Alloys — Aluchrom O</th>
<th>Resistance Alloy (Fe70/Cr25/Al 5)</th>
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<tbody>
<tr>
<td>Powder</td>
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<td>FE026001</td>
<td>Max. Particle size: 45micron, Condition: Atomized</td>
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<tr>
<td>FE026010</td>
<td>Max. Particle size: 150micron, Condition: Alloy Pre-cursor</td>
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**Aluchrom O** - Resistance Alloy (Fe70/Cr25/Al 5)

**Wire**
- FE085100 Diameter: 0.125mm, Temper: Annealed
- FE085120 Diameter: 0.25mm, Temper: Annealed
- FE085130 Diameter: 0.5mm, Temper: Annealed
- FE085140 Diameter: 0.914mm, Temper: Annealed
- FE085150 Diameter: 1.6mm, Temper: Annealed

**Fecralloy** - Iron/Chromium (Fe72.8/Cr22/Al 5/Y 0.1/Zr 0.1)

**Foil**
- FE080205 Thickness: 0.01mm, Temper: As rolled, Coil width 167 mm, Size: 40x40 mm to 160x160 mm
- FE080210 Thickness: 0.020mm, Temper: As rolled, Coil width 167 mm, Size: 80x80 mm to 160x160 mm
- FE080240 Thickness: 0.05mm, Coil width: 54mm, Temper: As rolled, Length: 1 m to 20 m
- FE080252 Thickness: 0.05mm, Temper: Annealed, Coil width 180 mm, Size: 90x90 mm to 180x180 mm
- FE080251 Thickness: 0.05mm, Temper: As rolled, Coil width 250 mm, Size: 50x50 mm to 250x250 mm
- FE080262 Thickness: 0.1mm, Coil width: 20mm, Temper: As rolled, Length: 0.5 m to 10 m
- FE080260 Thickness: 0.1mm, Coil width: 68mm, Temper: Annealed, Length: 0.5 m to 10 m
- FE080261 Thickness: 0.1mm, Temper: Annealed, Coil width 175 mm, Size: 85x85 mm to 175x175 mm
- FE080270 Thickness: 0.2mm, Temper: Annealed, Coil width 145 mm, Size: 70x70 mm to 140x140 mm
- FE080280 Thickness: 0.3mm, Temper: Annealed, Coil width 195 mm, Size: 50x100 mm to 50x200 mm
- FE080500 Thickness: 0.5mm, Temper: As rolled, Size: 100x100 mm to 200x1000 mm
- FE080600 Thickness: 1.0mm, Temper: As rolled, Size: 50x50 mm to 200x500 mm
- FE080750 Thickness: 2.0mm, Temper: As rolled, Size: 50x50 mm to 200x500 mm

**Sheet**
- FE083150 Thickness: 3mm, Temper: As rolled, Size: 100x100 mm to 100x200 mm
- FE083200 Thickness: 5mm, Temper: As rolled, Size: 100x100 mm to 200x200 mm
- FE083201 Thickness: 5mm, Temper: As rolled, Size: 207x500 mm to 207x1000 mm
- FE083280 Thickness: 20mm, Temper: As rolled, Size: 100x100 mm

**Foam**
- FE083810 Thickness: 6.35mm, Bulk density: 0.36g.cm⁻³, Pores/cm: 4, Size: 150x150 mm

**Rod**
- FE087902 Diameter: 1.8mm, Length: 100 mm to 1000 mm
- FE087905 Diameter: 3.2mm, Length: 100 mm to 1000 mm
- FE087920 Diameter: 12mm, Length: 100 mm to 1000 mm
- FE087925 Diameter: 16mm, Length: 100 mm to 1000 mm
- FE087930 Diameter: 20mm, Length: 100 mm to 500 mm
- FE087940 Diameter: 25.4mm, Condition: Hot rolled (black), Temper: Annealed, Condition: Diameter is nominal, Length: 100 mm to 500 mm
- FE087943 Diameter: 32mm, Condition: Hot rolled (black), Temper: Annealed, Length: 85 mm to 95 mm
- FE087946 Diameter: 36mm, Condition: Ground, Length: 50 mm to 200 mm
- FE087945 Diameter: 38mm, Length: 50 mm to 200 mm
- FE087950 Diameter: 50mm, Condition: Ground, Length: 50 mm to 100 mm
- FE087951 Diameter: 50.8mm, Condition: Hot rolled (black), Length: 50 mm to 100 mm
- FE087975 Diameter: 67mm, Condition: Hot rolled (black), Length: 50 mm to 100 mm
- FE087980 Diameter: 75mm, Condition: Hot rolled (black), Length: 50 mm to 100 mm

**Tube**
- FE087250 Outside Diameter: 6.0mm, Wall Thickness: 0.4mm, Inside Diameter: 5.2mm, Length: 100 mm to 1000 mm
- FE087450 Outside Diameter: 12.7mm, Wall Thickness: 0.8mm, Inside Diameter: 11.1mm, Length: 50 mm to 500 mm
- FE087500 Outside Diameter: 15mm, Wall Thickness: 1.5mm, Inside Diameter: 12mm, Length: 50 mm to 500 mm

**Lump**
- FE086100 Max. Lump size: 50mm, Condition: Pellets

**Chromaloy O** - Resistance Alloy (Fe75/Cr20/Al 5)

**Wire**
- FA185125 Diameter: 0.25mm, Temper: Annealed
- FA185150 Diameter: 0.5mm, Temper: Annealed

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<table>
<thead>
<tr>
<th>Alloys — Iron/Copper/Aluminum</th>
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<tbody>
<tr>
<td>Iron/Copper/Aluminum (Fe81/Cr16/Al 3)</td>
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<td>Powder</td>
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<td>FE010200</td>
<td>Thickness: 0.003mm, Temper: As rolled, Size: 25x25 mm to 50x50 mm</td>
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<td>Mean Particle size: 10micron, Condition: Gas atomized, Condition: Spherical</td>
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<td>Silver Steel (Fe98/C 1.1/Mn 0.3/Si 0.2)</td>
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<td>Rod</td>
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<td>Stainless Steel - 15-7PH (Fe/Cr15/Ni 7/Co 2.25)</td>
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<td>Stainless Steel - AISI 301 (Fe/Cr17/Ni 7/Co 0.1max)</td>
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<td>Foil</td>
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<td>Stainless Steel - AISI 302 (Fe/Cr18/Ni 8)</td>
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<td>Foil</td>
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<td>Thickness: 0.0125mm, Temper: Hard, Size: 25x25 mm</td>
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</table>

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## Alloys

### Stainless Steel - AISI 303 (Fe/Cr18/Ni 9/Mn/Si)

#### Wire

- **FE205100** Diameter: 0.01mm, Temper: As drawn
- **FE205110** Diameter: 0.025mm, Temper: Hard
- **FE205111** Diameter: 0.025mm, Temper: Annealed
- **FE205116** Diameter: 0.05mm, Temper: Hard
- **FE205115** Diameter: 0.05mm, Temper: Annealed
- **FE205320** Diameter: 0.1mm, Condition: Straight wire, Temper: Hard
- **FE205118** Diameter: 0.1mm, Temper: Hard
- **FE205119** Diameter: 0.1mm, Temper: Annealed
- **FE205120** Diameter: 0.125mm, Temper: Hard
- **FE205130** Diameter: 0.25mm, Temper: Hard
- **FE205140** Diameter: 0.5mm, Temper: Hard
- **FE205350** Diameter: 0.6mm, Condition: Straight wire, Temper: Hard
- **FE205150** Diameter: 1.0mm, Temper: Hard

#### Insulated Wire

- **FE205811** Conductor diameter: 0.025mm, Insulation thickness: 0.002mm, Insulation: 2 micron Polyethylene
- **FE205850** Conductor diameter: 0.1mm, Insulation thickness: 0.01mm, Insulation: Epoxy

### Stainless Steel - AISI 304 (Fe/Cr18/Ni10)

#### Wire

- **FE220200** Thickness: 0.005mm, Temper: As rolled, Coil width 100 mm, Size: 25x25 mm to 100x100 mm
- **FE220130** Thickness: 0.006mm, Size: 25x25 mm to 50x50 mm
- **FE220207** Thickness: 0.007mm, Temper: As rolled, Coil width 100 mm, Size: 25x25 mm to 100x100 mm
- **FE220150** Thickness: 0.008mm, Size: 50x50 mm to 100x100 mm
- **FE220209** Thickness: 0.01mm, Temper: As rolled, Coil width 116 mm, Size: 100x100 mm
- **FE220170** Thickness: 0.01mm, Size: 100x100 mm
- **FE220210** Thickness: 0.0125mm, Temper: Hard, Coil width 300 mm, Size: 25x25 mm to 300x300 mm
- **FE220211** Thickness: 0.015mm, Temper: As rolled, Coil width 300 mm, Size: 300x300 mm
- **FE220215** Thickness: 0.02mm, Temper: As rolled, Coil width 200 mm, Size: 200x300 mm
- **FE220221** Thickness: 0.025mm, Temper: Hard, Coil width 300 mm, Size: 25x25 mm to 300x300 mm
- **FE220250** Thickness: 0.05mm, Temper: Hard, Coil width 305 mm, Size: 25x25 mm to 300x300 mm
- **FE220260** Thickness: 0.075mm, Temper: Hard, Coil width 300 mm, Size: 25x25 mm to 300x300 mm
- **FE220271** Thickness: 0.1mm, Temper: Hard, Coil width 305 mm, Size: 25x25 mm to 300x300 mm

#### Insulated Wire

- **FE220270** Thickness: 0.1mm, Temper: Annealed, Coil width 305 mm, Size: 25x25 mm to 300x300 mm
- **FE220280** Thickness: 0.125mm, Temper: Annealed, Coil width 300 mm, Size: 25x25 mm to 300x300 mm
- **FE220290** Thickness: 0.15mm, Temper: Hard, Coil width 300 mm, Size: 25x25 mm to 300x300 mm
- **FE220291** Thickness: 0.15mm, Temper: Annealed, Coil width 300 mm, Size: 25x25 mm to 300x300 mm
- **FE220320** Thickness: 0.2mm, Temper: Annealed, Coil width 305 mm, Size: 25x25 mm to 300x300 mm
- **FE220321** Thickness: 0.25mm, Temper: Hard, Coil width 300 mm, Size: 25x25 mm to 300x300 mm
- **FE220322** Thickness: 0.25mm, Temper: Annealed, Coil width 300 mm, Size: 25x25 mm to 300x300 mm
- **FE220326** Thickness: 0.40mm, Temper: Hard, Coil width 300 mm, Size: 25x25 mm to 300x300 mm
- **FE220324** Thickness: 0.5mm, Surface treatment: Titanium Nitride coating 2-3 microns, Size: 25x25 mm
- **FE220323** Thickness: 0.5mm, Temper: Annealed, Coil width 300 mm, Size: 25x25 mm to 300x300 mm
- **FE220330** Thickness: 0.7mm, Temper: Annealed, Size: 50x50 mm to 500x500 mm
- **FE220341** Thickness: 0.914mm, Surface treatment: Titanium Nitride coating 2-3 microns, Size: 25x25 mm to 100x100 mm
- **FE220340** Thickness: 0.914mm, Temper: Annealed, Size: 50x50 mm to 500x500 mm
- **FE220360** Thickness: 1.0mm, Temper: Annealed, Size: 25x26 mm to 50x50 mm
- **FE220375** Thickness: 1.5mm, Size: 100x100 mm to 300x300 mm
- **FE220380** Thickness: 2.0mm, Temper: Annealed, Size: 100x100 mm to 300x300 mm
- **FE220390** Thickness: 3.0mm, Temper: Annealed, Size: 100x100 mm to 500x500 mm

#### Mesh

- **FE228710** Nominal Aperture: 0.38mm, Thickness: 0.75mm, Wire diameter: 0.25mm, Wires/inch: 40x40, Open area: 37%, Type: Plain weave mesh, Size: 100x100 mm to 900x900 mm
- **FE228720** Nominal Aperture: 0.54mm, Thickness: 0.6mm, Wire diameter: 0.30mm, Wires/inch: 30x30, Open area: 37%, Type: Plain weave mesh, Size: 160x100 mm to 900x900 mm

#### Rod

- **FA117910** Diameter: 12mm, Length: 100 mm to 1000 mm
- **FE220201** Diameter: 2.00mm, Temper: As drawn, Length: 500 mm to 1000 mm
### Alloys

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### Tube

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<td>100 mm to 1000 mm</td>
</tr>
<tr>
<td>FE227130</td>
<td>0.5mm</td>
<td>0.06mm</td>
<td>0.38mm</td>
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<tr>
<td>FE227200</td>
<td>0.8mm</td>
<td>0.15mm</td>
<td>0.5mm</td>
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<td>100 mm to 1000 mm</td>
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<tr>
<td>FE227180</td>
<td>0.8mm</td>
<td>0.15mm</td>
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<tr>
<td>FE227185</td>
<td>0.85mm</td>
<td>0.393mm</td>
<td>0.605mm</td>
<td>Hard</td>
<td>230 mm</td>
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<tr>
<td>FE227201</td>
<td>0.9mm</td>
<td>0.15mm</td>
<td>0.6mm</td>
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<td>35 mm</td>
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<tr>
<td>FE227211</td>
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<td>0.19mm</td>
<td>0.57mm</td>
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<td>100 mm to 1000 mm</td>
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<tr>
<td>FE227250</td>
<td>1.1mm</td>
<td>0.2mm</td>
<td>0.7mm</td>
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<td>100 mm to 1000 mm</td>
</tr>
<tr>
<td>FE227251</td>
<td>1.1mm</td>
<td>0.2mm</td>
<td>0.7mm</td>
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<td>5 mm</td>
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<tr>
<td>FE227300</td>
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<td>0.185mm</td>
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<td>100 mm to 1000 mm</td>
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<tr>
<td>FE227320</td>
<td>1.59mm</td>
<td>0.5mm</td>
<td>0.59mm</td>
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<td>100 mm to 500 mm</td>
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### Stainless Steel - AISI 304L (Fe/Cr18/Ni10)

#### Foil

<table>
<thead>
<tr>
<th>Code</th>
<th>Thickness</th>
<th>Width</th>
<th>Size</th>
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<tbody>
<tr>
<td>FA140231</td>
<td>0.15mm</td>
<td>12mm</td>
<td>0.5 m to 10 m</td>
</tr>
<tr>
<td>FA140230</td>
<td>0.15mm</td>
<td>305mm</td>
<td>0.5 m to 10 m</td>
</tr>
<tr>
<td>FA140250</td>
<td>0.2mm</td>
<td>305mm</td>
<td>0.5 m to 10 m</td>
</tr>
<tr>
<td>FA140275</td>
<td>0.25mm</td>
<td>46mm</td>
<td>0.5 m to 10 m</td>
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<tr>
<td>FA140300</td>
<td>0.3mm</td>
<td>300mm</td>
<td>0.5 m to 10 m</td>
</tr>
<tr>
<td>FA140350</td>
<td>0.5mm</td>
<td>300mm</td>
<td>0.5 m to 10 m</td>
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#### Powder

<table>
<thead>
<tr>
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<th>Max. Particle size</th>
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<th>Size</th>
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<tbody>
<tr>
<td>FE226010</td>
<td>45micron</td>
<td>300mm</td>
<td>0.5 m to 10 m</td>
</tr>
<tr>
<td>FE226805</td>
<td>0.5mm</td>
<td>300mm</td>
<td>0.5 m to 10 m</td>
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#### Sphere

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
<th>Tolerance</th>
<th>Sphericity</th>
<th>Grade</th>
<th>Condition</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>FE226010</td>
<td>0.5mm</td>
<td>± 12.7μm</td>
<td>20μm</td>
<td>Precision Sphere</td>
<td>Grade 100</td>
<td>100x100 mm to 500x500 mm</td>
</tr>
</tbody>
</table>

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## Alloys

### Stainless Steel - AISI 310

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Thickness</th>
<th>Condition</th>
<th>Size</th>
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<th>Length</th>
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</thead>
<tbody>
<tr>
<td>FE240240</td>
<td>0.038mm</td>
<td>Annealed</td>
<td>300mm</td>
<td></td>
<td>25x25mm to 280x300mm</td>
</tr>
<tr>
<td>FE240241</td>
<td>0.043mm</td>
<td>Annealed</td>
<td>300mm</td>
<td></td>
<td>25x25mm to 300x300mm</td>
</tr>
<tr>
<td>FE240252</td>
<td>0.05mm</td>
<td>Annealed</td>
<td>50mm</td>
<td></td>
<td>0.5m to 10m</td>
</tr>
<tr>
<td>FE240250</td>
<td>0.05mm</td>
<td>Annealed</td>
<td>315mm</td>
<td></td>
<td>25x25mm to 300x300mm</td>
</tr>
<tr>
<td>FE240260</td>
<td>0.075mm</td>
<td>Annealed</td>
<td>300mm</td>
<td></td>
<td>25x25mm to 300x300mm</td>
</tr>
<tr>
<td>FE240261</td>
<td>0.1mm</td>
<td>Hard</td>
<td>200mm</td>
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<td>25x25mm to 200x200mm</td>
</tr>
<tr>
<td>FE240265</td>
<td>0.1mm</td>
<td>Annealed</td>
<td>300mm</td>
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<td>25x25mm to 300x300mm</td>
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<tr>
<td>FE240270</td>
<td>0.125mm</td>
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<td>300mm</td>
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<tr>
<td>FE240290</td>
<td>0.15mm</td>
<td>Annealed</td>
<td>300mm</td>
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<td>25x25mm to 300x300mm</td>
</tr>
<tr>
<td>FE240300</td>
<td>0.25mm</td>
<td>Annealed</td>
<td>300mm</td>
<td></td>
<td>25x25mm to 300x300mm</td>
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<tr>
<td>FE240312</td>
<td>0.5mm</td>
<td>Hard</td>
<td></td>
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### Stainless Steel - AISI 310 (Fe/Cr25/Ni20)

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<th>Condition</th>
<th>Size</th>
<th>Temper</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>FE247805</td>
<td>0.914mm</td>
<td>Annealed</td>
<td>300mm</td>
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<td>25x25mm to 300x300mm</td>
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### Stainless Steel - AISI 316 (Fe/Cr18/Ni10/Mo 3)

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<th>Thickness</th>
<th>Condition</th>
<th>Size</th>
<th>Temper</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>FE240201</td>
<td>0.005mm</td>
<td>As rolled</td>
<td>95mm</td>
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<td>0.025m to 0.2m</td>
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<tr>
<td>FE240200</td>
<td>0.0075mm</td>
<td>As rolled</td>
<td>25x25mm</td>
<td>100x100mm</td>
<td></td>
</tr>
<tr>
<td>FE240210</td>
<td>0.01mm</td>
<td>As rolled</td>
<td>200mm</td>
<td></td>
<td>25x25mm to 200x200mm</td>
</tr>
<tr>
<td>FE240220</td>
<td>0.0125mm</td>
<td>Hard</td>
<td>305mm</td>
<td></td>
<td>300x300mm</td>
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<tr>
<td>FE240236</td>
<td>0.025mm</td>
<td>Annealed</td>
<td>150mm</td>
<td></td>
<td>25x25mm to 150x150mm</td>
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</tbody>
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### Stainless Steel - AISI 316 (Fe/Cr18/Ni10/Mo 3)

<table>
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<tr>
<th>Part No.</th>
<th>Thickness</th>
<th>Condition</th>
<th>Size</th>
<th>Temper</th>
<th>Length</th>
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</thead>
<tbody>
<tr>
<td>FE240205</td>
<td>0.025mm</td>
<td>Annealed</td>
<td>150mm</td>
<td></td>
<td>25x25mm to 150x150mm</td>
</tr>
</tbody>
</table>

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February 2017
## Alloys

<table>
<thead>
<tr>
<th>Description</th>
<th>Diameter</th>
<th>Tolerance</th>
<th>Grade</th>
<th>Coating</th>
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<tbody>
<tr>
<td><strong>FE245320</strong></td>
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<td>± 0.003mm</td>
<td>Precision</td>
<td>Annealed, Length: 0.25m</td>
</tr>
<tr>
<td><strong>FE245130</strong></td>
<td>0.5mm</td>
<td>± 0.003mm</td>
<td>Precision</td>
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<tr>
<td><strong>FE245131</strong></td>
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<td>± 0.003mm</td>
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<tr>
<td><strong>FE245135</strong></td>
<td>0.6mm</td>
<td>± 0.003mm</td>
<td>Precision</td>
<td>Annealed, Length: 0.25m</td>
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<tr>
<td><strong>FE245140</strong></td>
<td>0.8mm</td>
<td>± 0.003mm</td>
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<tr>
<td><strong>FE245110</strong></td>
<td>1.0mm</td>
<td>± 0.003mm</td>
<td>Precision</td>
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<td><strong>Insulated Wire</strong></td>
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</tr>
<tr>
<td><strong>FE245815</strong></td>
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<td>± 0.001mm</td>
<td>Precision</td>
<td>Annealed, Length: 0.25m</td>
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<tr>
<td><strong>FE245820</strong></td>
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<td>± 0.001mm</td>
<td>Precision</td>
<td>Annealed, Length: 0.25m</td>
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<tr>
<td><strong>FE245810</strong></td>
<td>0.075mm</td>
<td>± 0.001mm</td>
<td>Precision</td>
<td>Annealed, Length: 0.25m</td>
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<tr>
<td><strong>FE245840</strong></td>
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<td>± 0.001mm</td>
<td>Precision</td>
<td>Annealed, Length: 0.25m</td>
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<td><strong>FE245850</strong></td>
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<td>± 0.001mm</td>
<td>Precision</td>
<td>Annealed, Length: 0.25m</td>
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<tr>
<td><strong>Tube</strong></td>
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<tr>
<td><strong>FE247200</strong></td>
<td>3.0mm</td>
<td>± 0.05mm</td>
<td>Precision</td>
<td>Annealed, Length: 0.25m</td>
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<tr>
<td><strong>FE247400</strong></td>
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<td>± 0.05mm</td>
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<tr>
<td><strong>FE247500</strong></td>
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<td>± 0.05mm</td>
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<td>Annealed, Length: 0.25m</td>
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<tr>
<td><strong>FE247600</strong></td>
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<tr>
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<td><strong>Powder</strong></td>
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<td><strong>FE246020</strong></td>
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<td><strong>FE246010</strong></td>
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<tr>
<td><strong>Sphere</strong></td>
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<td></td>
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<tr>
<td><strong>FE246805</strong></td>
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<td>± 0.12mm</td>
<td>Precision</td>
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<tr>
<td><strong>FE246810</strong></td>
<td>1.0mm</td>
<td>± 0.12mm</td>
<td>Precision</td>
<td>Annealed, Length: 0.25m</td>
</tr>
<tr>
<td><strong>FE246820</strong></td>
<td>2.0mm</td>
<td>± 0.12mm</td>
<td>Precision</td>
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<td>3.0mm</td>
<td>± 0.12mm</td>
<td>Precision</td>
<td>Annealed, Length: 0.25m</td>
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### Stainless Steel - AISI 316L

**Phosphorus Free**

<table>
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<tr>
<th>Grade</th>
<th>Composition</th>
<th>Name</th>
<th>Description</th>
<th>Diameter</th>
<th>Tolerance</th>
<th>Condition</th>
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</thead>
<tbody>
<tr>
<td><strong>316L</strong></td>
<td>(Fe/Cr18/Ni10/Mo 3)</td>
<td>Stainless Steel</td>
<td>Fine-Grained, Annealed</td>
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<td>± 0.03mm</td>
<td>Annealed, Length: 0.25m</td>
</tr>
<tr>
<td><strong>316L</strong></td>
<td>Stainless Steel</td>
<td>Fine-Grained, Annealed</td>
<td>Annealed, Length: 0.25m</td>
<td>0.5mm</td>
<td>± 0.03mm</td>
<td>Annealed, Length: 0.25m</td>
</tr>
</tbody>
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### Alloys — Stainless Steel - AISI 316L (Fe/Cr18/Ni10/Mo 3)

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<th>Tolerance</th>
<th>Grade</th>
<th>Coating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FE246840</strong></td>
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<td>± 0.100m</td>
<td>Precision</td>
<td>Annealed, Length: 0.25m</td>
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<tr>
<td><strong>FE246850</strong></td>
<td>5mm</td>
<td>± 0.127m</td>
<td>Precision</td>
<td>Annealed, Length: 0.25m</td>
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<tr>
<td><strong>FE246860</strong></td>
<td>6mm</td>
<td>± 0.25m</td>
<td>Precision</td>
<td>Annealed, Length: 0.25m</td>
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<tr>
<td><strong>FE246870</strong></td>
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<td>Precision</td>
<td>Annealed, Length: 0.25m</td>
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<tr>
<td><strong>FE246880</strong></td>
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<td>± 0.25m</td>
<td>Precision</td>
<td>Annealed, Length: 0.25m</td>
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<td><strong>FE246890</strong></td>
<td>25mm</td>
<td>± 0.25m</td>
<td>Precision</td>
<td>Annealed, Length: 0.25m</td>
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### Foil

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
<th>Diameter</th>
<th>Tolerance</th>
<th>Grade</th>
<th>Coating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FF210230</strong></td>
<td>Thickness: 0.025mm, Temper: Annealed, Coil width: 0.25mm</td>
<td>0.025mm</td>
<td>± 0.002mm</td>
<td>Annealed, Length: 0.25m</td>
<td></td>
</tr>
<tr>
<td><strong>FF210240</strong></td>
<td>Thickness: 0.03mm, Temper: Annealed, Coil width: 0.25mm</td>
<td>0.03mm</td>
<td>± 0.002mm</td>
<td>Annealed, Length: 0.25m</td>
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</tr>
<tr>
<td><strong>FF210250</strong></td>
<td>Thickness: 0.05mm, Temper: Annealed, Coil width: 0.25mm</td>
<td>0.05mm</td>
<td>± 0.002mm</td>
<td>Annealed, Length: 0.25m</td>
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</tr>
<tr>
<td><strong>FF210275</strong></td>
<td>Thickness: 0.075mm, Temper: Annealed, Coil width: 0.25mm</td>
<td>0.075mm</td>
<td>± 0.002mm</td>
<td>Annealed, Length: 0.25m</td>
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</tr>
<tr>
<td><strong>FF210280</strong></td>
<td>Thickness: 0.1mm, Temper: Annealed, Coil width: 0.25mm</td>
<td>0.1mm</td>
<td>± 0.002mm</td>
<td>Annealed, Length: 0.25m</td>
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</tr>
<tr>
<td><strong>FF210301</strong></td>
<td>Thickness: 0.15mm, Temper: Annealed, Condition: Flattened, Size: 0.100mm</td>
<td>0.15mm</td>
<td>± 0.002mm</td>
<td>Annealed, Length: 0.25m</td>
<td></td>
</tr>
</tbody>
</table>

### Alloys — Stainless Steel - AISI 316L

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## Alloys

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Diameter/Thickness/Temp/Coil</th>
<th>Condition/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>FF210401</td>
<td>Thickness: 2.0mm, Temper: Annealed</td>
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<td>Mirror polished on both sides, Size: 100x100 mm</td>
</tr>
<tr>
<td>FF210450</td>
<td>Thickness: 3.0mm, Size: 100x100 mm to 500x500 mm</td>
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<td></td>
</tr>
<tr>
<td>FF210460</td>
<td>Thickness: 4.0mm, Size: 150x150 mm to 300x300 mm</td>
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</tr>
<tr>
<td>FF210480</td>
<td>Thickness: 5.0mm, Size: 279x300 mm to 300x300 mm</td>
<td></td>
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</tr>
<tr>
<td>FF210800</td>
<td>Thickness: 8.0mm, Temper: Annealed, Size: 100x100 mm to 205x205 mm</td>
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<tr>
<td>FF210801</td>
<td>Thickness: 8.0mm, Temper: Annealed, Size: 500x500 mm</td>
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### Non-Woven Fabric
- FF213720 Weight: 50g, Thickness: 0.060mm, Size: 150x150 mm to 560x560 mm

### Wire
- FF215105 Diameter: 0.025mm, Temper: Annealed
- FF215108 Diameter: 0.050mm, Temper: Annealed
- FF215110 Diameter: 0.10mm, Temper: Hard
- FF215120 Diameter: 0.20mm, Temper: As drawn
- FF215307 Diameter: 0.25mm, Condition: Straight wire, Temper: Annealed
- FF215125 Diameter: 0.25mm, Temper: As drawn
- FF215310 Diameter: 0.3mm, Condition: Straight wire, Temper: Annealed
- FF215130 Diameter: 0.3mm, Temper: As drawn
- FF215135 Diameter: 0.4mm, Temper: As drawn
- FF215313 Diameter: 0.5mm, Condition: Straight wire, Temper: Annealed
- FF215314 Diameter: 0.5mm, Condition: Straight wire, Temper: Hard
- FF215140 Diameter: 0.5mm, Temper: As drawn
- FF215145 Diameter: 0.6mm, Temper: As drawn
- FF215148 Diameter: 0.7mm, Temper: As drawn
- FF215315 Diameter: 0.8mm, Condition: Straight wire, Temper: Annealed
- FF215152 Diameter: 0.8mm, Temper: As drawn
- FF215156 Diameter: 0.9mm, Temper: As drawn
- FF215317 Diameter: 1.0mm, Condition: Straight wire, Temper: Annealed
- FF215160 Diameter: 1.0mm, Temper: As drawn
- FF215320 Diameter: 1.5mm, Condition: Straight wire, Temper: Annealed
- FF215330 Diameter: 2.0mm, Condition: Straight wire, Temper: Annealed

### Rod
- FF217905 Diameter: 3.175mm, Length: 100 mm to 1000 mm
- FF217908 Diameter: 5.0mm, Length: 100 mm to 1000 mm
- FF217910 Diameter: 6.0mm, Length: 100 mm to 1000 mm
- FF217915 Diameter: 8.0mm, Length: 100 mm to 1000 mm
- FF217920 Diameter: 12.7mm, Length: 100 mm to 1000 mm
- FF217922 Diameter: 16mm, Length: 100 mm to 1000 mm
- FF217925 Diameter: 20mm, Length: 100 mm to 1000 mm
- FF217930 Diameter: 25.4mm, Length: 100 mm to 1000 mm
- FF217935 Diameter: 38.1mm, Length: 100 mm to 1000 mm

### Tube
- FF217940 Diameter: 50.8mm, Length: 50 mm to 500 mm
- FF217940 Diameter: 50.8mm, Length: 50 mm to 500 mm

### Stainless Steel - AISI 321 (Fe/Cr18/Ni 9/Ti)
- FF217940 Diameter: 50.8mm, Length: 50 mm to 500 mm
- FF217940 Diameter: 50.8mm, Length: 50 mm to 500 mm

### Powder
- FF216030 Mean Particle size: 3micron, Condition: Atomized
- FF216040 Max. Particle size: 45micron, Condition: Atomized

### Stainless Steel - AISI 321 (Fe/Cr18/Ni 9/Ti)
- FF217940 Diameter: 50.8mm, Length: 50 mm to 500 mm
- FF217940 Diameter: 50.8mm, Length: 50 mm to 500 mm

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### Alloys

<table>
<thead>
<tr>
<th>Stainless Steel - AISI 410 (Fe/Cr12.5)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Foil</strong></td>
</tr>
<tr>
<td>FE260450 Thickness: 0.5mm, Size: 50x50 mm to 200x200 mm</td>
</tr>
<tr>
<td><strong>Wire</strong></td>
</tr>
<tr>
<td>FE265160 Diameter: 1mm, Temper: As drawn</td>
</tr>
<tr>
<td><strong>Rod</strong></td>
</tr>
<tr>
<td>FE267920 Diameter: 9.5mm, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td><strong>Powder</strong></td>
</tr>
<tr>
<td>FE266020 Max. Particle size: 45micron, Condition: Atomized</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stainless Steel - AISI 416 (Fe/Cr13/Mn 1/Si 0.5)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rod</strong></td>
</tr>
<tr>
<td>FF157960 Diameter: 31.5mm, Temper: Annealed, Length: 100 mm to 500 mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stainless Steel - AISI 420 (Fe86.7/Cr13.0/C 0.3)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Foil</strong></td>
</tr>
<tr>
<td>FK110250 Thickness: 0.075mm, Temper: Annealed, Coil width 110 mm, Size: 25x25 mm to 100x100 mm</td>
</tr>
<tr>
<td><strong>Sheet</strong></td>
</tr>
<tr>
<td>FK113050 Thickness: 0.5mm, Size: 50x50 mm to 200x200 mm</td>
</tr>
<tr>
<td>FK113080 Thickness: 1.0mm, Size: 50x50 mm to 200x200 mm</td>
</tr>
<tr>
<td>FK113100 Thickness: 1.5mm, Size: 50x50 mm to 300x300 mm</td>
</tr>
<tr>
<td>FK113150 Thickness: 2.0mm, Size: 90x90 mm to 190x190 mm</td>
</tr>
<tr>
<td><strong>Wire</strong></td>
</tr>
<tr>
<td>FK115160 Diameter: 1.0mm, Temper: As drawn</td>
</tr>
<tr>
<td><strong>Rod</strong></td>
</tr>
<tr>
<td>FK117920 Diameter: 9.5mm, Length: 100 mm to 1000 mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stainless Steel - AISI 347 (Fe/Cr18/Ni10/Nb)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Foil</strong></td>
</tr>
<tr>
<td>FE230210 Thickness: 0.05mm, Temper: Annealed, Size: 25x25 mm to 100x100 mm</td>
</tr>
<tr>
<td>FE230220 Thickness: 0.1mm, Temper: Annealed, Coil width 300 mm, Size: 25x25 mm to 300x300 mm</td>
</tr>
<tr>
<td>FE230230 Thickness: 0.2mm, Temper: Annealed, Size: 25x25 mm to 150x150 mm</td>
</tr>
<tr>
<td>FE230240 Thickness: 0.25mm, Temper: Annealed, Coil width 300 mm, Size: 25x25 mm to 300x300 mm</td>
</tr>
<tr>
<td>FE230350 Thickness: 0.25mm, Temper: Annealed, Size: 150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td><strong>Wire</strong></td>
</tr>
<tr>
<td>FE235150 Diameter: 0.5mm, Temper: Annealed</td>
</tr>
<tr>
<td><strong>Powder</strong></td>
</tr>
<tr>
<td>FE236010 Max. Particle size: 45micron, Condition: Atomized</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stainless Steel - AISI 430 (Fe81/Cr17/Mn/Si/C/S/P)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Foil</strong></td>
</tr>
<tr>
<td>FF230280 Thickness: 0.15mm, Temper: Annealed, Coil width 150 mm, Size: 25x25 mm to 150x150 mm</td>
</tr>
<tr>
<td>FF230330 Thickness: 0.70mm, Temper: Annealed, Coil width 305 mm, Size: 25x25 mm to 300x300 mm</td>
</tr>
<tr>
<td>FF230400 Thickness: 2.0mm, Temper: Annealed, Size: 50x50 mm to 200x200 mm</td>
</tr>
<tr>
<td><strong>Wire</strong></td>
</tr>
<tr>
<td>FF235110 Diameter: 0.025mm, Temper: Annealed</td>
</tr>
<tr>
<td>FF235120 Diameter: 0.05mm, Temper: Annealed</td>
</tr>
<tr>
<td>FF235130 Diameter: 0.50mm, Temper: Annealed, Condition: Diameter +/- 3%</td>
</tr>
<tr>
<td>FF235140 Diameter: 1.0mm, Temper: Annealed, Condition: Diameter +/- 3%</td>
</tr>
</tbody>
</table>

---

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### Alloys

#### Stainless Steel - AISI 431 (Fe82/Cr16/Ni2)
- **Rod**
  - FF237919 Diameter: 12.0mm, Length: 100 mm to 1000 mm
  - FF237920 Diameter: 12.7mm, Length: 100 mm to 1000 mm

#### Stainless Steel - Duplex (Fe/Cr22/Ni 5.5/Mo 3/N)
- **Wire**
  - FA205150 Diameter: 0.5mm

#### Stainless Steel - Super Duplex (Fe/Cr25/Ni 5.5/Mo 4)
- **Rod**
  - FL027910 Diameter: 6.0mm, Length: 100 mm to 1000 mm
  - FL027920 Diameter: 8.0mm, Length: 100 mm to 1000 mm

#### Gallium/Indium/Tin (Ga62/In22/Sn16)
- **Lump**
  - GA066100 Max. Lump size: 100mm, Condition: Liquid at RTP

#### Gallium/Indium (Ga68.5/In21.5/Sn10)
- **Lump**
  - GA056100 Max. Lump size: 100mm, Condition: Liquid at RTP

#### Gallium/Indium (Ga75.5/In24.5)
- **Lump**
  - GA046100 Max. Lump size: 10mm, Condition: Liquid at RTP

#### Indium/Tin (In50/Sn50)
- **Foil**
  - IN080200 Thickness: 0.05mm, Tolerance: 25 %, Size: 25x25 mm to 100x100 mm
  - IN080230 Thickness: 0.1mm, Size: 25x25 mm to 100x100 mm
  - IN080250 Thickness: 0.25mm, Size: 25x25 mm to 100x100 mm

#### Indium/Silver (In75/Ag25 Atomic %)
- **Rod**
  - IN177910 Diameter: 3.0mm, Temper: As drawn, Length: 25 mm to 100 mm

#### Indium/Silver (In90/Ag10)
- **Sputtering Target**
  - IN189200 Thickness: 2.0mm, Size: 25.4 mm to 76.2 mm

#### Indium/Tin (In95/Sn 5)
- **Sheet**
  - IN103300 Thickness: 3mm, Size: 50x50 mm to 100x100 mm

#### Magnesium/Nickel (Mg85/Ni15)
- **Rod**
  - MG047920 Diameter: 22mm, Length: 50 mm to 500 mm

#### Magnesium Alloy AZ61 (Mg93/Al 6/Zn 1)
- **Rod**
  - MG097935 Diameter: 22mm, Length: 85 mm
  - MG097940 Diameter: 25mm, Length: 100 mm to 500 mm

#### Magnesium alloy AZ31 (Mg96/Al 3/Zn 1)
- **Foil**
  - MG010250 Thickness: 0.25mm, Size: 100x100 mm to 200x500 mm
  - MG010300 Thickness: 0.5mm, Size: 100x100 mm to 200x500 mm
  - MG010350 Thickness: 1.0mm, Size: 100x100 mm to 200x500 mm
  - MG010400 Thickness: 2.0mm, Size: 100x100 mm to 200x500 mm
### Alloys — Manganese/Nickel

<table>
<thead>
<tr>
<th>Alloys</th>
<th>Powder</th>
<th>Molybdenum/Titanium (Mo90/Ti10)</th>
<th>Molybdenum High Temperature Alloy TZM (Mo99/Ti 0.5/Zr 0.1)</th>
<th>Molybdenum/Tungsten (Mo67/W 33)</th>
<th>Niobium/Titanium (Nb56/Ti44)</th>
<th>Niobium/Tantalum (Nb98.5/Ta 1.5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manganese/Nickel (Mn70/Ni30)</td>
<td>MN106010 Max. Particle size: 150micron, Condition: Alloy Pre-cursor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manganese/Iron (Mn80/Fe20)</td>
<td>MN229700 Thickness: 7mm, Size: 23 mm</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manganese/Nickel (Mn88/Ni12)</td>
<td>MN010200 Thickness: 0.0125mm, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
<td>MN010210 Thickness: 0.025mm, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
<td>MN010215 Thickness: 0.038mm, Temper: As rolled, Size: 50x50 mm</td>
<td>MN0102020 Thickness: 0.0125mm, Temper: As drawn, Size: 25x25 mm to 100x100 mm</td>
<td>M00152020 Diameter: 0.4mm, Length: 50 mm to 200 mm</td>
<td>MN137600 Outside Diameter: 10.0mm, Wall Thickness: 0.4mm, Inside Diameter: 9.2mm, Temper: As drawn, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>Molybdenum/Rhenium (Mo52.5/Re47.5)</td>
<td>MO070210 Thickness: 0.050mm, Temper: Annealed, Size: 25x25 mm to 50x50 mm</td>
<td>MO070240 Thickness: 0.125mm, Temper: Annealed, Size: 25x25 mm to 100x100 mm</td>
<td>MO075125 Diameter: 0.125mm, Temper: As drawn</td>
<td>MO075140 Diameter: 0.25mm, Temper: As drawn</td>
<td>MO046020 Max. Particle size: 150micron, Condition: Alloy Pre-cursor</td>
<td></td>
</tr>
<tr>
<td>Molybdenum/Tungsten (Mo67/W 33)</td>
<td>MO157925 Diameter: 25mm, Length: 50 mm to 200 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Molybdenum/Titanium (Mo80/Ti20)</td>
<td>MO046010 Max. Particle size: 45micron, Condition: Alloy Pre-cursor</td>
<td>MO046020 Max. Particle size: 150micron, Condition: Alloy Pre-cursor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Niobium/Titanium (Nb52/Ti48)</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Niobium/Tantalum (Nb98.5/Ta 1.5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tbody>
</table>

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### Alloys

#### Niobium/Zirconium (Nb99/Zr 1)
- **Wire**  
  NB035160 Diameter: 0.25mm, Temper: As drawn
- **Rod**  
  NB037940 Diameter: 3.95mm, Temper: Annealed, Length: 100 mm to 1000 mm
- **Tube**  
  NB037100 Outside Diameter: 1.76mm, Wall Thickness: 0.25mm, Inside Diameter: 1.26mm, Length: 100 mm to 500 mm  
  NB037350 Outside Diameter: 3.95mm, Wall Thickness: 0.35mm, Inside Diameter: 3.25mm, Temper: Stress relieved, Length: 100 mm to 1000 mm

#### Neodymium/Iron/Boron (Nd$_2$Fe$_{14}$B)
- **Sheet**  
  ND013020 Thickness: 2mm, Condition: Rare earth magnet, Coating: Parylene, Size: 5x5 mm
  ND013050 Thickness: 5mm, Condition: Rare earth magnet, Coating: Uncoated, Size: 15x15 mm
- **Rod**  
  ND019100 Diameter: 6.35mm, Condition: Non-magnetized, Coating: Uncoated, Size: 10 mm to 50 mm
  ND019300 Thickness: 3.0mm, Condition: Non-magnetized, Coating: Uncoated, Size: 25 mm to 50 mm
- **Sputtering Target**  
  ND019110 Thickness: 1mm, Condition: Non-magnetized, Coating: Uncoated, Size: 7x7 mm
  ND019310 Thickness: 3.0mm, Condition: Non-magnetized, Coating: Uncoated, Size: 25 mm to 50 mm

#### Incoloy® alloy 800 - Heat Resisting Alloy (Ni32.5/Cr21/Fe)
- **Foil**  
  NI120350 Thickness: 0.5mm, Size: 50x50 mm to 300x300 mm
- **Rod**  
  NI127930 Diameter: 10mm, Temper: Annealed, Length: 100 mm to 500 mm
- **Tube**  
  NI127400 Outside Diameter: 9.5mm, Wall Thickness: 0.7mm, Inside Diameter: 8.1mm, Temper: Annealed, Length: 100 mm to 1000 mm

#### Alloy 825 (Ni39.5/Fe32/Cr22/Mo 3/Cu 2/Ti )
- **Rod**  
  NL067920 Diameter: 12mm, Temper: Annealed, Length: 100 mm to 1000 mm

#### Hastelloy® X (Ni49.5/Cr22/Fe18/Mo 9/Co 1/W)
- **Foil**  
  NE070350 Thickness: 0.50mm, Temper: Annealed, Size: 50x50 mm to 300x300 mm
- **Wire**  
  NE075110 Diameter: 0.25mm, Temper: Annealed
  NE075120 Diameter: 0.50mm, Temper: Annealed
  NE075130 Diameter: 0.8mm, Temper: Annealed
  NE075140 Diameter: 1.0mm, Temper: Annealed
- **Rod**  
  NE077920 Diameter: 9.5mm, Length: 50 mm to 500 mm
  NE077930 Diameter: 16mm, Length: 50 mm to 500 mm
  NE077940 Diameter: 25.4mm, Length: 50 mm to 200 mm

#### Nickel/Cobalt (Ni50/Co50)
- **Wire**  
  NC265050 Diameter: 0.50mm, Temper: As drawn

#### Magnetic Shape Memory Alloy (Ni50/Mn28/Ga22 (Atomic %))
- **Bar**  
  MA048010 Side Length: 1mm, Side Length (of longer side): 2.5mm, Condition: Shape-Memory Alloy, Length: 20 mm
  MA048015 Side Length: 2mm, Side Length (of longer side): 3mm, Condition: Shape-Memory Alloy, Length: 15 mm
  MA048020 Side Length: 3mm, Side Length (of longer side): 5mm, Condition: Shape-Memory Alloy, Length: 20 mm

#### Nickel/Iron (Ni52/Fe48)
- **Sheet**  
  Ni193100 Thickness: 7.1mm, Size: 108x108 mm
- **Rod**  
  Ni197910 Diameter: 2mm, Temper: Annealed, Length: 100 mm to 1000 mm
  Ni197920 Diameter: 3mm, Length: 100 mm to 1000 mm
- **Tube**  
  Ni197450 Outside Diameter: 4.5mm, Wall Thickness: 0.07mm, Inside Diameter: 4.36mm, Length: 200 mm to 1000 mm
  Ni197651 Outside Diameter: 6.5mm, Wall Thickness: 0.07mm, Inside Diameter: 6.36mm, Length: 200 mm to 1000 mm
  Ni197750 Outside Diameter: 9.55mm, Wall Thickness: 0.275mm, Inside Diameter: 9.0mm, Length: 100 mm to 1000 mm

#### Nimonic® alloy 90 (Ni53/Cr20/Co18/Ti 2.5/Al 1.5/Fe 1.5)
- **Foil**  
  NJ100275 Thickness: 0.6mm, Temper: Annealed, Size: 50x50 mm to 200x200 mm
## Alloys

### Inconel® alloy 718 - Heat Resisting Alloy (Ni53/Fe19/Cr19/Nb/Mo/Ti)

**INCONEL® alloy 718**

<table>
<thead>
<tr>
<th>Material</th>
<th>Diameter</th>
<th>Condition</th>
<th>Temper</th>
<th>Length</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rod</td>
<td>1.0mm</td>
<td>Spring hard</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rod</td>
<td>2.0mm</td>
<td>Annealed</td>
<td>100 mm to 1000 mm</td>
<td>200x200 mm</td>
<td></td>
</tr>
<tr>
<td>Rod</td>
<td>2.5mm</td>
<td>Superelastic</td>
<td>Annealed, Length: 100 mm to 1000 mm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Shape-Memory Alloy, Type: Superelastic**

<table>
<thead>
<tr>
<th>Material</th>
<th>Diameter</th>
<th>Condition</th>
<th>Tempe</th>
<th>Length</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rod</td>
<td>0.125 mm</td>
<td>Superelastic</td>
<td>Annealed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rod</td>
<td>0.2 m</td>
<td>Surface oxide</td>
<td>100 mm to 1000 mm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Hastelloy® C276 - Heat Resisting Alloy (Ni57/Mo17/Cr16/Fe/W/Mn)

**Hastelloy® C276**

<table>
<thead>
<tr>
<th>Material</th>
<th>Diameter</th>
<th>Condition</th>
<th>Temper</th>
<th>Length</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rod</td>
<td>0.025 mm</td>
<td>As rolled</td>
<td></td>
<td>100 mm to 1000 mm</td>
<td>22x22 mm</td>
</tr>
<tr>
<td>Rod</td>
<td>0.05 mm</td>
<td>Annealed</td>
<td>100 mm to 1000 mm</td>
<td>200x200 mm</td>
<td></td>
</tr>
<tr>
<td>Rod</td>
<td>0.05 m</td>
<td>Hard</td>
<td>100 mm to 1000 mm</td>
<td>100 mm to 500 mm</td>
<td></td>
</tr>
</tbody>
</table>

**Solution annealed + aged**

<table>
<thead>
<tr>
<th>Material</th>
<th>Diameter</th>
<th>Condition</th>
<th>Temper</th>
<th>Length</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rod</td>
<td>0.075 mm</td>
<td>Annealed</td>
<td></td>
<td>450 mm to 900 mm</td>
<td>90x90 mm</td>
</tr>
<tr>
<td>Rod</td>
<td>0.075 m</td>
<td>Annealed</td>
<td>450 mm to 900 mm</td>
<td>100 mm to 200 mm</td>
<td></td>
</tr>
</tbody>
</table>

**Annealed, Size: 50x50 mm to 200x200 mm**

**Coil width: 40mm, Temper: Annealed, Coil width: 6.6mm, Temper: Annealed**

**Annealed, Size: 50x50 mm to 200x200 mm**

## Alloys — Inconel® heat resisting alloy

<table>
<thead>
<tr>
<th>Material</th>
<th>Diameter</th>
<th>Condition</th>
<th>Tempe</th>
<th>Length</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rod</td>
<td>0.125 mm</td>
<td>Superelastic</td>
<td>Annealed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rod</td>
<td>0.2 m</td>
<td>Surface oxide</td>
<td>100 mm to 1000 mm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Shape-Memory Alloy, Type: Superelastic, Condition: Ap-Temperature = -15°C**

<table>
<thead>
<tr>
<th>Material</th>
<th>Diameter</th>
<th>Condition</th>
<th>Temper</th>
<th>Length</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rod</td>
<td>0.1 mm</td>
<td>Hard</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rod</td>
<td>0.5 mm</td>
<td>Hard</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

### Inconel® 617 (Ni57/Cr22/Co12/Mo 9)

<table>
<thead>
<tr>
<th>Material</th>
<th>Diameter</th>
<th>Condition</th>
<th>Temper</th>
<th>Length</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rod</td>
<td>1.6 mm</td>
<td>Annealed</td>
<td>450 mm to 900 mm</td>
<td>90x90 mm</td>
<td></td>
</tr>
<tr>
<td>Rod</td>
<td>2.4 mm</td>
<td>Annealed</td>
<td>450 mm to 900 mm</td>
<td>100 mm to 200 mm</td>
<td></td>
</tr>
</tbody>
</table>

**Annealed, Length: 100 mm to 1000 mm**

## Hastelloy® — Inconel® heat resisting alloy

<table>
<thead>
<tr>
<th>Material</th>
<th>Diameter</th>
<th>Condition</th>
<th>Temper</th>
<th>Length</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rod</td>
<td>0.025 mm</td>
<td>As rolled</td>
<td></td>
<td>100 mm to 1000 mm</td>
<td>22x22 mm</td>
</tr>
<tr>
<td>Rod</td>
<td>0.05 mm</td>
<td>Annealed</td>
<td>100 mm to 1000 mm</td>
<td>200x200 mm</td>
<td></td>
</tr>
<tr>
<td>Rod</td>
<td>0.05 m</td>
<td>Hard</td>
<td>100 mm to 1000 mm</td>
<td>100 mm to 500 mm</td>
<td></td>
</tr>
</tbody>
</table>

**Solution annealed + aged, Length: 100 mm to 1000 mm**

**Annealed, Size: 50x50 mm to 200x200 mm**

**Coil width: 40mm, Temper: Annealed, Coil width: 6.6mm, Temper: Annealed**

**Annealed, Size: 50x50 mm to 200x200 mm**

## Nitinol (Ni55/Ti45)

<table>
<thead>
<tr>
<th>Material</th>
<th>Diameter</th>
<th>Condition</th>
<th>Temper</th>
<th>Length</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rod</td>
<td>6.35 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rod</td>
<td>12.7 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rod</td>
<td>16 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rod</td>
<td>19 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rod</td>
<td>20 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rod</td>
<td>25.4 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Solution annealed + aged, Length: 100 mm to 1000 mm**

**Annealed, Length: 100 mm to 1000 mm**

**Annealed, Length: 100 mm to 1000 mm**

**Annealed, Length: 100 mm to 1000 mm**

## Nitinol (Ni55/Ti45)

<table>
<thead>
<tr>
<th>Material</th>
<th>Diameter</th>
<th>Condition</th>
<th>Temper</th>
<th>Length</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rod</td>
<td>0.5 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rod</td>
<td>0.15 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rod</td>
<td>1.0 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rod</td>
<td>1.2 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Annealed, Size: 100x100 mm**

**Annealed, Size: 100x100 mm**

**Annealed, Size: 100x100 mm**

**Annealed, Size: 100x100 mm**

## Hastelloy® — Inconel® heat resisting alloy

<table>
<thead>
<tr>
<th>Material</th>
<th>Diameter</th>
<th>Condition</th>
<th>Temper</th>
<th>Length</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rod</td>
<td>0.1 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rod</td>
<td>0.5 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rod</td>
<td>1.0 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Annealed, Length: 100 mm to 1000 mm**

**Annealed, Length: 100 mm to 1000 mm**

**Annealed, Length: 100 mm to 1000 mm**

**Annealed, Length: 100 mm to 1000 mm**

## Alloys — Inconel® heat resisting alloy

<table>
<thead>
<tr>
<th>Material</th>
<th>Diameter</th>
<th>Condition</th>
<th>Temper</th>
<th>Length</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rod</td>
<td>0.125 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rod</td>
<td>0.2 m</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Shape-Memory Alloy, Type: Superelastic, Condition: Ap-Temperature = -15°C**

<table>
<thead>
<tr>
<th>Material</th>
<th>Diameter</th>
<th>Condition</th>
<th>Temper</th>
<th>Length</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rod</td>
<td>0.1 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rod</td>
<td>0.5 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rod</td>
<td>1.0 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Annealed, Length: 100 mm to 1000 mm**

**Annealed, Length: 100 mm to 1000 mm**

**Annealed, Length: 100 mm to 1000 mm**

**Annealed, Length: 100 mm to 1000 mm**

## Alloys — Inconel® heat resisting alloy

<table>
<thead>
<tr>
<th>Material</th>
<th>Diameter</th>
<th>Condition</th>
<th>Temper</th>
<th>Length</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rod</td>
<td>0.1 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rod</td>
<td>0.5 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rod</td>
<td>1.0 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Annealed, Length: 100 mm to 1000 mm**

**Annealed, Length: 100 mm to 1000 mm**

**Annealed, Length: 100 mm to 1000 mm**

**Annealed, Length: 100 mm to 1000 mm**
Alloys

**Alloys — Waspaloy**

- **Heat Resisting Alloy**

  - **Waspaloy**
    - **Alloy (Ni58/Cr19/Co14/Mo/Ti/Al/Fe)**
      - Diameter: 10mm, Length: 480 mm to 490 mm
      - Diameter: 12.7mm, Length: 50 mm to 500 mm
      - Diameter: 16mm, Length: 50 mm to 500 mm
      - Diameter: 25mm, Length: 50 mm to 200 mm
      - Diameter: 30mm, Length: 50 mm to 200 mm

- **Tube**
  - **Outside Diameter:**
    - NI147100 Outside Diameter: 3.2mm, Wall Thickness: 0.9mm, Inside Diameter: 1.4mm, Length: 100 mm to 1000 mm
    - NI147095 Outside Diameter: 3.2mm, Wall Thickness: 0.5mm, Inside Diameter: 2.2mm, Length: 100 mm to 1000 mm
    - NI147200 Outside Diameter: 6.35mm, Wall Thickness: 0.9mm, Inside Diameter: 4.55mm, Length: 100 mm to 1000 mm
    - NI147300 Outside Diameter: 9.5mm, Wall Thickness: 0.9mm, Inside Diameter: 7.7mm, Length: 100 mm to 1000 mm

- **Waspaloy**
  - **Alloy (Ni59/Cr22/Mo13/Fe 3/W 3)**

**Alloys — Hastelloy**

- **C-22**
  - **(Ni59/Cr19/Co14/Mo/Ti/Al/Fe)**

**Alloys — Inconel 625**

- **- Corrosion Resistant Alloy (Ni61/Cr23/Al1.4/Mn1.0/Fe)**

**Alloys — Nickel/Titanium (Ni60/Ti40)**

- **Powder**
  - **Max. Particle size:** 150micron, **Condition:** Alloy Pre-cursor

- **Inconel 625**
  - **- Corrosion Resistant Alloy (Ni61/Cr22/Mo 9/Fe 5)**

**Alloys — Sheet**

- **Rod**
  - Diameter: 10mm, Length: 100 mm to 1000 mm
  - Diameter: 12mm, Length: 50 mm to 1000 mm
  - Diameter: 16mm, Length: 50 mm to 500 mm

**Alloys — Wire**

- **_Waspaloy_® - Heat Resisting Alloy (Ni58/Cr19/Co14/Mo/Ti/Al/Fe)_**

**Alloys — Inconel® alloy 601**

- **- Heat Resisting Alloy (Ni61/Cr23/Al1.4/Mn1.0/Fe)**

**Alloys — Crucible**

- **Shape:** Cylindrical, **Outside Diameter:** 21mm, **Inside Diameter:** 19mm, **Height:** 19mm, **Capacity:** 5ml, **Quantity:** : 1 pcs
- **Shape:** Cylindrical, **Outside Diameter:** 27mm, **Inside Diameter:** 25mm, **Height:** 22mm, **Capacity:** 10ml, **Quantity:** : 1 pcs
- **Shape:** Cylindrical, **Outside Diameter:** 33mm, **Inside Diameter:** 31mm, **Height:** 22mm, **Capacity:** 15ml, **Quantity:** : 1 pcs
- **Shape:** Cylindrical, **Outside Diameter:** 47mm, **Inside Diameter:** 45mm, **Height:** 22mm, **Capacity:** 25ml, **Quantity:** : 1 pcs
- **Shape:** Cylindrical, **Outside Diameter:** 47mm, **Inside Diameter:** 45mm, **Height:** 29mm, **Capacity:** 45ml, **Quantity:** : 1 pcs
- **Shape:** Cylindrical, **Outside Diameter:** 47mm, **Inside Diameter:** 45mm, **Height:** 41mm, **Capacity:** 55ml, **Quantity:** : 1 pcs
- **Shape:** Cylindrical, **Outside Diameter:** 51mm, **Inside Diameter:** 49mm, **Height:** 41mm, **Capacity:** 75ml, **Quantity:** : 1 pcs

**Goodfellow Corporation**

February 2017
## Alloys

<table>
<thead>
<tr>
<th>Shape</th>
<th>Outside Diameter</th>
<th>Inside Diameter</th>
<th>Height</th>
<th>Capacity</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cylindrical</td>
<td>59mm</td>
<td>57mm</td>
<td>45mm</td>
<td>100ml</td>
<td>1 pcs</td>
</tr>
<tr>
<td>Cylindrical</td>
<td>83mm</td>
<td>81mm</td>
<td>57mm</td>
<td>250ml</td>
<td>1 pcs</td>
</tr>
<tr>
<td>Cylindrical</td>
<td>104mm</td>
<td>102mm</td>
<td>63mm</td>
<td>500ml</td>
<td>1 pcs</td>
</tr>
<tr>
<td>Cylindrical</td>
<td>127mm</td>
<td>125mm</td>
<td>89mm</td>
<td>1000ml</td>
<td>1 pcs</td>
</tr>
<tr>
<td>Cylindrical</td>
<td>152mm</td>
<td>150mm</td>
<td>99mm</td>
<td>1500ml</td>
<td>1 pcs</td>
</tr>
</tbody>
</table>

### Haynes® 230 alloy

**(Ni62/Cr22/W 14/Mo 2)**  
*Rod*

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Temper</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.7mm</td>
<td>Annealed</td>
<td>50 mm to 200 mm</td>
</tr>
<tr>
<td>25.4mm</td>
<td>Annealed</td>
<td>50 mm to 100 mm</td>
</tr>
</tbody>
</table>

### Nickel/Silicon (Ni62/Si38)

*Powder*

<table>
<thead>
<tr>
<th>Max. Particle size</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>150 micron</td>
<td>Atomized</td>
</tr>
</tbody>
</table>

### Monel® alloy K-500

**(Ni63/Cu30/Al3/Fe2/Mn1.5/Ti0.5)**  
*Sheet*

<table>
<thead>
<tr>
<th>Thickness</th>
<th>Temper</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5mm</td>
<td>Annealed</td>
<td>100x100 mm to 200x200 mm</td>
</tr>
</tbody>
</table>

### Monel® alloy 400 (Ni65/Cu33/Fe 2)

*Foil*

<table>
<thead>
<tr>
<th>Thickness</th>
<th>Temper</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.025mm</td>
<td>Annealed</td>
<td>25x25 mm to 300x300 mm</td>
</tr>
<tr>
<td>0.030mm</td>
<td>Annealed</td>
<td>25x25 mm to 150x300 mm</td>
</tr>
<tr>
<td>0.05mm</td>
<td>Annealed</td>
<td>25x25 mm to 150x300 mm</td>
</tr>
<tr>
<td>0.075mm</td>
<td>Annealed</td>
<td>25x25 mm to 150x300 mm</td>
</tr>
<tr>
<td>0.12mm</td>
<td>Annealed</td>
<td>25x25 mm to 150x300 mm</td>
</tr>
<tr>
<td>0.125mm</td>
<td>Annealed</td>
<td>25x25 mm to 150x300 mm</td>
</tr>
<tr>
<td>0.2mm</td>
<td>Annealed</td>
<td>25x25 mm to 300x300 mm</td>
</tr>
<tr>
<td>0.3mm</td>
<td>Annealed</td>
<td>25x25 mm to 200x200 mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Wall Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5mm</td>
<td>0.146mm</td>
</tr>
<tr>
<td>0.6mm</td>
<td>0.1mm</td>
</tr>
<tr>
<td>0.8mm</td>
<td>0.1mm</td>
</tr>
<tr>
<td>1.5mm</td>
<td>0.25mm</td>
</tr>
<tr>
<td>1.9mm</td>
<td>0.275mm</td>
</tr>
<tr>
<td>2.0mm</td>
<td>0.175mm</td>
</tr>
<tr>
<td>2.2mm</td>
<td>0.18mm</td>
</tr>
<tr>
<td>2.5mm</td>
<td>0.15mm</td>
</tr>
</tbody>
</table>

### Mesh

<table>
<thead>
<tr>
<th>Nominal Aperture</th>
<th>Wire diameter</th>
<th>Wires/inch</th>
<th>Open area</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.38mm</td>
<td>0.25mm</td>
<td>40</td>
<td>37%</td>
<td>Plain weave mesh</td>
</tr>
</tbody>
</table>

### Wire

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Temper</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.125mm</td>
<td>As drawn</td>
<td>100 mm to 1000 mm</td>
</tr>
<tr>
<td>0.25mm</td>
<td>As drawn</td>
<td>100 mm to 1000 mm</td>
</tr>
<tr>
<td>0.5mm</td>
<td>As drawn</td>
<td>100 mm to 1000 mm</td>
</tr>
<tr>
<td>1.0mm</td>
<td>Annealed</td>
<td>100 mm to 1000 mm</td>
</tr>
<tr>
<td>1.5mm</td>
<td>Annealed</td>
<td>100 mm to 2000 mm</td>
</tr>
</tbody>
</table>

### Tube

<table>
<thead>
<tr>
<th>Outside Diameter</th>
<th>Wall Thickness</th>
<th>Inside Diameter</th>
<th>Temper</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5mm</td>
<td>0.146mm</td>
<td>0.208mm</td>
<td>As drawn</td>
<td>100 mm to 1000 mm</td>
</tr>
<tr>
<td>0.6mm</td>
<td>0.1mm</td>
<td>0.4mm</td>
<td>As drawn</td>
<td>100 mm to 1000 mm</td>
</tr>
<tr>
<td>0.8mm</td>
<td>0.1mm</td>
<td>0.6mm</td>
<td>As drawn</td>
<td>100 mm to 1000 mm</td>
</tr>
<tr>
<td>1.5mm</td>
<td>0.25mm</td>
<td>1mm</td>
<td>As drawn</td>
<td>100 mm to 1000 mm</td>
</tr>
<tr>
<td>1.9mm</td>
<td>0.275mm</td>
<td>1.35mm</td>
<td>As drawn</td>
<td>100 mm to 2000 mm</td>
</tr>
<tr>
<td>2.0mm</td>
<td>0.175mm</td>
<td>1.65mm</td>
<td>As drawn</td>
<td>100 mm to 1000 mm</td>
</tr>
<tr>
<td>2.2mm</td>
<td>0.18mm</td>
<td>2.14mm</td>
<td>As drawn</td>
<td>100 mm to 1000 mm</td>
</tr>
</tbody>
</table>

Alloys — Haynes® 230 alloy

Please visit www.goodfellow.com or www.goodfellowusa.com for latest prices
<table>
<thead>
<tr>
<th>Alloys — Hastelloy</th>
<th>Inconel&lt;sup&gt;®&lt;/sup&gt; alloy 600 - Heat Resisting Alloy (Ni72/Cr16/Fe 8)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hastelloy&lt;sup&gt;®&lt;/sup&gt; B-3</strong> (Ni65/Mo28.5/Cr 1.5/Fe 1.5/(Co + Mn + W ) 3.5max)</td>
<td><strong>Inconel&lt;sup&gt;®&lt;/sup&gt; alloy 600</strong></td>
</tr>
<tr>
<td><strong>Wire</strong> NK255150 Diameter: 0.5mm, Temper: Annealed</td>
<td><strong>Foil</strong> NI020203 Thickness: 0.0125mm, Temper: Annealed, Coil width 312 mm, Size: 150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td><strong>Rod</strong> NK257910 Diameter: 5.5mm, Temper: Annealed, Length: 100 mm to 1000 mm</td>
<td><strong>NI020201 Thickness: 0.025mm, Temper: Hard, Size: 25x25 mm to 50x50 mm</strong></td>
</tr>
<tr>
<td><strong>Hastelloy&lt;sup&gt;®&lt;/sup&gt; B-2</strong> (Ni68/Mo28/Fe 2/Cr 1/Co 1)</td>
<td><strong>NI020202 Thickness: 0.025mm, Temper: Annealed, Coil width 305 mm, Size: 150x150 mm to 300x300 mm</strong></td>
</tr>
<tr>
<td><strong>Rod</strong> NK247920 Diameter: 16mm, Temper: Annealed, Length: 50 mm to 200 mm</td>
<td><strong>NI020204 Thickness: 0.05mm, Temper: Annealed, Coil width 305 mm, Size: 150x150 mm to 300x300 mm</strong></td>
</tr>
<tr>
<td><strong>Nickel/Chromium (Ni70/Cr30)</strong></td>
<td><strong>NI020200 Thickness: 0.075mm, Temper: Annealed, Coil width 289 mm, Size: 25x25 mm to 280x280 mm</strong></td>
</tr>
<tr>
<td><strong>Wire</strong> NE025140 Diameter: 0.25mm, Temper: Annealed</td>
<td><strong>NI020206 Thickness: 0.1mm, Coil width: 76mm, Temper: Annealed, Length: 0.5 m to 10 m</strong></td>
</tr>
<tr>
<td><strong>Nickel/Copper (Ni70/Cu30)</strong></td>
<td><strong>NI020205 Thickness: 0.1mm, Temper: Annealed, Coil width 305 mm, Size: 25x25 mm to 300x300 mm</strong></td>
</tr>
<tr>
<td><strong>Powder</strong> NI076011 Max. Particle size: 150micron, Purity: 98%, Condition: Atomized</td>
<td><strong>NI020210 Thickness: 0.2mm, Temper: Annealed, Coil width 305 mm, Size: 25x25 mm to 300x300 mm</strong></td>
</tr>
<tr>
<td><strong>Nickel/Iron (Ni70/Fe30)</strong></td>
<td><strong>NI020401 Thickness: 0.5mm, Surface treatment: Titanium Nitride coating 2-3 microns, Size: 25x25 mm to 100x100 mm</strong></td>
</tr>
<tr>
<td><strong>Wire</strong> NJ125130 Diameter: 0.03mm, Temper: Annealed</td>
<td><strong>NI020400 Thickness: 0.5mm, Temper: Annealed, Coil width 305 mm, Size: 50x50 mm to 300x300 mm</strong></td>
</tr>
<tr>
<td><strong>Insulated Wire</strong> NJ125825 Conductor diameter: 0.025mm, Insulation thickness: 0.0035mm, Insulation: Polyimide</td>
<td><strong>NI020450 Thickness: 0.635mm, Temper: Annealed, Size: 25x25 mm to 300x300 mm</strong></td>
</tr>
<tr>
<td><strong>Nickel/Titanium (Ni70/Ti30)</strong></td>
<td><strong>NI020520 Thickness: 1.0mm, Temper: Annealed, Size: 25x25 mm to 300x300 mm</strong></td>
</tr>
<tr>
<td><strong>Powder</strong> NJ066011 Max. Particle size: 150micron</td>
<td><strong>NI020550 Thickness: 2.0mm, Temper: Annealed, Size: 25x25 mm to 300x300 mm</strong></td>
</tr>
<tr>
<td><strong>Nickel/Zirconium (Ni70/Zr30)</strong></td>
<td><strong>NI020560 Thickness: 3.0mm, Temper: Annealed, Size: 50x50 mm to 200x200 mm</strong></td>
</tr>
<tr>
<td><strong>Powder</strong> NJ096010 Max. Particle size: 150micron, Condition: Alloy Pre-cursor</td>
<td><strong>NI020575 Thickness: 5.0mm, Size: 150x150 mm</strong></td>
</tr>
<tr>
<td><strong>Powder</strong> NJ096010 Max. Particle size: 150micron</td>
<td><strong>NI020660 Thickness: 8.0mm, Size: 50x100 mm to 150x150 mm</strong></td>
</tr>
<tr>
<td><strong>Nickel/Titanium (Ni70/Ti30)</strong></td>
<td><strong>NI020650 Thickness: 12mm, Size: 101x102 mm to 210x210 mm</strong></td>
</tr>
<tr>
<td><strong>Rod</strong> NI025150 Diameter: 0.05mm, Temper: Hard</td>
<td><strong>Wire</strong> NI025100 Diameter: 0.05mm, Temper: Hard</td>
</tr>
<tr>
<td><strong>NI025110 Diameter: 0.10mm, Temper: Hard</strong></td>
<td><strong>NI025125 Diameter: 0.20mm, Temper: Hard</strong></td>
</tr>
<tr>
<td><strong>NI025130 Diameter: 0.25mm, Temper: Hard</strong></td>
<td><strong>NI025133 Diameter: 0.30mm, Temper: Hard</strong></td>
</tr>
<tr>
<td><strong>NI025136 Diameter: 0.40mm, Temper: Hard</strong></td>
<td><strong>NI025137 Diameter: 0.40mm, Temper: Annealed</strong></td>
</tr>
<tr>
<td><strong>NI025140 Diameter: 0.5mm, Temper: Hard</strong></td>
<td><strong>NI025143 Diameter: 0.60mm, Temper: Hard</strong></td>
</tr>
<tr>
<td><strong>NI025160 Diameter: 0.60mm, Temper: Hard</strong></td>
<td><strong>NI025150 Diameter: 1.0mm, Temper: Hard</strong></td>
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<tr>
<td><strong>Rod</strong> NI027902 Diameter: 2.0mm, Temper: Annealed, Length: 100 mm to 1000 mm</td>
<td><strong>NI027903 Diameter: 2.5mm, Temper: Annealed, Condition: Centerless ground, Length: 100 mm to 1000 mm</strong></td>
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<tr>
<td><strong>NI027905 Diameter: 3.2mm, Temper: Annealed, Length: 100 mm to 1000 mm</strong></td>
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</tbody>
</table>
### Alloys

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Diameter</th>
<th>Wall Thickness</th>
<th>Inside Diameter</th>
<th>Temper</th>
<th>Length</th>
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<tbody>
<tr>
<td>NI027910</td>
<td>Outside Diameter: 6.0 mm, Wall Thickness: 0.3 mm, Inside Diameter: 4.4 mm, Temper: Annealed</td>
<td>100 mm to 1000 mm</td>
<td>0.3 mm</td>
<td>4.4 mm</td>
<td>Annealed, Length: 100 mm to 1000 mm</td>
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<tr>
<td>NI027920</td>
<td>Outside Diameter: 12.7 mm, Wall Thickness: 0.83 mm, Inside Diameter: 10 mm</td>
<td>100 mm to 1000 mm</td>
<td>0.83 mm</td>
<td>10 mm</td>
<td>Annealed, Length: 100 mm to 1000 mm</td>
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<tr>
<td>NI027930</td>
<td>Outside Diameter: 20.0 mm, Wall Thickness: 1.0 mm, Inside Diameter: 18.0 mm</td>
<td>50 mm to 1000 mm</td>
<td>1.0 mm</td>
<td>18.0 mm</td>
<td>Annealed, Length: 50 mm to 1000 mm</td>
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<tr>
<td>NI027935</td>
<td>Outside Diameter: 25.0 mm, Wall Thickness: 1.0 mm, Inside Diameter: 22.1 mm</td>
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<td>1.0 mm</td>
<td>22.1 mm</td>
<td>Annealed, Length: 50 mm to 200 mm</td>
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<tr>
<td>NI027940</td>
<td>Outside Diameter: 40.0 mm, Wall Thickness: 1.0 mm, Inside Diameter: 36.0 mm</td>
<td>50 mm to 200 mm</td>
<td>1.0 mm</td>
<td>36.0 mm</td>
<td>Annealed, Length: 50 mm to 200 mm</td>
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</tbody>
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#### Inconel® X750 - Heat Resisting Alloy
(Ni74/Cr15/Fe 7/Ti/Al/Nb)

**Foil**
- Ni160220: Thickness: 0.028 mm, Temper: As rolled, Coil width 220 mm, Size: 25x25 mm to 200x200 mm
- Ni160250: Thickness: 0.075 mm, Temper: As rolled, Size: 25x25 mm to 50x100 mm

**Tube**
- Ni160251: Thickness: 0.075 mm, Temper: Annealed, Coil width 305 mm, Size: 25x25 mm to 300x300 mm
- Ni160270: Thickness: 0.25 mm, Temper: Annealed, Coil width 305 mm, Size: 50x50 mm to 300x300 mm
- Ni160500: Thickness: 1.0 mm, Temper: Annealed, Size: 50x50 mm to 150x150 mm

**Wire**
- Ni165120: Diameter: 0.25 mm, Temper: Annealed
- Ni165130: Diameter: 0.5 mm, Temper: Annealed
- Ni165140: Diameter: 1.0 mm, Temper: Annealed

**Evanohm®** - Precision Resistance Alloy
(Ni75/Cr20/Al 2.5/Cu 2.5)

**Foil**
- Ni170210: Thickness: 0.0025 mm, Temper: As rolled, Coil width 103 mm, Size: 25x25 mm to 100x100 mm
- Ni170250: Thickness: 0.025 mm, Temper: Annealed, Coil width 100 mm, Size: 25x25 mm to 100x100 mm
- Ni170275: Thickness: 0.025 mm, Temper: Annealed, Coil width 100 mm, Size: 25x25 mm to 100x100 mm
- Ni170300: Thickness: 0.05 mm, Temper: Annealed, Coil width 111 mm, Size: 25x25 mm to 100x100 mm

**Nickel/Manganese (Ni75/Mn25)**

**Powder**
- Ni256045: Max. Particle size: 45 micron, Condition: Atomized

**Magnetic Shielding Alloy**
(Ni77/Fe14/Cu 5/Mo 4)

**Foil**
- Ni030200: Thickness: 0.0027 mm, Size: 25x25 mm to 50x100 mm
- Ni030230: Thickness: 0.0125 mm, Coil width 100 mm, Size: 25x25 mm to 100x100 mm
- Ni030240: Thickness: 0.025 mm, Coil width 100 mm, Size: 25x25 mm to 100x100 mm
- Ni030245: Thickness: 0.032 mm, Size: 50x110 mm
- Ni030250: Thickness: 0.05 mm, Coil width 150 mm, Size: 25x25 mm to 150x300 mm
- Ni030260: Thickness: 0.1 mm, Temper: Annealed, Coil width 200 mm, Size: 50x50 mm to 200x200 mm
- Ni030271: Thickness: 0.125 mm, Temper: Annealed, Coil width 150 mm, Size: 50x50 mm to 150x150 mm
- Ni030275: Thickness: 0.15 mm, Temper: Annealed, Coil width 185 mm, Size: 60x60 mm to 185x185 mm
- Ni030290: Thickness: 0.25 mm, Temper: Annealed, Coil width 150 mm, Size: 50x50 mm to 150x150 mm

**Rod**
- Ni037910: Diameter: 6.35 mm, Length: 100 mm to 1000 mm
- Ni037920: Diameter: 12.0 mm, Length: 100 mm to 1000 mm
- Ni037960: Diameter: 76.2 mm, Length: 10 mm to 25 mm

**Tube**
- Ni037300: Outside Diameter: 4.5 mm, Wall Thickness: 0.07 mm, Inside Diameter: 4.36 mm, Temper: As drawn, Length: 650 mm
<table>
<thead>
<tr>
<th>Alloy Type</th>
<th>Material</th>
<th>Thickness (mm)</th>
<th>Condition</th>
<th>Diameter (mm)</th>
<th>Length (mm)</th>
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<td><strong>Alloys</strong></td>
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<td><strong>Powder</strong></td>
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<td>NI037301</td>
<td>Outside Diameter: 4.5mm, Wall Thickness: 0.07mm, Inside Diameter: 4.36mm, Temper: As drawn, Length: 12.7 mm</td>
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<td>NI037450</td>
<td>Outside Diameter: 8.175mm, Wall Thickness: 0.07mm, Inside Diameter: 8.035mm, Temper: As drawn, Length: 795 mm</td>
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<td><strong>Sputtering Target</strong></td>
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<td>NI059300 Thickness: 3.0mm, Size: 50.8 mm to 75 mm</td>
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<tr>
<td><strong>Nickel/Aluminum (Ni79/Al21)</strong></td>
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<td>Powder</td>
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<td>NI268000 Max. Particle size: 150micron, Condition: Alloy Pre-cursor</td>
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<td><strong>Nickel/Chromium (Ni80/Cr20)</strong></td>
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<td>Nichrome V , Toghet A</td>
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<tr>
<td>Microfoil</td>
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<td>NI054700 Thickness: 0.5μm, Specific density: 420μg.cm⁻², Support: Permanent Mylar 3.5μm, Diameter: 10 mm to 25 mm</td>
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<td><strong>Foil</strong></td>
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<tr>
<td>Foil</td>
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<td>NI050200 Thickness: 0.005mm, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
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<td>NI050221</td>
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<td>NI050220</td>
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<tr>
<td>NI050223</td>
<td>Thickness: 0.030mm, Coil width: 7.5mm, Temper: As rolled, Length: 1 m</td>
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<td>NI050225</td>
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<td>NI050231</td>
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<tr>
<td>NI050236</td>
<td>Thickness: 0.10mm, Coil width: 10mm, Temper: As rolled, Length: 1 m to 20 m</td>
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<tr>
<td>NI050237</td>
<td>Thickness: 0.10mm, Coil width: 25.4mm, Temper: As rolled, Length: 0.5 m to 10 m</td>
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<td>NI050270</td>
<td>Thickness: 0.18mm, Temper: As rolled, Coil width 185 mm, Size: 25x25 mm to 150x150 mm</td>
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<td>NI050274</td>
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<td>NI050280</td>
<td>Thickness: 0.25mm, Temper: As rolled, Coil width 150 mm, Size: 25x25 mm to 150x150 mm</td>
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<tr>
<td>NI050300</td>
<td>Thickness: 0.4mm, Temper: As rolled, Coil width 100 mm, Size: 50x50 mm to 100x100 mm</td>
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<td>NI050320</td>
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<tr>
<td><strong>Sheet</strong></td>
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<tr>
<td>Sheet</td>
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<td>NI053150 Thickness: 1.0mm, Temper: Annealed, Size: 100x100 mm to 200x200 mm</td>
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<td>NI053200</td>
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<tr>
<td><strong>Wire</strong></td>
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<tr>
<td>Wire</td>
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<td>NI055076 Diameter: 0.0076mm, Temper: As drawn</td>
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<td>NI055100</td>
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<td>NI055101</td>
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<td>NI055110</td>
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<tr>
<td>NI055111</td>
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<td>NI055114</td>
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<td>NI055113</td>
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<td>NI055116</td>
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<td>NI055118</td>
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<td>NI055120</td>
<td>Diameter: 0.125mm, Temper: Hard</td>
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<td>NI055125</td>
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<td>NI055130</td>
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<td>NI055131</td>
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<td>NI055135</td>
<td>Diameter: 0.30mm, Temper: Annealed</td>
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<td>NI055140</td>
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<td>NI055160</td>
<td>Diameter: 2.0mm, Temper: Hard</td>
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<tr>
<td><strong>Insulated Wire</strong></td>
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<td>Insulated Wire</td>
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<td>NI055820 Conductor diameter: 0.0125mm, Insulation thickness: 0.003mm, Insulation: Polyimide</td>
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<tr>
<td><strong>Rod</strong></td>
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<tr>
<td>Rod</td>
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<td>NI057910 Diameter: 3.0mm, Length: 100 mm to 1000 mm</td>
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<td>NI057915</td>
<td>Diameter: 4.0mm, Length: 100 mm to 1000 mm</td>
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<td>NI057917</td>
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<td>NI057930</td>
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<td>Alloys — High Permeability Magnetic Alloy</td>
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<tr>
<td><strong>Diameter:</strong> 9.7mm, Length: 328 mm</td>
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<td><strong>Diameter:</strong> 12.0mm, Length: 100 mm to 1000 mm</td>
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<tr>
<td><strong>Diameter:</strong> 19.0mm, Length: 100 mm to 200 mm</td>
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<td><strong>Diameter:</strong> 20.0mm, Length: 100 mm to 1000 mm</td>
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<tr>
<td><strong>Tube</strong></td>
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<tr>
<td><strong>Outside Diameter:</strong> 0.56mm, Wall Thickness: 0.025mm, Inside Diameter: 0.51mm, Length: 100 mm to 1000 mm</td>
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<td><strong>Outside Diameter:</strong> 1.3mm, Wall Thickness: 0.25mm, Inside Diameter: 0.8mm, Length: 100 mm to 1000 mm</td>
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<tr>
<td><strong>Powder</strong></td>
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</tr>
<tr>
<td><strong>Max. Particle size:</strong> 75micron</td>
<td></td>
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</tr>
<tr>
<td><strong>Lump</strong></td>
<td></td>
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</tr>
<tr>
<td><strong>Max. Lump size:</strong> 10mm, Condition: Pellets</td>
<td></td>
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</tr>
<tr>
<td><strong>High Permeability Magnetic Alloy</strong></td>
<td></td>
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</tr>
<tr>
<td><strong>(Ni80/Fe15/Mo 5)</strong></td>
<td></td>
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</tr>
<tr>
<td><strong>Foil</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Thickness:</strong> 0.0075mm, Size: 25x25 mm to 100x100 mm</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Thickness:</strong> 0.012mm, Size: 25x25 mm to 100x100 mm</td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Nickel/Iron/Molybdenum</strong></td>
<td></td>
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</tr>
<tr>
<td><strong>(Ni80/Fe15.5/Mo 4.5)</strong></td>
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</tr>
<tr>
<td><strong>Foil</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Thickness:</strong> 0.5mm, Temper: Annealed, Size: 50x50 mm to 300x300 mm</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Thickness:</strong> 1.0mm, Temper: Annealed, Size: 50x50 mm to 300x300 mm</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Thickness:</strong> 2.0mm, Temper: Annealed, Size: 50x50 mm to 300x300 mm</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Thickness:</strong> 3.0mm, Temper: Annealed, Size: 76x76 mm to 150x150 mm</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Thickness:</strong> 3.5mm, Temper: Annealed, Size: 76x76 mm to 150x150 mm</td>
<td></td>
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</tr>
<tr>
<td><strong>Sheet</strong></td>
<td></td>
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</tr>
<tr>
<td><strong>Thickness:</strong> 15mm, Size: 108x108 mm</td>
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<tr>
<td><strong>Sputtering Target</strong></td>
<td></td>
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</tr>
<tr>
<td><strong>Thickness:</strong> 3mm, Size: 50.8 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Wire</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Diameter:</strong> 0.5mm, Temper: As drawn</td>
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</tr>
<tr>
<td><strong>Diameter:</strong> 1.0mm, Temper: As drawn</td>
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<tr>
<td><strong>Rod</strong></td>
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</tr>
<tr>
<td><strong>Diameter:</strong> 2.0mm, Temper: As drawn, Length: 100 mm to 1000 mm</td>
<td></td>
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</tr>
<tr>
<td><strong>Diameter:</strong> 3.2mm, Temper: As drawn, Length: 100 mm to 1000 mm</td>
<td></td>
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</tr>
<tr>
<td><strong>Nickel/Iron (Ni80/Fe20)</strong></td>
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<tr>
<td><strong>Foil</strong></td>
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<td></td>
</tr>
<tr>
<td><strong>Thickness:</strong> 1.0mm, Temper: As rolled, Size: 25x25 mm to 100x100 mm</td>
<td></td>
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</tr>
<tr>
<td><strong>Thickness:</strong> 3.0mm, Temper: As rolled, Size: 25x25 mm to 50x50 mm</td>
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<tr>
<td><strong>Lump</strong></td>
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</tr>
<tr>
<td><strong>Max. Lump size:</strong> 5mm</td>
<td></td>
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</tr>
<tr>
<td><strong>Max. Lump size:</strong> 5mm, Condition: Pellets</td>
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</tr>
<tr>
<td><strong>Nickel/Molybdenum (Ni80/Mo20)</strong></td>
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</tr>
<tr>
<td><strong>Powder</strong></td>
<td></td>
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</tr>
<tr>
<td><strong>Max. Particle size:</strong> 150micron, Condition: Alloy Pre-cursor</td>
<td></td>
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</tr>
<tr>
<td><strong>Nickel/Iron (Ni81/Fe19)</strong></td>
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<tr>
<td><strong>Powder</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Max. Particle size:</strong> 45micron, Condition: Atomized</td>
<td></td>
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</tr>
<tr>
<td><strong>Nickel/Molybdenum (Ni84/Mo16)</strong></td>
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<tr>
<td><strong>Powder</strong></td>
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</tr>
<tr>
<td><strong>Max. Particle size:</strong> 45micron, Condition: Alloy Pre-cursor</td>
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</tr>
<tr>
<td><strong>Nickel/Boron (Ni85/B 15)</strong></td>
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<tr>
<td><strong>Powder</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Max. Particle size:</strong> 150micron, Condition: Alloy Pre-cursor</td>
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</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Alloys — T1 - Thermocouple Alloy (Ni90/Cr10)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Conductor diameter:</strong> 0.05mm, <strong>Insulation thickness:</strong> 0.003mm, <strong>Insulation:</strong> Polyimide, <strong>Thermocouple wire:</strong> May be used as one component of a Thermocouple</td>
<td></td>
</tr>
<tr>
<td><strong>Conductor diameter:</strong> 0.05mm, <strong>Insulation thickness:</strong> 0.005mm, <strong>Insulation:</strong> Polyurethane, <strong>Thermocouple wire:</strong> May be used as one component of a Thermocouple</td>
<td></td>
</tr>
<tr>
<td><strong>Conductor diameter:</strong> 0.08mm, <strong>Insulation thickness:</strong> 0.007mm, <strong>Insulation:</strong> Polyimide, <strong>Thermocouple wire:</strong> May be used as one component of a Thermocouple</td>
<td></td>
</tr>
<tr>
<td><strong>Conductor diameter:</strong> 0.125mm, <strong>Insulation thickness:</strong> 0.008mm, <strong>Insulation:</strong> Polyimide, <strong>Thermocouple wire:</strong> May be used as one component of a Thermocouple</td>
<td></td>
</tr>
<tr>
<td><strong>Conductor diameter:</strong> 0.125mm, <strong>Insulation thickness:</strong> 0.015mm, <strong>Insulation:</strong> Polyester, <strong>Thermocouple wire:</strong> May be used as one component of a Thermocouple</td>
<td></td>
</tr>
<tr>
<td><strong>Conductor diameter:</strong> 0.25mm, <strong>Insulation thickness:</strong> 0.018mm, <strong>Insulation:</strong> Polyester, <strong>Thermocouple wire:</strong> May be used as one component of a Thermocouple</td>
<td></td>
</tr>
<tr>
<td><strong>Conductor diameter:</strong> 0.25mm, <strong>Insulation thickness:</strong> 0.04mm, <strong>Insulation:</strong> Polyimide, <strong>Thermocouple wire:</strong> May be used as one component of a Thermocouple</td>
<td></td>
</tr>
<tr>
<td><strong>Conductor diameter:</strong> 0.125mm, <strong>Insulation thickness:</strong> 0.007mm, <strong>Insulation:</strong> Polyimide, <strong>Thermocouple wire:</strong> May be used as one component of a Thermocouple</td>
<td></td>
</tr>
<tr>
<td><strong>Conductor diameter:</strong> 0.05mm, <strong>Insulation thickness:</strong> 0.005mm, <strong>Insulation:</strong> Polyurethane, <strong>Thermocouple wire:</strong> May be used as one component of a Thermocouple</td>
<td></td>
</tr>
<tr>
<td><strong>Conductor diameter:</strong> 0.05mm, <strong>Insulation thickness:</strong> 0.003mm, <strong>Insulation:</strong> Polyimide, <strong>Thermocouple wire:</strong> May be used as one component of a Thermocouple</td>
<td></td>
</tr>
<tr>
<td><strong>Conductor diameter:</strong> 0.05mm, <strong>Insulation thickness:</strong> 0.002mm, <strong>Insulation:</strong> Polyimide, <strong>Thermocouple wire:</strong> May be used as one component of a Thermocouple</td>
<td></td>
</tr>
</tbody>
</table>

**Chromel** (Hoskins Manufacturing Company)

**Sputtering Target**

**Insulated Wire**

**Microfoil**

**Foil**

**Wire**

**Rod**

**Nickel/Iron (Ni90/Fe10)**

**Nickel/Titanium (Ni90/Ti10)**

**Nickel/Manganese (Ni92/Mn 8)**

**Nickel/Vanadium (Ni93/V 7)**

**Sputtering Target**

**Lump**

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## Alloys

### T2 - Thermocouple Alloy (Ni95/(Al + Mn + Si) 5)

**Alumel** (Hoskins Manufacturing Company)

<table>
<thead>
<tr>
<th>Foil</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NI100260</strong></td>
<td>Thickness: 0.25mm, Coil width: 100mm, Temper: Annealed, Length: 0.1 m to 2 m</td>
</tr>
<tr>
<td><strong>NI100280</strong></td>
<td>Thickness: 0.50mm, Coil width: 100mm, Temper: Annealed, Length: 0.1 m to 1 m</td>
</tr>
<tr>
<td><strong>NI100300</strong></td>
<td>Thickness: 0.6mm, Coil width: 38mm, Temper: Annealed, Length: 0.2 m to 5 m</td>
</tr>
</tbody>
</table>

**Sputtering Target**

<table>
<thead>
<tr>
<th>Wire</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NI105105</strong></td>
<td>Diameter: 0.0075mm, Temper: Annealed, <strong>Thermocouple wire</strong>: May be used as one component of a Thermocouple</td>
</tr>
<tr>
<td><strong>NI105108</strong></td>
<td>Diameter: 0.01mm, Temper: Annealed, <strong>Thermocouple wire</strong>: May be used as one component of a Thermocouple</td>
</tr>
<tr>
<td><strong>NI105110</strong></td>
<td>Diameter: 0.025mm, Temper: Annealed, <strong>Thermocouple wire</strong>: May be used as one component of a Thermocouple</td>
</tr>
<tr>
<td><strong>NI105120</strong></td>
<td>Diameter: 0.05mm, Temper: Annealed, <strong>Thermocouple wire</strong>: May be used as one component of a Thermocouple</td>
</tr>
<tr>
<td><strong>NI105130</strong></td>
<td>Diameter: 0.125mm, Temper: Annealed, <strong>Thermocouple wire</strong>: May be used as one component of a Thermocouple</td>
</tr>
<tr>
<td><strong>NI105140</strong></td>
<td>Diameter: 0.25mm, Temper: Annealed, <strong>Thermocouple wire</strong>: May be used as one component of a Thermocouple</td>
</tr>
<tr>
<td><strong>NI105150</strong></td>
<td>Diameter: 0.5mm, Temper: Annealed, <strong>Thermocouple wire</strong>: May be used as one component of a Thermocouple</td>
</tr>
<tr>
<td><strong>NI105160</strong></td>
<td>Diameter: 1.0mm, Temper: Annealed, <strong>Thermocouple wire</strong>: May be used as one component of a Thermocouple</td>
</tr>
</tbody>
</table>

**Insulated Wire**

<table>
<thead>
<tr>
<th>Wire</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NI105810</strong></td>
<td>Conductor diameter: 0.025mm, Insulation thickness: 0.002mm, Insulation: Polyester, <strong>Thermocouple wire</strong>: May be used as one component of a Thermocouple</td>
</tr>
<tr>
<td><strong>NI105815</strong></td>
<td>Conductor diameter: 0.025mm, Insulation thickness: 0.004mm, Insulation: Polyimide, <strong>Thermocouple wire</strong>: May be used as one component of a Thermocouple</td>
</tr>
<tr>
<td><strong>NI105820</strong></td>
<td>Conductor diameter: 0.05mm, Insulation thickness: 0.002mm, Insulation: Polyester, <strong>Thermocouple wire</strong>: May be used as one component of a Thermocouple</td>
</tr>
<tr>
<td><strong>NI105825</strong></td>
<td>Conductor diameter: 0.05mm, Insulation thickness: 0.003mm, Insulation: Polyimide, <strong>Thermocouple wire</strong>: May be used as one component of a Thermocouple</td>
</tr>
</tbody>
</table>

### Nickel/Cobalt (Ni97/Co 3)

**Powder**

<table>
<thead>
<tr>
<th>Sphere</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NE296011</strong></td>
<td>Mean Particle size: 50micron, Condition: Gas atomized, <strong>Condition</strong>: Spherical</td>
</tr>
<tr>
<td><strong>NE296010</strong></td>
<td>Max. Particle size: 150micron, Condition: Gas atomized, <strong>Condition</strong>: Spherical</td>
</tr>
</tbody>
</table>

**Nickel/Beryllium/Titanium (Ni97.5/Be 1.95/Ti 0.5)**

<table>
<thead>
<tr>
<th>Foil</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NI108020</strong></td>
<td>Thickness: 0.01mm, Coil width 75 mm, Size: 25x25 mm to 50x50 mm</td>
</tr>
<tr>
<td><strong>NI108025</strong></td>
<td>Thickness: 0.2mm, Coil width 100 mm, Size: 50x50 mm to 100x100 mm</td>
</tr>
</tbody>
</table>

**OFHC Copper (OFHC)**

<table>
<thead>
<tr>
<th>Wire</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PB035138</strong></td>
<td>Diameter: 0.9mm, Temper: As drawn</td>
</tr>
<tr>
<td><strong>PB035140</strong></td>
<td>Diameter: 1mm, Temper: As drawn</td>
</tr>
</tbody>
</table>

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**Goodfellow Corporation**

February 2017

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## Alloys

### Lead/Bismuth (Pb90/Bi10 (Atomic %))
- **Foil**
  - PB090300: Thickness: 1.0mm, Temper: As rolled, Size: 25x25 mm to 50x50 mm

### Antimonial Lead (Pb95/Sb 5)
- **Powder**
  - PB126010: Max. Particle size: 250micron, Min. Particle size: 150micron

### Antimonial Lead (Pb96/Sb 4)
- **Foil**
  - PB020400: Thickness: 2.0mm, Temper: As rolled, Size: 25x25 mm to 50x50 mm

### Lead/Selenium (Pb99/Se 1)
- **Granule**
  - PB106300: Nominal Granule Size: 5mm, Condition: Alloy Pre-cursor

### Palladium/Copper (Pd60/Cu40)
- **Foil**
  - PD120220: Thickness: 0.025mm, Size: 25x25 mm to 50x50 mm
  - PD120300: Thickness: 0.5mm, Size: 25x25 mm to 50x50 mm

### Palladium/Silver (Pd70/Ag30)
- **Foil**
  - PD070240: Thickness: 0.15mm, Temper: As rolled, Size: 25x25 mm to 100x100 mm

### Palladium/Silver (Pd75/Ag25)
- **Foil**
  - PD030210: Thickness: 0.01mm, Size: 25x25 mm to 50x50 mm
  - PD030350: Thickness: 0.25mm, Size: 25x25 mm to 100x100 mm

### Palladium/Silver (Pd77/Ag23)
- **Foil**
  - PD270250: Thickness: 0.125mm, Temper: As rolled, Size: 25x25 mm to 50x50 mm
  - PD270300: Thickness: 0.25mm, Temper: As rolled, Size: 25x25 mm to 50x50 mm

### Palladium/Chromium (Pd94/Cr 6)
- **Foil**
  - PJ010240: Thickness: 0.08mm, Temper: As rolled, Size: 25x25 mm to 60x60 mm
  - PJ010300: Thickness: 0.5mm, Temper: As rolled, Size: 15x15 mm to 60x60 mm

### Palladium/Nickel (Pd95/Ni 5)
- **Mesh**
  - PJ088710: Nominal Aperture: 0.20mm, Wire diameter: 0.076mm, Wire/inch: 92, Open area: 52.5%, Type: Plain weave mesh, Size: 20x20 mm to 100x100 mm

### Platinum/Rhodium (Pt60/Rh40)
- **Foil**
  - PT280240: Thickness: 0.125mm, Temper: As rolled, Size: 25x25 mm

### Platinum/Iridium (Pt70/Ir30)
- **Foil**
  - PT050250: Thickness: 0.125mm, Size: 25x25 mm to 100x100 mm

### Platinum/Rhodium (Pt70/Rh30)
- **Wire**
  - PT285130: Diameter: 0.125mm, Temper: As drawn
  - PT285140: Diameter: 0.25mm, Temper: As drawn
  - PT285150: Diameter: 0.5mm, Temper: As drawn
  - PT285155: Diameter: 0.8mm, Temper: As drawn
  - PT285160: Diameter: 1.0mm, Temper: As drawn

### Platinum/Iridium (Pt75/Ir25)
- **Wire**
  - PT065120: Diameter: 0.05mm, Temper: Annealed
  - PT065140: Diameter: 0.25mm, Temper: Annealed
  - PT065160: Diameter: 1.0mm, Temper: Annealed

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February 2017
## Alloys

### Platinum/Iridium (Pt80/Ir20)

**Foil**
- PT040225 Thickness: 0.01mm, Temper: As rolled, Size: 25x25 mm to 100x100 mm
- PT040230 Thickness: 0.0125mm, Temper: As rolled, Size: 25x25 mm to 100x100 mm
- PT040240 Thickness: 0.025mm, Temper: As rolled, Size: 25x25 mm to 100x100 mm
- PT040250 Thickness: 0.05mm, Temper: As rolled, Size: 25x25 mm to 100x100 mm
- PT040300 Thickness: 0.25mm, Temper: As rolled, Size: 25x25 mm to 50x50 mm
- PT040400 Thickness: 2.0mm, Temper: As rolled, Size: 25x25 mm to 50x50 mm

**Rod**
- PT047913 Diameter: 1.3mm, Temper: As drawn, Length: 25 mm to 200 mm
- PT047918 Diameter: 1.8mm, Temper: As drawn, Length: 10 mm to 50 mm

### Platinum/Rhodium (Pt80/Rh20)

**Wire**
- PC115130 Diameter: 0.25mm
- PC115140 Diameter: 0.5mm
- PC115150 Diameter: 1.0mm

### Platinum/Rhodium (Pt83/Rh17)

**Wire**
- PT265150 Diameter: 0.5mm, Temper: As drawn

### Platinum/Iridium (Pt85/Ir15)

**Wire**
- PC135160 Diameter: 1.0mm, Temper: As drawn

### Platinum/Rhodium (Pt87/Rh13)

**Wire**
- PT035050 Diameter: 0.015mm, Temper: Annealed
- PT035100 Diameter: 0.025mm, Temper: Annealed, Condition: Straight wire

### Platinum/Iridium (Pt90/Ir10)

**Foil**
- PT020235 Thickness: 0.025mm, Temper: As rolled, Size: 25x25 mm to 100x100 mm
- PT020240 Thickness: 0.05mm, Temper: As rolled, Size: 25x25 mm to 100x100 mm
- PT020245 Thickness: 0.10mm, Temper: As rolled, Size: 25x25 mm to 100x100 mm
- PT020250 Thickness: 0.125mm, Temper: As rolled, Size: 25x25 mm to 100x100 mm
- PT020260 Thickness: 0.25mm, Temper: As rolled, Size: 25x25 mm to 100x100 mm
- PT020300 Thickness: 1.0mm, Temper: As rolled, Size: 25x25 mm to 50x50 mm
- PT020350 Thickness: 2.0mm, Temper: As rolled, Size: 25x25 mm to 50x50 mm

**Wire**
- PT025095 Diameter: 0.0125mm, Temper: As drawn
- PT025098 Diameter: 0.015mm, Temper: As drawn
- PT025100 Diameter: 0.025mm, Temper: As drawn
- PT025103 Diameter: 0.03mm, Temper: As drawn
- PT025110 Diameter: 0.05mm, Temper: As drawn
- PT025115 Diameter: 0.075mm, Temper: As drawn
- PT025120 Diameter: 0.1mm, Temper: As drawn
- PT025130 Diameter: 0.125mm, Temper: As drawn
- PT025135 Diameter: 0.15mm, Temper: As drawn
- PT025140 Diameter: 0.25mm, Temper: As drawn
- PT025141 Diameter: 0.25mm, Temper: Annealed
- PT025143 Diameter: 0.3mm, Temper: As drawn
- PT025145 Diameter: 0.38mm, Temper: As drawn
- PT025340 Diameter: 0.45mm, Temper: As drawn, Condition: Straight wire
- PT025150 Diameter: 0.5mm, Temper: As drawn
- PT025160 Diameter: 1.0mm, Temper: As drawn

**Insulated Wire**
- PT025825 Conductor diameter: 0.025mm, Insulation thickness: 0.005mm, Purity: 99.999%, Insulation: PTFE (Polytetrafluoroethylene)

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## Alloys

### Platinum/Rhodium (Pt90/Rh10)

**Foil**
- **PT010250** Thickness: 0.125mm, Size: 25x25 mm to 100x100 mm

**Wire**
- **PT015105** Diameter: 0.005mm, Condition: Wollaston wire, **T h e r m o c o u p l e w i r e**: May be used as one component of a Thermocouple
- **PT015110** Diameter: 0.025mm, Temper: Annealed, **T h e r m o c o u p l e w i r e**: May be used as one component of a Thermocouple
- **PT015120** Diameter: 0.05mm, Temper: Annealed, **T h e r m o c o u p l e w i r e**: May be used as one component of a Thermocouple
- **PT015130** Diameter: 0.125mm, Temper: Annealed, **T h e r m o c o u p l e w i r e**: May be used as one component of a Thermocouple
- **PT015140** Diameter: 0.25mm, Temper: Annealed, **T h e r m o c o u p l e w i r e**: May be used as one component of a Thermocouple
- **PT015145** Diameter: 0.30mm, Temper: Annealed, **T h e r m o c o u p l e w i r e**: May be used as one component of a Thermocouple
- **PT015148** Diameter: 0.38mm, Temper: Annealed, **T h e r m o c o u p l e w i r e**: May be used as one component of a Thermocouple
- **PT015150** Diameter: 0.5mm, Temper: Annealed, **T h e r m o c o u p l e w i r e**: May be used as one component of a Thermocouple
- **PT015160** Diameter: 1.0mm, Temper: Annealed, **T h e r m o c o u p l e w i r e**: May be used as one component of a Thermocouple

### Platinum/Rhodium (Pt94/Rh6)

**Wire**
- **PT017180** Outside Diameter: 1.6mm, Wall Thickness: 0.3mm, Inside Diameter: 1mm, Temper: As drawn, Length: 50 mm to 100 mm
- **PT017200** Outside Diameter: 2.0mm, Wall Thickness: 0.4mm, Inside Diameter: 1.2mm, Temper: As drawn, Length: 50 mm to 100 mm
- **PT017240** Outside Diameter: 3.18mm, Wall Thickness: 0.125mm, Inside Diameter: 2.93mm, Temper: As drawn, Length: 50 mm to 100 mm

### Platinum/Tungsten (Pt92/W8)

**Wire**
- **PT105120** Diameter: 0.025mm, Temper: As drawn
- **PT105125** Diameter: 0.05mm, Temper: As drawn
- **PT105150** Diameter: 0.5mm, Temper: As drawn

### Insulated Wire
- **PT016825** Conductor diameter: 0.025mm, Insulation thickness: 0.007mm, Insulation: Polyimide

### Platinum/Rhodium (Pt94/Rh6)

**Foil**
- **PT010250** Thickness: 0.125mm, Size: 25x25 mm to 100x100 mm

**Wire**
- **PT075100** Diameter: 0.1mm, Temper: Annealed
- **PT075120** Diameter: 0.25mm, Temper: Annealed
- **PT075130** Diameter: 0.50mm, Temper: Annealed
- **PT075140** Diameter: 1.0mm, Temper: Annealed

### Platinum/Iridium (Pt95/Ir5)

**Wire**
- **PT245140** Diameter: 0.33mm, Temper: As drawn

### Silicon/Germanium (Si70/Ge30)

**Lump**
- **SI056100** Max. Lump size: 50mm, Condition: Broken ingot

### Tin/Lead (Sn50/Pb50)

**Powder**
- **SN076010** Max. Particle size: 75micron, Condition: Spherical

**Lump**
- **SN076100** Max. Lump size: 100mm

### Tin/Lead/Antimony (Sn60/Pb39/Sb1)

**Foil**
- **SN010200** Thickness: 0.006mm, Size: 50x50 mm to 300x300 mm

**Lump**
- **SN010300** Thickness: 0.10mm, Coil width 90 mm, Size: 20x25 mm to 50x200 mm

### Tin/Lead (Sn60/Pb40)

**Wire**
- **SN255150** Diameter: 1mm, Temper: As drawn

### Tin/Lead/Silver (Sn62/Pb36/Ag2)

**Foil**
- **SA190300** Thickness: 0.5mm, Temper: As rolled, Size: 15x15 mm to 30x30 mm
<table>
<thead>
<tr>
<th>Alloys</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tin/Zinc (Sn75/Zn25)</td>
<td>Foil SA200360 Thickness: 0.6mm, Temper: As rolled, Size: 25x25 mm to 50x50 mm</td>
</tr>
<tr>
<td>Tin/Antimony (Sn95/Sb 5)</td>
<td>Powder SA056010 Max. Particle size: 45micron, SA056020 Max. Particle size: 250micron</td>
</tr>
<tr>
<td>Tin/Silver (Sn96/Ag 4)</td>
<td>Wire SN175120 Diameter: 0.27mm, Temper: As drawn, SN175140 Diameter: 0.50mm, Temper: As drawn, SN175150 Diameter: 1.0mm, Temper: As drawn, SN175170 Diameter: 1.5mm, Temper: As drawn</td>
</tr>
<tr>
<td>Tantalum/Tungsten (Ta90/W 10)</td>
<td>Foil TA030450 Thickness: 0.075mm, Temper: Annealed, Size: 25x25 mm to 100x100 mm</td>
</tr>
<tr>
<td>Tantalum/Tungsten (Ta95/W 5)</td>
<td>Foil TA090500 Thickness: 1.0mm, Temper: As rolled, Size: 50x50 mm to 100x100 mm</td>
</tr>
<tr>
<td>Tantalum/Tungsten (Ta97.5/W 2.5)</td>
<td>Foil TA070500 Thickness: 1.0mm, Temper: As rolled, Size: 50x50 mm to 100x100 mm</td>
</tr>
</tbody>
</table>

**Titanium/Iron (Ti50/Fe50)**

- Powder Ti176010 Max. Particle size: 150micron, Condition: Alloy Pre-cursor

**Titanium/Aluminum (Ti65/Al35)**

- Powder Ti066010 Max. Particle size: 75micron, Condition: Alloy Pre-cursor

**Titanium/Vanadium/Chromium/Aluminum (Ti69/V 15/Cr13/Al 3)**

- Foil TJ110350 Thickness: 0.038mm, Temper: Annealed, Size: 25x25 mm to 100x100 mm

**Titanium Bronze (Ti75/Cu25)**

- Powder Ti136010 Max. Particle size: 45micron, Condition: Alloy Pre-cursor

**Titanium Alloy Beta 3 (Ti77.5/Mo12/Zr 6/Sn4.5)**

- Foil TJ054000 Thickness: 0.42mm, Temper: Annealed, Condition: Precipitation hardenable, Coil width 150 mm, Size: 25x25 mm to 150x150 mm

**Titanium/Aluminum (Ti78/Al22)**

- Powder Ti106010 Max. Particle size: 75micron, Condition: Alloy Pre-cursor

**Titanium/Molybdenum/Niobium/Aluminum/Silicon (Ti78.8/Mo15/Nb 3/Al 3/Si 0.2)**

- Foil TJ140250 Thickness: 0.5mm, Temper: As rolled, Size: 50x50 mm to 100x100 mm

**Titanium/Chromium (Ti80/Cr20)**

- Powder Ti146010 Max. Particle size: 75micron, Condition: Alloy Pre-cursor

**Titanium/Molybdenum (Ti84/Mo16)**

- Powder TI186010 Max. Particle size: 150micron, Condition: Alloy Pre-cursor

**Titanium/Molybdenum (Ti85/Mo15)**

- Wire TI085150 Diameter: 1.0mm, Temper: As drawn
## Alloys

### Rod

<table>
<thead>
<tr>
<th>Diameter:</th>
<th>TI017902</th>
<th>Diameter: 2.0mm, Temper: Annealed, Length: 100 mm to 1000 mm</th>
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</thead>
<tbody>
<tr>
<td>Diameter:</td>
<td>TI017908</td>
<td>Diameter: 3.0mm, Temper: Annealed, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>Diameter:</td>
<td>TI017909</td>
<td>Diameter: 5.0mm, Temper: Annealed, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>Diameter:</td>
<td>TI017910</td>
<td>Diameter: 7.0mm, Temper: Annealed, Length: 100 mm to 1000 mm</td>
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<tr>
<td>Diameter:</td>
<td>TI017911</td>
<td>Diameter: 10.0mm, Length: 50 mm to 1000 mm</td>
</tr>
<tr>
<td>Diameter:</td>
<td>TI017912</td>
<td>Diameter: 12.7mm, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>Diameter:</td>
<td>TI017913</td>
<td>Diameter: 16.0mm, Length: 100 mm to 500 mm</td>
</tr>
<tr>
<td>Diameter:</td>
<td>TI017914</td>
<td>Diameter: 20.0mm, Length: 100 mm to 500 mm</td>
</tr>
<tr>
<td>Diameter:</td>
<td>TI017915</td>
<td>Diameter: 25.0mm, Length: 50 mm to 200 mm</td>
</tr>
<tr>
<td>Diameter:</td>
<td>TI017916</td>
<td>Diameter: 30.0mm, Length: 50 mm to 200 mm</td>
</tr>
<tr>
<td>Diameter:</td>
<td>TI017917</td>
<td>Diameter: 35.0mm, Length: 50 mm to 200 mm</td>
</tr>
<tr>
<td>Diameter:</td>
<td>TI017918</td>
<td>Diameter: 50mm, Length: 50 mm to 300 mm</td>
</tr>
<tr>
<td>Diameter:</td>
<td>TI017919</td>
<td>Diameter: 101.6mm, Length: 67 mm to 200 mm</td>
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### Powder

<table>
<thead>
<tr>
<th>Max. Particle size:</th>
<th>TI017920</th>
<th>150micron, Condition: Alloy Pre-cursor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Particle size:</td>
<td>TI017921</td>
<td>45micron, Condition: Spherical</td>
</tr>
<tr>
<td>Max. Particle size:</td>
<td>TI017922</td>
<td>200micron, Min. Particle size: 150micron, Condition: Spherical</td>
</tr>
<tr>
<td>Max. Particle size:</td>
<td>TI017923</td>
<td>450micron, Condition: Spherical</td>
</tr>
</tbody>
</table>

### Foil

| Thickness: | TI017924 | 0.1mm, Temper: Annealed, Size: 50x50 mm to 300x300 mm |
| Thickness: | TI017925 | 0.2mm, Temper: Annealed, Size: 50x50 mm to 300x300 mm |
| Thickness: | TI017926 | 0.3mm, Temper: Annealed, Size: 50x50 mm to 300x300 mm |
| Thickness: | TI017927 | 0.4mm, Temper: Annealed, Size: 50x50 mm to 300x300 mm |
| Thickness: | TI017928 | 0.5mm, Temper: Annealed, Size: 50x50 mm to 300x300 mm |
| Thickness: | TI017929 | 0.6mm, Temper: Annealed, Size: 50x50 mm to 300x300 mm |
| Thickness: | TI017930 | 0.7mm, Temper: Annealed, Size: 50x50 mm to 300x300 mm |
| Thickness: | TI017931 | 0.8mm, Temper: Annealed, Size: 50x50 mm to 300x300 mm |
| Thickness: | TI017932 | 0.9mm, Temper: Annealed, Size: 50x50 mm to 300x300 mm |
| Thickness: | TI017933 | 1.0mm, Temper: Annealed, Size: 50x50 mm to 300x300 mm |

### Wire

| Diameter: | TI017934 | 0.1mm, Temper: Annealed |
| Diameter: | TI017935 | 0.2mm, Temper: As drawn |
| Diameter: | TI017936 | 0.5mm, Temper: Annealed |
| Diameter: | TI017937 | 1.0mm, Temper: Annealed |

### Rod

| Diameter: | TI017938 | Diameter: 1.0mm, Temper: Annealed, Condition: Cold drawn, Length: 100 mm to 1000 mm |
| Diameter: | TI017939 | Diameter: 2.0mm, Temper: Annealed, Condition: Cold drawn, Length: 200 mm to 1000 mm |

---

**Titanium/Aluminum (Ti88/Al12)**

- Diameter: TI017905
- Diameter: TI017902

**Titanium/Aluminum/Vanadium (Ti90/Al 6/V 4)**

- Diameter: TI017908
- Diameter: TI017909

**Titanium/Aluminum/Vanadium (Ti90/V 10)**

- Diameter: TI017910
- Diameter: TI017911

**Titanium/Gallium (Ti92/Ga 8)**

- Diameter: TI017912
- Diameter: TI017913

**Titanium/Silicon (Ti92/Si 8)**

- Diameter: TI017914
- Diameter: TI017915

**Titanium/Vanadium (Ti90/V 2/5)**

- Thickness: TI017916
- Thickness: TI017917

**Titanium/Palladium (Ti99.85/Pd 0.15)**

- Thickness: TI017918
- Thickness: TI017919

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### Alloys

#### Titanium/Cobalt (Ti99.95/C0 0.05)
- **Wire**
  - TK025120 Diameter: 0.25mm, Temper: As drawn

#### Vanadium/Cromium (V 75/Cr25)
- **Powder**
  - V 026010 Max. Particle size: 150micron, Condition: Alloy Pre-cursor

#### Tungsten/Cobalt (W 50/Co50)
- **Powder**
  - W 036010 Max. Particle size: 75micron, Condition: Alloy Pre-cursor

#### Tungsten/Copper (W 60/Cu40)
- **Foil**
  - W 180210 Thickness: 0.125mm, Size: 25x25 mm to 25x200 mm
  - W 180250 Thickness: 0.25mm, Size: 25x25 mm to 75x200 mm
  - W 180300 Thickness: 0.50mm, Size: 25x75 mm to 75x200 mm
  - W 180400 Thickness: 1.0mm, Size: 25x75 mm to 75x200 mm

- **Wire**
  - W 185110 Diameter: 0.25mm, Condition: Straight wire
  - W 185120 Diameter: 0.5mm, Condition: Straight wire
  - W 185140 Diameter: 1.0mm, Condition: Straight wire

- **Tube**
  - W 187100 Outside Diameter: 0.5mm, Wall Thickness: 0.13mm, Inside Diameter: 0.24mm, Length: 175 mm
  - W 187300 Outside Diameter: 3.15mm, Wall Thickness: 1.15mm, Inside Diameter: 0.85mm, Length: 80 mm to 175 mm

#### Tungsten/Copper (W 65/Cu35)
- **Foil**
  - W 100250 Thickness: 0.25mm, Size: 25x25 mm to 25x75 mm

#### Tungsten/Nickel/Iron (W 70/Ni 20/Fe 10)
- **Lump**
  - W 276100 Max. Lump size: 3mm

#### Tungsten/Copper (W 72/Cu28)
- **Copelmet®**
  - W 113100 Thickness: 3.15mm, Size: 25x25 mm to 50x200 mm

- **Rod**
  - W 117915 Diameter: 3.5mm, Length: 100 mm to 200 mm
  - W 117917 Diameter: 4.0mm, Length: 200 mm
  - W 117920 Diameter: 6.25mm, Length: 100 mm to 200 mm
  - W 117925 Diameter: 8.0mm, Length: 100 mm to 200 mm

#### Tungsten/Rhenium (W 74/Re26)
- **Wire**
  - W 125120 Diameter: 0.125mm, Temper: Annealed
  - W 125410 Diameter: 0.2mm, Temper: Annealed

#### Tungsten/Rhenium (W 75/Re25)
- **Wire**
  - W 015075 Diameter: 0.05mm, Temper: Annealed, T h e m o c o u p l e w i r e : May be used as one component of a Thermocouple
  - W 015100 Diameter: 0.075mm, Temper: Annealed, T h e m o c o u p l e w i r e : May be used as one component of a Thermocouple
  - W 015110 Diameter: 0.1mm, Temper: Annealed, T h e m o c o u p l e w i r e : May be used as one component of a Thermocouple
  - W 015120 Diameter: 0.125mm, Temper: Annealed, T h e m o c o u p l e w i r e : May be used as one component of a Thermocouple
  - W 015125 Diameter: 0.178mm, Temper: Annealed, T h e m o c o u p l e w i r e : May be used as one component of a Thermocouple
  - W 015130 Diameter: 0.2mm, Temper: Annealed, T h e m o c o u p l e w i r e : May be used as one component of a Thermocouple
  - W 015135 Diameter: 0.25mm, Temper: Annealed, T h e m o c o u p l e w i r e : May be used as one component of a Thermocouple
  - W 015138 Diameter: 0.35mm, Temper: Annealed, T h e m o c o u p l e w i r e : May be used as one component of a Thermocouple
  - W 015140 Diameter: 0.5mm, Temper: Annealed, T h e m o c o u p l e w i r e : May be used as one component of a Thermocouple
  - W 015145 Diameter: 0.75mm, Temper: Annealed, T h e m o c o u p l e w i r e : May be used as one component of a Thermocouple
  - W 015150 Diameter: 1.0mm, Temper: Annealed, T h e m o c o u p l e w i r e : May be used as one component of a Thermocouple

#### Tungsten/Copper (W 80/Cu20)
- **Foil**
  - W 160450 Thickness: 3.0mm, Size: 100x100 mm

- **Rod**
  - W 167910 Diameter: 6mm, Length: 100 mm to 200 mm
## Alloys

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Diameter</th>
<th>Length</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>W 167920</td>
<td>Diameter: 12mm, Length: 100 mm to 200 mm</td>
<td>12mm</td>
<td>100 mm to 200 mm</td>
<td></td>
</tr>
<tr>
<td>W 167940</td>
<td>Diameter: 25mm, Length: 100 mm to 200 mm</td>
<td>25mm</td>
<td>100 mm to 200 mm</td>
<td></td>
</tr>
<tr>
<td>W 167100</td>
<td>Outside Diameter: 0.5mm, Wall Thickness: 0.13mm, Inside Diameter: 0.24mm, Length: 180 mm</td>
<td>0.5mm</td>
<td>180 mm</td>
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</tbody>
</table>

### Tungsten/Silver (W 90/Ag 10)

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<tr>
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<th>Length</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>W 076010</td>
<td>Max. Particle size: 150 micron, Condition: Alloy Pre-cursor</td>
<td>25mm</td>
<td>105 mm</td>
<td></td>
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</table>

### Tungsten/Chromium (W 90/Cr 10)

<table>
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<th>Code</th>
<th>Description</th>
<th>Diameter</th>
<th>Length</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>W 025100</td>
<td>Diameter: 0.1mm, Temper: Annealed, <strong>Thermocouple wire</strong>: May be used as one component of a Thermocouple</td>
<td>0.1mm</td>
<td>150 micron, Condition: Alloy Pre-cursor</td>
<td></td>
</tr>
<tr>
<td>W 025120</td>
<td>Diameter: 0.125mm, Temper: Annealed, <strong>Thermocouple wire</strong>: May be used as one component of a Thermocouple</td>
<td>0.125mm</td>
<td>45 micron</td>
<td></td>
</tr>
<tr>
<td>W 025410</td>
<td>Diameter: 0.2mm, Temper: Annealed, <strong>Thermocouple wire</strong>: May be used as one component of a Thermocouple</td>
<td>0.2mm</td>
<td>45 micron</td>
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</tr>
<tr>
<td>W 025250</td>
<td>Diameter: 0.25mm, Temper: Annealed, <strong>Thermocouple wire</strong>: May be used as one component of a Thermocouple</td>
<td>0.25mm</td>
<td>45 micron</td>
<td></td>
</tr>
<tr>
<td>W 025350</td>
<td>Diameter: 0.5mm, Temper: Annealed, <strong>Thermocouple wire</strong>: May be used as one component of a Thermocouple</td>
<td>0.5mm</td>
<td>45 micron</td>
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<tr>
<td>W 025365</td>
<td>Diameter: 0.65mm, Temper: Annealed, <strong>Thermocouple wire</strong>: May be used as one component of a Thermocouple</td>
<td>0.65mm</td>
<td>45 micron</td>
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</tr>
<tr>
<td>W 025370</td>
<td>Diameter: 0.7mm, Temper: Annealed, <strong>Thermocouple wire</strong>: May be used as one component of a Thermocouple</td>
<td>0.7mm</td>
<td>45 micron</td>
<td></td>
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</table>

### Tungsten/Titanium (W 95/Ti 5)

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<th>Description</th>
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<th>Length</th>
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</thead>
<tbody>
<tr>
<td>W 086010</td>
<td>Max. Particle size: 45 micron, Condition: Alloy Pre-cursor</td>
<td>25mm</td>
<td>105 mm</td>
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</tr>
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</table>

### Tungsten/Rhenium (W 97/Re 3)

<table>
<thead>
<tr>
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<th>Thickness</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>W 040250</td>
<td>Thickness: 0.05mm, Coil width: 0.5mm, Temper: Annealed, Length: 0.05 m to 0.5 m</td>
<td>0.05mm</td>
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</table>

### Thoriated Tungsten (W 98/Th 2)

<table>
<thead>
<tr>
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<th>Notes</th>
</tr>
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<tbody>
<tr>
<td>W 133200</td>
<td>Thickness: 5.0mm, Temper: As rolled, Size: 16x26 mm to 65x65 mm</td>
<td>5.0mm</td>
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</table>

### Thoriated Tungsten (W 99/Th 1)

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>W 145351</td>
<td>Diameter: 0.15mm, Temper: As drawn, Condition: Clean</td>
<td>0.15mm</td>
<td>150 micron</td>
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</tr>
<tr>
<td>W 145370</td>
<td>Diameter: 0.2mm, Temper: Annealed</td>
<td>0.2mm</td>
<td>125 Hookstown Grade Road, Coraopolis, PA 15108-9302. USA</td>
<td></td>
</tr>
<tr>
<td>W 145440</td>
<td>Diameter: 0.38mm, Temper: Annealed</td>
<td>0.38mm</td>
<td>125 Hookstown Grade Road, Coraopolis, PA 15108-9302. USA</td>
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</tr>
<tr>
<td>W 145450</td>
<td>Diameter: 0.5mm, Temper: Annealed</td>
<td>0.5mm</td>
<td>125 Hookstown Grade Road, Coraopolis, PA 15108-9302. USA</td>
<td></td>
</tr>
<tr>
<td>W 145475</td>
<td>Diameter: 0.75mm, Temper: Annealed</td>
<td>0.75mm</td>
<td>125 Hookstown Grade Road, Coraopolis, PA 15108-9302. USA</td>
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</tr>
<tr>
<td>W 145500</td>
<td>Diameter: 1mm, Temper: Annealed</td>
<td>1mm</td>
<td>125 Hookstown Grade Road, Coraopolis, PA 15108-9302. USA</td>
<td></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Diameter</th>
<th>Temper</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>W 055150</td>
<td>Zinc/Aluminum (Zn50/Al50)</td>
<td>0.025mm</td>
<td>Annealed</td>
<td>Diameter: 0.025mm, Temper: Annealed</td>
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<tr>
<td>W 055200</td>
<td>Zinc/Aluminum (Zn50/Al50)</td>
<td>0.05mm</td>
<td>Annealed</td>
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<tr>
<td>W 055250</td>
<td>Zinc/Aluminum (Zn50/Al50)</td>
<td>0.1mm</td>
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<td>Diameter: 0.1mm, Temper: Annealed</td>
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<tr>
<td>W 055475</td>
<td>Zinc/Aluminum (Zn50/Al50)</td>
<td>0.75mm</td>
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<tr>
<td>W 055500</td>
<td>Zinc/Aluminum (Zn50/Al50)</td>
<td>1.0mm</td>
<td>Annealed</td>
<td>Diameter: 1.0mm, Temper: Annealed</td>
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<tr>
<td>ZN016010</td>
<td>Zinc/Copper (Zn95/Cu 5)</td>
<td>Powder</td>
<td></td>
<td>Max. Particle size: 150micron, Condition: Alloy Pre-cursor</td>
</tr>
<tr>
<td>ZN026010</td>
<td>Zinc/Copper (Zn95/Cu 5)</td>
<td>Sputtering Target</td>
<td></td>
<td>Thickness: 6.0mm, Size: 50 mm</td>
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<tr>
<td>ZN036010</td>
<td>Zinc/Nickel (Zn90/Ni10)</td>
<td>Powder</td>
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<td>Max. Particle size: 150micron, Condition: Alloy Pre-cursor</td>
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<tr>
<td>ZR046010</td>
<td>Zirconium/Nickel (Zr70/Ni30)</td>
<td>Powder</td>
<td></td>
<td>Max. Particle size: 150micron, Condition: Alloy Pre-cursor</td>
</tr>
<tr>
<td>ZR059600</td>
<td>Zamak 410 - Zinc/Aluminum/Copper/Magnesium (Zn95/Al 4/Cu 1/Mg)</td>
<td>Foam</td>
<td></td>
<td>Thickness: 20mm, Bulk density: 0.33g.cm³, Pores/cm²: 4, Size: 150x150 mm</td>
</tr>
<tr>
<td>ZR063801</td>
<td>Zamak 410 - Zinc/Aluminum/Copper/Magnesium (Zn95/Al 4/Cu 1/Mg)</td>
<td>Foam</td>
<td></td>
<td>Thickness: 50mm, Bulk density: 0.33g.cm³, Pores/cm²: 4, Size: 150x150 mm</td>
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<tr>
<td>ZR063802</td>
<td>Zamak 410 - Zinc/Aluminum/Copper/Magnesium (Zn95/Al 4/Cu 1/Mg)</td>
<td>Foam</td>
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<td>Thickness: 20mm, Bulk density: 0.33g.cm³, Pores/cm²: 4, Size: 150x150 mm</td>
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<tr>
<td>ZR063803</td>
<td>Zamak 410 - Zinc/Aluminum/Copper/Magnesium (Zn95/Al 4/Cu 1/Mg)</td>
<td>Foam</td>
<td></td>
<td>Thickness: 50mm, Bulk density: 0.33g.cm³, Pores/cm²: 4, Size: 150x150 mm</td>
</tr>
</tbody>
</table>
## Compounds

### Aluminum Borosilicide (AlBSi)
- **Powder**
  - ALS46010 Max. Particle size: 150micron

### Aluminum Carbide (Al₄C₃)
- **Powder**
  - ALS16010 Max. Particle size: 45micron, Purity: 98.0%

### Aluminum Nitride (AlN)
- **Sputtering Target**
  - ALS29300 Thickness: 3.0mm, Size: 50 mm
  - ALS29600 Thickness: 6.0mm, Size: 50 mm
- **Powder**
  - ALS26020 Max. Particle size: 50micron, Purity: 99%

### Antimony Telluride (Sb₂Te₃)
- **Lump**
  - SB506100 Max. Lump size: 10mm, Purity: 99.99%

### Arsenic Telluride (As₂Te₃)
- **Lump**
  - AS506100 Max. Lump size: 10mm, Purity: 99.99%

### Arsenic trisulphide (As₂S₃)
- **Film**
  - AS521410 Thickness: 0.1mm, Condition: Single crystal, Size: 5x5 mm

### Barium Titanate (BaTiO₃)
- **Powder**
  - BASS06010 Max. Particle size: 45micron, Purity: 98.0%

### Bismuth Telluride (Bi₂Te₃)
- **Lump**
  - BIS506100 Max. Lump size: 6mm, Purity: 99.99%

### Boron Carbide (B₄C)
- **Powder**
  - B506010 Max. Particle size: 45micron, Purity: 99%

### Boron Nitride (BN)
- **Film**
  - B511410 Thickness: 0.1mm, Condition: Single crystal, Size: 1x2 mm
- **Powder**
  - B516011 Max. Particle size: 10micron, Purity: 99.5%

### Cadmium Selenide (CdSe)
- **Lump**
  - CD516010 Max. Lump size: 15mm

### Calcium Boride (CaB₆)
- **Powder**
  - CAS526011 Max. Particle size: 45micron, Purity: 95%
  - CAS526010 Max. Particle size: 150micron, Purity: 99%

### Calcium Fluoride (CaF₂)
- **Sheet**
  - CAS53200 Thickness: 2.0mm, Tolerance: +/-0.2 mm, Condition: IR grade, Size: 10x10 mm
  - CAS53202 Thickness: 5.0mm, Tolerance: +/-0.05 mm, Condition: Polished both sides, Condition: IR grade, Diameter: 24 mm
  - CAS53205 Thickness: 10mm, Tolerance: +/-0.2 mm, Condition: Polished on all sides, Condition: IR grade, Size: 10x10 mm

### Calcium Titanate (CaTiO₃)
- **Powder**
  - CAS546010 Max. Particle size: 45micron

### Cesium Iodide (CsI)
- **Sheet**
  - CS533010 Thickness: 2.0mm, Condition: Polished both sides, Size: 5x10 mm
  - CS533011 Thickness: 2.0mm, Condition: Polished both sides, Size: 10x10 mm

### Cesium Metavanadate (CsVO₃)
- **Powder**
  - CS516010 Max. Particle size: 45micron, Purity: 99.9%

### Cesium Molybdate (Cs₂MoO₄)
- **Powder**
  - CS506011 Max. Particle size: 75micron, Purity: 99.9%

### Chromium Boride (Cr₂B)
- **Powder**
  - CRS546010 Max. Particle size: 45micron

### Chromium Carbide (Cr₃C₂)
- **Powder**
  - CRS516010 Max. Particle size: 45micron, Purity: 99.0%

### Chromium Diboride (CrB₂)
- **Powder**
  - CRS506010 Max. Particle size: 45micron, Purity: 99.0%

### Chromium Nitride (Cr₂N)
- **Powder**
  - CRS526011 Max. Particle size: 45micron, Purity: 99.0%
## Compounds

<table>
<thead>
<tr>
<th>Compounds</th>
<th>Powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromium Silicide (CrSi₂)</td>
<td>CR536020 Max. Particle size: 45micron, Purity: 99.999%</td>
</tr>
<tr>
<td>Cobalt (II) Oxide (CoO)</td>
<td></td>
</tr>
<tr>
<td>Sputtering Target</td>
<td></td>
</tr>
<tr>
<td>CO509300 Thickness: 3.0mm, Size: 50 mm</td>
<td></td>
</tr>
<tr>
<td>CO509310 Thickness: 5mm, Size: 25.4 mm</td>
<td></td>
</tr>
<tr>
<td>Cobalt Boride (Co₂B)</td>
<td></td>
</tr>
<tr>
<td>Powder</td>
<td></td>
</tr>
<tr>
<td>CO516010 Max. Particle size: 500micron</td>
<td></td>
</tr>
<tr>
<td>Copper Selenide (CuSe)</td>
<td></td>
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<tr>
<td>Powder</td>
<td></td>
</tr>
<tr>
<td>CU516100 Max. Particle size: 45micron, Purity: 99.99%</td>
<td></td>
</tr>
<tr>
<td>Cupric Oxide (CuO)</td>
<td></td>
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<tr>
<td>Powder</td>
<td></td>
</tr>
<tr>
<td>CU506010 Max. Particle size: 10micron</td>
<td></td>
</tr>
<tr>
<td>CU506020 Max. Particle size: 75micron</td>
<td></td>
</tr>
<tr>
<td>Gadolinium Oxide (Gd₂O₃)</td>
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<tr>
<td>Powder</td>
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</tr>
<tr>
<td>GD506011 Mean Particle size: 5micron</td>
<td></td>
</tr>
<tr>
<td>GD506012 Max. Particle size: 10micron</td>
<td></td>
</tr>
<tr>
<td>Gallium selenide (GaSe)</td>
<td></td>
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<tr>
<td>Film</td>
<td></td>
</tr>
<tr>
<td>GAS51410 Thickness: 0.1mm, Condition: Single crystal, Size: 1x3 mm</td>
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<tr>
<td>Graphene oxide (COH)</td>
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</tr>
<tr>
<td>Film</td>
<td></td>
</tr>
<tr>
<td>GR501012 Thickness: 0.012-0.015mm, Support: Millipore filter, Support thickness: 105 micron, Support porosity: 70%, Support material: Cellulose acetate/Cellulose nitrate, Support pore size: 0.025 micron, Diameter: 40 mm</td>
<td></td>
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<tr>
<td>Powder</td>
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</tr>
<tr>
<td>GR506010 Mean Particle size: 17micron, Condition: Aqueous dispersion, Concentration: 0.5mg/ml</td>
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<tr>
<td>GR506040 Mean Particle size: 17micron, Condition: Aqueous dispersion, Concentration: 4mg/ml</td>
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<tr>
<td>GR506050 Mean Particle size: 285micron, Condition: Reduced</td>
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<tr>
<td>Hafnium Hydride (HfH₂)</td>
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<tr>
<td>Powder</td>
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</tr>
<tr>
<td>HF526010 Max. Particle size: 75micron, Purity: 99.5%</td>
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</tr>
<tr>
<td>Hafnium Oxide (HfO₂)</td>
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<tr>
<td>Sputtering Target</td>
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<tr>
<td>HF549300 Thickness: 3mm, Condition: Hot-pressed, Size: 25.4 mm to 50.8 mm</td>
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<tr>
<td>Indium Oxide (In₂O₃)</td>
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<tr>
<td>Sputtering Target</td>
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</tr>
<tr>
<td>IN519300 Thickness: 3.0mm, Size: 50 mm</td>
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</tr>
<tr>
<td>Indium Oxide/Tin Oxide (In₂O₃ 90 /SnO₂ 10)</td>
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<tr>
<td>Sputtering Target</td>
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</tr>
<tr>
<td>IN519600 Thickness: 6.0mm, Condition: Hot-pressed, Size: 50.8 mm to 76.2 mm</td>
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<tr>
<td>Iron Boride (FeB)</td>
<td></td>
</tr>
<tr>
<td>Powder</td>
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</tr>
<tr>
<td>FE546010 Max. Particle size: 500micron</td>
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</tr>
<tr>
<td>Lump</td>
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<tr>
<td>FE546100 Max. Lump size: 10mm</td>
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<tr>
<td>Iron Boride (Fe₂B)</td>
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<tr>
<td>Powder</td>
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<tr>
<td>FF506010 Max. Particle size: 500micron</td>
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<tr>
<td>Iron Oxide (Fe₃O₄)</td>
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<tr>
<td>Powder</td>
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<tr>
<td>FE596010 Max. Particle size: 50micron, Purity: 99.9%</td>
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<tr>
<td>Iron Silicide (FeSi)</td>
<td></td>
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<tr>
<td>Powder</td>
<td></td>
</tr>
<tr>
<td>FE506020 Max. Particle size: 850micron, Purity: 99.999%</td>
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<tr>
<td>Lanthanum Fluoride (LaF₃)</td>
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<tr>
<td>Single Crystal</td>
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<tr>
<td>LA512010 Oriented: Random, Diameter: 10mm, Length: 1.5mm, Dopant: Eu</td>
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<tr>
<td>LA512025 Oriented: Random, Diameter: 6mm, Length: 4.5 mm, Dopant: Eu, Condition: Polished both sides,</td>
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<tr>
<td>LA512011 Oriented: Random, Thickness: 1.5mm, Diameter: 5mm, Dopant: Eu</td>
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<tr>
<td>LA512020 Oriented: Random, Diameter: 6mm, Length: 5mm, Dopant: Eu</td>
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<tr>
<td>Lanthanum Hexaboride (LaB₆)</td>
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<tr>
<td>Powder</td>
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</tr>
<tr>
<td>LA506010 Max. Particle size: 45micron, Purity: 99.0%</td>
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<tr>
<td>Compounds</td>
<td>Details</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
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<tr>
<td>Lanthanum Oxide (La₂O₃)</td>
<td>Powder</td>
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<tr>
<td>MG502075</td>
<td>Oriented: Uncleaved, Size: 26x7x6 mm to 30x7x4.5 mm</td>
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<tr>
<td>Lead Selenide (PbSe)</td>
<td>Powder</td>
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<tr>
<td>MG506011</td>
<td>Max. Particle size: 75micron</td>
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<tr>
<td>Lithium Fluoride (LiF)</td>
<td>Powder</td>
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<tr>
<td>MG502000</td>
<td>Oriented: (100), Purity: 99.9%, Size: 31x16x4 mm</td>
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<tr>
<td>Magnesium Fluoride (MgF₂)</td>
<td>Powder</td>
</tr>
<tr>
<td>MG506010</td>
<td>Max. Particle size: 1000micron</td>
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<tr>
<td>Magnesium Oxide (MgO)</td>
<td>Powder</td>
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<tr>
<td>MG502020</td>
<td>Oriented: (100), Purity: 99.9%, Min. Particle size: 10x10x2.1 mm</td>
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<tr>
<td>Molybdenum Carbide (Mo₂C)</td>
<td>Powder</td>
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<tr>
<td>MG506011</td>
<td>Max. Particle size: 45micron, Purity: 99.0%</td>
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<tr>
<td>Molybdenum Diboride (MoB₂)</td>
<td>Powder</td>
</tr>
<tr>
<td>MG506011</td>
<td>Max. Particle size: 10micron, Purity: 99.0%</td>
</tr>
<tr>
<td>Molybdenum Diselenide (MoSe₂)</td>
<td>Powder</td>
</tr>
<tr>
<td>MG506011</td>
<td>Max. Particle size: 10micron, Purity: 99.0%</td>
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<tr>
<td>Nickel Oxide (NiO)</td>
<td>Powder</td>
</tr>
<tr>
<td>MG502000</td>
<td>Oriented: (100), Purity: 99.9%, Size: 31x16x4 mm</td>
</tr>
<tr>
<td>Niobium Boride (NbB₂)</td>
<td>Powder</td>
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<tr>
<td>MG506011</td>
<td>Max. Particle size: 45micron, Purity: 99.0%</td>
</tr>
<tr>
<td>Niobium Carbide (NbC)</td>
<td>Powder</td>
</tr>
<tr>
<td>MG506011</td>
<td>Max. Particle size: 45micron, Purity: 99.0%</td>
</tr>
</tbody>
</table>
## Compounds

### Niobium Hydride (NbH)

- **Powder**
- **NB526010** Max. Particle size: 250micron

### Niobium Nitride (NbN)

- **Powder**
- **NB546010** Max. Particle size: 150micron, Purity: 99%

### Niobium Pentoxide (Nb₂O₅)

- **Powder**
- **NB556010** Max. Particle size: 150micron, Purity: 99.5%

### Niobium Silicide (NbSi₂)

- **Powder**
- **NB536010** Max. Particle size: 45micron, Purity: 99.0%

### Silicon Carbide (SiC)

- **Powder**
- **Si516022** Max. Particle size: 0.05micron, Purity: 99.0%, Condition: Nanopowder, Phase: Beta
- **Si516021** Mean Particle size: 0.1-1micron, Purity: 99.0%, Phase: Alpha
- **Si516017** Mean Particle size: 17micron, Color: Green
- **Si516010** Max. Particle size: 75micron, Purity: 98.7%, Phase: Alpha

### Silicon Monoxide (SiO)

- **Powder**
- **Si546010** Max. Particle size: 45micron, Purity: 99.999%

### Silicon Nitride (Si₃N₄)

- **Powder**
- **Si536015** Max. Particle size: 0.02micron, Purity: 99%, Condition: Nanopowder, Phase: Amorphous
- **Si536014** Max. Particle size: 0.8micron, Min. Particle size: 0.1micron, Purity: 99%, Condition: Nanopowder, Phase: Alpha
- **Si536020** Max. Particle size: 10micron, Condition: Alpha Si₃N₄ (85% minimum)

### Silver Chloride (AgCl)

- **Powder**
- **AG506010** Max. Particle size: 150micron

### Sodium Chloride (NaCl)

- **Single Crystal**
- **NA502100** Oriented: (100), Condition: Polished both sides, Size: 1x20x20 mm
- **NA502101** Oriented: (100), Condition: Polished both sides, Size: 1x10x10 mm
- **NA502102** Oriented: (100), Condition: Unpolished, Size: 1x20x20 mm

### Strontium Titanate (SrTiO₃)

- **Powder**
- **SR506010** Mean Particle size (FSSS): 5micron, Purity: 98.0%

### Tantalum Boride (TaB₂)

- **Powder**
- **TA516010** Max. Particle size: 45micron, Purity: 99.0%

### Tantalum Carbide (TaC)

- **Powder**
- **TA526010** Max. Particle size: 45micron

### Tantalum Pentoxide (Ta₂O₅)

- **Sputtering Target**
- **TA579300** Thickness: 3.0mm, Size: 50.8 mm to 76.2 mm

### Tantalum Silicide (TaSi₂)

- **Powder**
- **TA566010** Max. Particle size: 45micron, Purity: 99.0%

### Tin Oxide (SnO₂)

- **Sputtering Target**
- **SN509300** Thickness: 3.0mm, Condition: Hot-pressed, Size: 50 mm to 75 mm

### Tin Oxide (SnO)

- **Powder**
- **SN516010** Max. Particle size: 150micron

### Titanium Aluminide (TiAl₃)

- **Powder**
- **Ti506011** Max. Particle size: 45micron, Purity: 99.0%

### Titanium Boride (TiB₂)

- **Sputtering Target**
- **Ti519300** Thickness: 3.0mm, Size: 50 mm
- **Ti519600** Thickness: 6.0mm, Size: 50 mm

### Titanium Carbide (TiC)

- **Powder**
- **Ti546005** Mean Particle size: <0.05micron, Purity: 99.8+%, Condition: Nanopowder
- **Ti546013** Mean Particle size: 0.1micron, Purity: 98.5%
- **Ti546010** Mean Particle size (FSSS): 3micron, Purity: 98.5%
- **Ti546020** Max. Particle size: 5micron, Purity: 99.8+%
- **Ti546030** Max. Particle size: 150micron, Min. Particle size: 50micron, Purity: 99.8+%

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<table>
<thead>
<tr>
<th>Compounds</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium Hydride (TiH$_2$)</td>
<td></td>
</tr>
<tr>
<td><strong>Powder</strong></td>
<td></td>
</tr>
<tr>
<td>Ti556010 Max. Particle size: 150 micron, Purity: 99.0%</td>
<td></td>
</tr>
<tr>
<td><strong>Titanium Nitride (TiN)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Sputtering Target</strong></td>
<td></td>
</tr>
<tr>
<td>Ti569300 Thickness: 3.0mm, Condition: Hot-pressed, Size: 25.4 mm to 50.8 mm</td>
<td></td>
</tr>
<tr>
<td>Ti569000 Thickness: 6.0mm, Condition: Hot-pressed, Size: 50.8 mm to 76.2 mm</td>
<td></td>
</tr>
<tr>
<td><strong>Powder</strong></td>
<td></td>
</tr>
<tr>
<td>Ti566005 Max. Particle size: 0.02 micron, Purity: 99.0%, Condition: Nanopowder</td>
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</tr>
<tr>
<td>Ti566010 Max. Particle size: 45 micron, Purity: 99.0%</td>
<td></td>
</tr>
<tr>
<td><strong>Titanium Silicide (TiSi$_2$)</strong></td>
<td></td>
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<tr>
<td><strong>Powder</strong></td>
<td></td>
</tr>
<tr>
<td>Ti576010 Max. Particle size: 45 micron, Purity: 99.0%</td>
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<tr>
<td><strong>Titanium Silicocarbide</strong> (TiSiC$_2$ + TiSiC)</td>
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<tr>
<td><strong>Powder</strong></td>
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</tr>
<tr>
<td>Ti586010 Max. Particle size: 45 micron, Purity: 99.999%</td>
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</tr>
<tr>
<td><strong>Tungsten Boride (WB)</strong></td>
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</tr>
<tr>
<td><strong>Powder</strong></td>
<td></td>
</tr>
<tr>
<td>W 506010 Max. Particle size: 45 micron, Purity: 99.0%</td>
<td></td>
</tr>
<tr>
<td><strong>Tungsten Carbide (WC)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Powder</strong></td>
<td></td>
</tr>
<tr>
<td>W 526011 Max. Particle size: 45 micron, Purity: 99.5%</td>
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</tr>
<tr>
<td>W 526010 Max. Particle size: 150 micron, Min. Particle size: 45 micron, Purity: 99.5%</td>
<td></td>
</tr>
<tr>
<td><strong>Tungsten Disulfide (WS$_2$)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Film</strong></td>
<td></td>
</tr>
<tr>
<td>W 551410 Thickness: 0.1 mm, Condition: Single crystal, Size: 3x3 mm</td>
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<tr>
<td><strong>Powder</strong></td>
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</tr>
<tr>
<td>W 556010 Mean Particle size (FSSS): 0.1-2 micron, Purity: 99.5%</td>
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<tr>
<td>W 556011 Max. Particle size: 10 micron, Purity: 99.5%</td>
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</tr>
<tr>
<td><strong>Tungsten Ditelluride (WTe$_2$)</strong></td>
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<tr>
<td><strong>Film</strong></td>
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<tr>
<td>W 571410 Thickness: 0.1 mm, Condition: Single crystal, Size: 3x3 mm</td>
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<tr>
<td><strong>Tungsten Selenide (WSe$_2$)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Film</strong></td>
<td></td>
</tr>
<tr>
<td>WA521410 Thickness: 0.1 mm, Condition: Single crystal, Size: 3x3 mm</td>
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</tr>
<tr>
<td><strong>Tungsten Silicide (WSi$_2$)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Sputtering Target</strong></td>
<td></td>
</tr>
<tr>
<td>W 549300 Thickness: 3.0 mm, Size: 50.8 mm</td>
<td></td>
</tr>
<tr>
<td><strong>Powder</strong></td>
<td></td>
</tr>
<tr>
<td>W 546010 Max. Particle size: 45 micron, Purity: 99.0%</td>
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</tr>
<tr>
<td><strong>Tungsten Titanium Carbide (WTiC$_2$)</strong></td>
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<td><strong>Powder</strong></td>
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<tr>
<td>W 566010 Max. Particle size: 150 micron, Purity: 99.5%, Condition: Crystalline</td>
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<tr>
<td><strong>Tungsten Trioxide (WO$_3$)</strong></td>
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<td><strong>Sputtering Target</strong></td>
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<tr>
<td>WA509200 Thickness: 3 mm, Size: 50.8 mm</td>
<td></td>
</tr>
<tr>
<td>WA509300 Thickness: 5 mm, Size: 50 mm</td>
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</tr>
<tr>
<td><strong>Powder</strong></td>
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<tr>
<td>WA506010 Max. Particle size: 45 micron</td>
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</tr>
<tr>
<td><strong>Vanadium Carbide (VC)</strong></td>
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</tr>
<tr>
<td><strong>Powder</strong></td>
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<tr>
<td>V 516010 Max. Particle size: 45 micron, Purity: 99.0%</td>
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<tr>
<td><strong>Vanadium Nitride (VN)</strong></td>
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<tr>
<td><strong>Powder</strong></td>
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</tr>
<tr>
<td>V 536010 Max. Particle size: 150 micron, Purity: 99.0%</td>
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<tr>
<td><strong>Vanadium Pentoxide (V$_2$O$_5$)</strong></td>
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<tr>
<td><strong>Powder</strong></td>
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<tr>
<td>V 566010 Max. Particle size: 400 micron</td>
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<tr>
<td><strong>Vanadium Silicide (VSi$_2$)</strong></td>
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<tr>
<td><strong>Powder</strong></td>
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<tr>
<td>V 546010 Max. Particle size: 45 micron, Purity: 99.0%</td>
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<tr>
<td><strong>Zinc Arsenide (Zn$_3$As$_2$)</strong></td>
<td></td>
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<td><strong>Powder</strong></td>
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</tr>
<tr>
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<tr>
<td><strong>Zinc Oxide (ZnO)</strong></td>
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<tr>
<td><strong>Sputtering Target</strong></td>
<td></td>
</tr>
<tr>
<td>ZN529200 Thickness: 2.5 mm, Size: 15 mm</td>
<td></td>
</tr>
<tr>
<td>ZN529300 Thickness: 3.0 mm, Size: 50 mm to 75 mm</td>
<td></td>
</tr>
<tr>
<td>ZN529500 Thickness: 5.0 mm, Size: 25 mm</td>
<td></td>
</tr>
<tr>
<td>ZN529600 Thickness: 6.0 mm, Size: 76.2 mm</td>
<td></td>
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<tr>
<td><strong>Powder</strong></td>
<td></td>
</tr>
<tr>
<td>ZN526010 Max. Particle size: 45 micron, High Purity: 99.999%</td>
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<tr>
<td><strong>Single Crystal</strong></td>
<td></td>
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<tr>
<td>ZN522010 Oriented: Random, Condition: Ground, Size: 8x8x1 mm</td>
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### Compounds

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<tr>
<th>Compound</th>
<th>Type</th>
<th>Reference</th>
<th>Quantity</th>
<th>Size</th>
<th>Purity</th>
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<tbody>
<tr>
<td>Zinc Oxide / Gallium Oxide 2% - GZO (ZnO 98 / Ga2O3 2)</td>
<td>Sputtering Target</td>
<td>ZN579500</td>
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<td>Thickness: 5mm, Size: 25 mm</td>
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<tr>
<td>Zinc Selenide (ZnSe)</td>
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<td>ZN516010</td>
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<td>Max. Particle size: 45micron</td>
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<td>Zinc Sulfide (ZnS)</td>
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<td>ZN536010</td>
<td></td>
<td>Max. Particle size: 45micron, Purity: 99.9%</td>
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<tr>
<td>Zinc Sulfide (ZnS)</td>
<td>Lump</td>
<td>ZN536100</td>
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<td>Zirconium Boride (ZrB2)</td>
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<td>Zirconium Hydride (ZrH2)</td>
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<td>ZR526010</td>
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<tr>
<td>Zirconium Nitride (ZrN)</td>
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<td>Thickness: 3.0mm, Size: 50.8 mm</td>
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<tr>
<td>Zirconium Nitride (ZrN)</td>
<td>Powder</td>
<td>ZR536010</td>
<td></td>
<td>Max. Particle size: 45micron, Purity: 99.0%</td>
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### Intermetallics

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<tr>
<th>Intermetallics</th>
<th>Powder Code</th>
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<th>Mean Particle Size</th>
<th>Purity</th>
<th>Condition</th>
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<tbody>
<tr>
<td>Aluminum Nickelide (Al$_3$Ni)</td>
<td>AL706010</td>
<td>150 micron</td>
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<tr>
<td>Aluminum Nickelide (Al$_3$Ni$_2$)</td>
<td>AL716010</td>
<td>150 micron</td>
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<tr>
<td>Nickel Aluminide (NiAl)</td>
<td>NI706010</td>
<td>150 micron, 45 micron</td>
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<td>99.0%</td>
<td>Atomized</td>
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<td>Nickel Aluminide (Ni$_3$Al)</td>
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## Alumina (Al₂O₃)

### Sheet

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Thickness</th>
<th>Purity</th>
<th>Size</th>
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<tbody>
<tr>
<td>AL603015</td>
<td>0.15mm</td>
<td>96%</td>
<td>50x50 mm</td>
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<tr>
<td>AL603024</td>
<td>0.25mm</td>
<td>96%</td>
<td>25 mm</td>
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<tr>
<td>AL603025</td>
<td>0.25mm</td>
<td>96%</td>
<td>25x25 mm</td>
</tr>
<tr>
<td>AL603026</td>
<td>0.25mm</td>
<td>96%</td>
<td>50x50 mm</td>
</tr>
<tr>
<td>AL603028</td>
<td>0.25mm</td>
<td>99.0%</td>
<td>5x5 mm to 60x60 mm</td>
</tr>
<tr>
<td>AL603029</td>
<td>0.25mm</td>
<td>99.0%</td>
<td>Diameter: 57 mm</td>
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<tr>
<td>AL603027</td>
<td>0.25mm</td>
<td>96%</td>
<td>100x100 mm</td>
</tr>
<tr>
<td>AL603039</td>
<td>0.38mm</td>
<td></td>
<td>2x29.8 mm</td>
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<tr>
<td>AL603050</td>
<td>0.50mm</td>
<td>96%</td>
<td>25x25 mm</td>
</tr>
<tr>
<td>AL603051</td>
<td>0.50mm</td>
<td>96%</td>
<td>50x50 mm to 60x60 mm</td>
</tr>
<tr>
<td>AL603053</td>
<td>0.50mm</td>
<td>99.0%</td>
<td>60x60 mm</td>
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<tr>
<td>AL603052</td>
<td>0.50mm</td>
<td>96%</td>
<td>100x100 mm</td>
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<tr>
<td>AL603064</td>
<td>0.64mm</td>
<td>96%</td>
<td>100x150 mm to 114x114 mm</td>
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<tr>
<td>AL603099</td>
<td>1.0mm</td>
<td>96%</td>
<td>Size: 14x17 mm</td>
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<tr>
<td>AL603100</td>
<td>1.0mm</td>
<td>97.5%</td>
<td>25x25 mm</td>
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<tr>
<td>AL603110</td>
<td>1.0mm</td>
<td>97.5%</td>
<td>50x50 mm</td>
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<tr>
<td>AL603115</td>
<td>1.0mm</td>
<td>99.6%</td>
<td>10x10 mm to 50x50 mm</td>
</tr>
<tr>
<td>AL603101</td>
<td>1.0mm</td>
<td>96%</td>
<td>Size: 60x60 mm</td>
</tr>
<tr>
<td>AL603104</td>
<td>1.0mm</td>
<td>99.0%</td>
<td>60x60 mm</td>
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<tr>
<td>AL603102</td>
<td>1.0mm</td>
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<td>Size: 100x100 mm to 110x110 mm</td>
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<td>AL603103</td>
<td>1.0mm</td>
<td>99.0%</td>
<td>200x200 mm</td>
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<tr>
<td>AL603202</td>
<td>2.0mm</td>
<td>99.0%</td>
<td>Diameter: 15 mm</td>
</tr>
<tr>
<td>AL603200</td>
<td>2.0mm</td>
<td>99.0%</td>
<td>50x50 mm</td>
</tr>
<tr>
<td>AL603201</td>
<td>2.0mm</td>
<td>99.0%</td>
<td>2x12 mm</td>
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<tr>
<td>AL603250</td>
<td>2.5mm</td>
<td>99.0%</td>
<td>25x25 mm</td>
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<td>AL603251</td>
<td>2.5mm</td>
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<td>AL603300</td>
<td>3.0mm</td>
<td>99.0%</td>
<td>25x25 mm</td>
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<td>AL603301</td>
<td>3.0mm</td>
<td>99.0%</td>
<td>25x50 mm</td>
</tr>
<tr>
<td>AL603401</td>
<td>4.0mm</td>
<td>99.0%</td>
<td>25x50 mm</td>
</tr>
<tr>
<td>AL603450</td>
<td>5.0mm</td>
<td>99.0%</td>
<td>25x25 mm to 100x100 mm</td>
</tr>
<tr>
<td>AL603480</td>
<td>10.0mm</td>
<td>99.0%</td>
<td>50x50 mm</td>
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### Sputtering Target

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Thickness</th>
<th>Purity</th>
<th>Size</th>
</tr>
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<tbody>
<tr>
<td>AL609200</td>
<td>2.0mm</td>
<td>99.99%</td>
<td>25.4 mm</td>
</tr>
<tr>
<td>AL609301</td>
<td>3.15mm</td>
<td>99.99%</td>
<td>Size: 20 mm to 76.2 mm</td>
</tr>
<tr>
<td>AL609300</td>
<td>3.15mm</td>
<td>99.9%</td>
<td>Size: 25.4 mm to 100.5 mm</td>
</tr>
<tr>
<td>AL609501</td>
<td>5.0mm</td>
<td>99.5%</td>
<td>Size: 50 mm</td>
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<tr>
<td>AL609601</td>
<td>6.35mm</td>
<td>99.99%</td>
<td>Size: 50.8 mm to 76.2 mm</td>
</tr>
<tr>
<td>AL609600</td>
<td>6.35mm</td>
<td>99.5%</td>
<td>Size: 50.8 mm to 76.2 mm</td>
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### Foam

<table>
<thead>
<tr>
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<th>Thickness</th>
<th>Purity</th>
<th>Size</th>
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<tbody>
<tr>
<td>AL603810</td>
<td>4mm</td>
<td>86%</td>
<td>26, Size: 96x96 mm</td>
</tr>
<tr>
<td>AL603820</td>
<td>7mm</td>
<td>86%</td>
<td>26, Size: 30x100 mm to 100x100 mm</td>
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<tr>
<td>AL603825</td>
<td>12.7mm</td>
<td>84%</td>
<td>Size: 100x100 mm</td>
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<tr>
<td>AL603821</td>
<td>12.7mm</td>
<td>86%</td>
<td>Size: 26, Size: 100x100 mm</td>
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<tr>
<td>AL603822</td>
<td>12.7mm</td>
<td>86%</td>
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### Fiber

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<tr>
<th>Item Code</th>
<th>Tex Number</th>
<th>Filament Diameter</th>
<th>Number of Filaments</th>
<th>Grade</th>
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<tbody>
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<td>210</td>
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<td>AL605725</td>
<td>250</td>
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### Rod

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<td>AL607910</td>
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<td>AL607911</td>
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<td>AL607915</td>
<td>1.5mm</td>
<td>300 mm</td>
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<tr>
<td>AL607921</td>
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### Bar

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## Ceramics — Alumina

### Tube

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<tr>
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<th>Outside Diameter</th>
<th>Wall Thickness</th>
<th>Inside Diameter</th>
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February 2017

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**Ceramics**

- **Washer**
  - **Part Number:** AL60WA02
  - **Description:** M2 (ANSI), M2 (BS4320)
  - **Diameter:** 5.70 - 6.00mm, 4.70 - 5.00mm
  - **Thickness:** 0.40 - 0.60mm, 0.20 - 0.40mm
  - **Pitch:** 1.25mm, 0.8mm
  - **Quantity:** 10 pcs to 25 pcs

- **Crucible**
  - **Part Number:** AL608510
  - **Description:** Classic, Outside Diameter: 31mm
  - **Capacity:** 7ml
  - **Purity:** Quantity: 5 pcs

- **Cylindrical**
  - **Part Number:** AL608580
  - **Description:** Classic, Outside Diameter: 81mm
  - **Capacity:** 107mm
  - **Purity:** Quantity: 5 pcs

---

**Contact Information**

- **Telephone:** +44 1480 424 900 (UK: 0800 731 4653)
- **Fax:** +44 1480 424 900 (UK: 0800 328 7689)
- **Address:** Ermine Business Park, Huntingdon PE29 6WR England

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**February 2017**

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**Shape:** Classic, Outside Diameter: 31mm, Inside Diameter: 28mm, Height: 25mm, Capacity: 7ml, Purity: Quantity: 5 pcs
## Ceramics

**Powder**

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<tr>
<td>AL608655</td>
<td>Round, shallow</td>
<td>94mm</td>
<td>54mm</td>
<td>93%</td>
<td>5 pcs</td>
</tr>
<tr>
<td>AL608660</td>
<td>Round, shallow</td>
<td>120mm</td>
<td>40mm</td>
<td>93%</td>
<td>5 pcs</td>
</tr>
</tbody>
</table>

**Granule**

<table>
<thead>
<tr>
<th>Code</th>
<th>Nominal Granule Size</th>
<th>Purity</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL606300</td>
<td>2mm</td>
<td>99.99%</td>
</tr>
</tbody>
</table>

**Sphere**

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
<th>Tolerance</th>
<th>Sphericity</th>
<th>Condition</th>
<th>Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL606810</td>
<td>0.5mm</td>
<td>± 2.5μm</td>
<td>0.625μm</td>
<td>Polished</td>
<td>Precision Sphere</td>
</tr>
<tr>
<td>AL606815</td>
<td>1.0mm</td>
<td>± 2.5μm</td>
<td>0.625μm</td>
<td>Polished</td>
<td>Precision Sphere</td>
</tr>
<tr>
<td>AL606906</td>
<td>2.4mm</td>
<td>0.3-0.6mm</td>
<td>0.9</td>
<td>Hollow</td>
<td></td>
</tr>
</tbody>
</table>

---

**Goodfellow Cambridge Limited**

Tel 1-800-821-2870

Fax 1-800-283-2020

Ceramics — Alumina

February 2017
## Ceramics

### Alumina (Al₂O₃ 99.5)
- **Sputtering Target**
  - AL659306  
  - Thickness: 3.15mm, Size: 62 mm

### Alumina Toughened Zirconia (ATZ - ZrO₂ / Al₂O₃)
- **Powder**
  - ZR686020  
  - Max. Particle size: 1micron

### Alumina/Silica (Al₂O₃ 80/SiO₂ 20)
- **Fiber**
  - AJ615720  
  - Tex Number: 205, Filament diameter: 0.01mm, Number of filaments: 960

### Alumina/Silica (Al₂O₃ 85/SiO₂ 15)
- **Crucible**
  - AJ658505  
  - Shape: Cylindrical, Outside Diameter: 25mm, Inside Diameter: 23mm, Height: 70mm, Quantity: 5 pcs

### Alumina/Silica/Boria (Al₂O₃ 70/SiO₂ 28/B₂O₃ 2)
- **Fiber**
  - AJ625710  
  - Tex Number: 110, Filament diameter: 0.011mm, Number of filaments: 390, Grade: Nextel 440®

### Alumino-silicate Glass (SiO₂ 57/Al₂O₃ 36/CaO/MgO/BaO)
- **Sheet**
  - S1693060  
  - Thickness: 6mm, Condition: Porous Alumino-Silicate, Diameter: 50 mm
  - S1693100  
  - Thickness: 10mm, Condition: Porous Alumino-Silicate, Diameter: 150x150 mm
  - S1693150  
  - Thickness: 15mm, Condition: Porous Alumino-Silicate, Diameter: 300x300 mm
  - S1693200  
  - Thickness: 20mm, Condition: Porous Alumino-Silicate, Diameter: 300x300 mm

### Aluminum Nitride (AIN)
- **Sheet**
  - AL643010  
  - Thickness: 0.075mm, Condition: Translucent, Size: 20x20 mm
  - AL643125  
  - Thickness: 0.125mm, Condition: Translucent, polished both sides, Polish: 0.025 - 0.05μm Ra, Size: 25x25 mm
  - AL643064  
  - Thickness: 0.64mm, Condition: Translucent, Size: 25x25 mm to 50x50 mm
  - AL643200  
  - Thickness: 2.0mm, Condition: Translucent, Diameter: 9.6 mm

### Powder
- AL646005  
  - Max. Particle size: 0.02micron, Purity: 99.5+, Condition: Nanopowder

---

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### Ceramics

<table>
<thead>
<tr>
<th>AL646010</th>
<th>Mean Particle size (FSSS): 1.4 microns, Purity: 99.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aluminum Nitride - Machinable</strong> (AIN / BN)</td>
<td></td>
</tr>
<tr>
<td>Sheet</td>
<td></td>
</tr>
<tr>
<td>AK613006</td>
<td>Thickness: 0.6 mm, Grade: ShapalTM-M soft, Size: 50x50 mm</td>
</tr>
<tr>
<td>AK613306</td>
<td>Thickness: 0.6 mm, Grade: ShapalTM-Hi-M soft, Size: 50x50 mm</td>
</tr>
<tr>
<td>AK613011</td>
<td>Thickness: 1 mm, Grade: ShapalTM-M soft, Diameter: 24 mm</td>
</tr>
<tr>
<td>AK613311</td>
<td>Thickness: 1 mm, Grade: ShapalTM-Hi-M soft, Diameter: 24 mm</td>
</tr>
<tr>
<td>AK613010</td>
<td>Thickness: 1 mm, Grade: ShapalTM-M soft, Size: 50x50 mm to 100x100 mm</td>
</tr>
<tr>
<td>AK613310</td>
<td>Thickness: 1 mm, Grade: ShapalTM-Hi-M soft, Size: 50x50 mm to 100x100 mm</td>
</tr>
<tr>
<td>AK613030</td>
<td>Thickness: 3 mm, Grade: ShapalTM-M soft, Size: 50x50 mm</td>
</tr>
<tr>
<td>AK613330</td>
<td>Thickness: 3 mm, Grade: ShapalTM-Hi-M soft, Size: 50x50 mm</td>
</tr>
<tr>
<td>AK613050</td>
<td>Thickness: 5 mm, Grade: ShapalTM-M soft, Size: 25x25 mm to 50x50 mm</td>
</tr>
<tr>
<td>AK613350</td>
<td>Thickness: 5 mm, Grade: ShapalTM-Hi-M soft, Size: 25x25 mm to 100x100 mm</td>
</tr>
<tr>
<td>AK613100</td>
<td>Thickness: 10 mm, Grade: ShapalTM-M soft, Size: 25x25 mm</td>
</tr>
<tr>
<td>AK613300</td>
<td>Thickness: 10 mm, Grade: ShapalTM-Hi-M soft, Size: 25x25 mm to 100x100 mm</td>
</tr>
<tr>
<td><strong>Rod</strong></td>
<td></td>
</tr>
<tr>
<td>AK617900</td>
<td>Diameter: 6.0 mm, Grade: ShapalTM-M soft, Length: 50 mm</td>
</tr>
<tr>
<td>AK617956</td>
<td>Diameter: 6.0 mm, Grade: ShapalTM-Hi-M soft, Length: 50 mm to 100 mm</td>
</tr>
<tr>
<td>AK617910</td>
<td>Diameter: 10 mm, Grade: ShapalTM-M soft, Length: 25 mm to 300 mm</td>
</tr>
<tr>
<td>AK617960</td>
<td>Diameter: 10 mm, Grade: ShapalTM-Hi-M soft, Length: 25 mm to 300 mm</td>
</tr>
<tr>
<td>AK617920</td>
<td>Diameter: 20 mm, Grade: ShapalTM-M soft, Length: 25 mm to 100 mm</td>
</tr>
<tr>
<td>AK617970</td>
<td>Diameter: 20 mm, Grade: ShapalTM-Hi-M soft, Length: 25 mm to 100 mm</td>
</tr>
<tr>
<td><strong>Aluminum Nitride - Machinable (BNP-2) (AIN / BN)</strong></td>
<td></td>
</tr>
<tr>
<td>Sheet</td>
<td></td>
</tr>
<tr>
<td>AK623030</td>
<td>Thickness: 3 mm, Grade: BNP-2, Size: 50x50 mm to 100x100 mm</td>
</tr>
<tr>
<td>AK623050</td>
<td>Thickness: 5 mm, Grade: BNP-2, Size: 50x50 mm to 100x100 mm</td>
</tr>
<tr>
<td>AK623100</td>
<td>Thickness: 10 mm, Grade: BNP-2, Size: 50x50 mm to 100x100 mm</td>
</tr>
<tr>
<td><strong>Rod</strong></td>
<td></td>
</tr>
<tr>
<td>AK627905</td>
<td>Diameter: 5 mm, Grade: BNP-2, Length: 50 mm to 100 mm</td>
</tr>
<tr>
<td>AK627910</td>
<td>Diameter: 10 mm, Grade: BNP-2, Length: 50 mm to 200 mm</td>
</tr>
<tr>
<td>AK627920</td>
<td>Diameter: 20 mm, Grade: BNP-2, Length: 50 mm to 200 mm</td>
</tr>
</tbody>
</table>

### Barium Cerate - Yttrium doped (10 mol% Yttrium)  
(BaCe0.9Y0.1O3-d (BCY-10))

| Lump | BA606105 | Max. Lump size: 5 mm, Condition: Fuel cell pellets |

### Barium Cerate - Yttrium doped (20 mol% Yttrium)  
(BaCe0.8Y0.2O3-d (BCY-20))

| Lump | BA616105 | Max. Lump size: 5 mm, Condition: Fuel cell pellets |

### Beryllia (BeO 99.5)

<table>
<thead>
<tr>
<th>Sheet</th>
<th>BE603050</th>
<th>Thickness: 0.5 mm, Size: 14.5x14.5 mm to 25x25 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE603051</td>
<td>Thickness: 0.5 mm, Diameter: 23 mm</td>
<td></td>
</tr>
<tr>
<td>BE603055</td>
<td>Thickness: 0.5 mm, Size: 50x50 mm</td>
<td></td>
</tr>
<tr>
<td>BE603100</td>
<td>Thickness: 1.0 mm, Size: 12x12 mm to 25x25 mm</td>
<td></td>
</tr>
<tr>
<td>BE603110</td>
<td>Thickness: 1.0 mm, Size: 50x50 mm</td>
<td></td>
</tr>
<tr>
<td>BE603150</td>
<td>Thickness: 1.5 mm, Size: 25x25 mm</td>
<td></td>
</tr>
<tr>
<td>BE603200</td>
<td>Thickness: 2.0 mm, Size: 25x25 mm</td>
<td></td>
</tr>
<tr>
<td>BE603210</td>
<td>Thickness: 2.0 mm, Size: 50x50 mm</td>
<td></td>
</tr>
<tr>
<td>BE603400</td>
<td>Thickness: 4.0 mm, Size: 25x25 mm</td>
<td></td>
</tr>
<tr>
<td>BE603410</td>
<td>Thickness: 4.0 mm, Size: 50x50 mm</td>
<td></td>
</tr>
</tbody>
</table>

### Boron Carbide (B₄C)

<table>
<thead>
<tr>
<th>Powder</th>
<th>B 626010</th>
<th>Max. Particle size: 45 microns, Purity: 99%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Granule</td>
<td>B 626300</td>
<td>Nominal Granule Size: 5 mm</td>
</tr>
</tbody>
</table>

### Boron Carbide - Hot-pressed (B₄C)

<table>
<thead>
<tr>
<th>Sheet</th>
<th>B 613200</th>
<th>Thickness: 0.5 mm, Size: 25x25 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>B 613205</td>
<td>Thickness: 1.0 mm, Size: 25x25 mm</td>
<td></td>
</tr>
<tr>
<td>B 613210</td>
<td>Thickness: 2.0 mm, Size: 50x50 mm</td>
<td></td>
</tr>
<tr>
<td>B 613410</td>
<td>Thickness: 4.0 mm, Size: 50x50 mm</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sputtering Target</th>
<th>B 619300</th>
<th>Thickness: 3.0 mm, Size: 50 mm to 76.2 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>B 619400</td>
<td>Thickness: 4.0 mm, Size: 30 mm</td>
<td></td>
</tr>
<tr>
<td>B 619635</td>
<td>Thickness: 6.45 mm, Condition: Binder free, Size: 76.2 mm</td>
<td></td>
</tr>
</tbody>
</table>
### Ceramics

#### Boron Nitride (BN)

<table>
<thead>
<tr>
<th>Description</th>
<th>Diameter</th>
<th>Condition</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rod</td>
<td>6.0mm</td>
<td>Hot-pressed</td>
<td>10 mm</td>
</tr>
<tr>
<td>B 617905</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B 617906</td>
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#### Sheet

<table>
<thead>
<tr>
<th>Description</th>
<th>Thickness</th>
<th>Condition</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>B 603110</td>
<td>0.20mm</td>
<td>Hot-pressed</td>
<td>5x5 mm</td>
</tr>
<tr>
<td>B 603151</td>
<td>0.55mm</td>
<td>Hot-pressed</td>
<td>30 mm</td>
</tr>
<tr>
<td>B 603150</td>
<td>0.55mm</td>
<td>Hot-pressed</td>
<td>100x100 mm</td>
</tr>
<tr>
<td>B 603175</td>
<td>1.00mm</td>
<td>Hot-pressed</td>
<td>13 mm to 20 mm</td>
</tr>
<tr>
<td>B 603120</td>
<td>1.00mm</td>
<td>Pyrotic</td>
<td>25x25 mm</td>
</tr>
<tr>
<td>B 603121</td>
<td>1.00mm</td>
<td>Pyrotic</td>
<td>50x50 mm</td>
</tr>
<tr>
<td>B 603200</td>
<td>2.00mm</td>
<td>Hot-pressed</td>
<td>25x25 mm</td>
</tr>
<tr>
<td>B 603220</td>
<td>2.00mm</td>
<td>Hot-pressed</td>
<td>50x50 mm</td>
</tr>
<tr>
<td>B 603210</td>
<td>2.00mm</td>
<td>Hot-pressed</td>
<td>100x100 mm to 100x200 mm</td>
</tr>
<tr>
<td>B 603400</td>
<td>4.00mm</td>
<td>Hot-pressed</td>
<td>25x25 mm</td>
</tr>
<tr>
<td>B 603401</td>
<td>4.00mm</td>
<td>Hot-pressed</td>
<td>50x50 mm</td>
</tr>
<tr>
<td>B 603402</td>
<td>4.00mm</td>
<td>Hot-pressed</td>
<td>300x300 mm</td>
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#### Sputtering Target

<table>
<thead>
<tr>
<th>Description</th>
<th>Thickness</th>
<th>Condition</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>B 609300</td>
<td>3.0 mm</td>
<td>Hot-pressed</td>
<td>25.4 mm to 76.2 mm</td>
</tr>
</tbody>
</table>

#### Duratec 750® Machinable Ceramic (CaSiO$_3$)

<table>
<thead>
<tr>
<th>Description</th>
<th>Diameter</th>
<th>Condition</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rod</td>
<td>3.0 mm</td>
<td>Hot-pressed</td>
<td>100 mm</td>
</tr>
<tr>
<td>B 607905</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B 607907</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B 607906</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B 607910</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B 607915</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B 607920</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B 607930</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B 607940</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B 607950</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Tube

<table>
<thead>
<tr>
<th>Description</th>
<th>Diameter</th>
<th>Wall Thickness</th>
<th>Condition</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>B 607050</td>
<td>4.0 mm</td>
<td>1.0 mm</td>
<td>Hot-pressed</td>
<td>210 mm</td>
</tr>
<tr>
<td>B 607100</td>
<td>6.4 mm</td>
<td>2.35 mm</td>
<td>Hot-pressed</td>
<td>100 mm</td>
</tr>
<tr>
<td>B 607101</td>
<td>6.4 mm</td>
<td>2.35 mm</td>
<td>Hot-pressed</td>
<td>50 mm</td>
</tr>
<tr>
<td>B 607120</td>
<td>16 mm</td>
<td></td>
<td>Hot-pressed</td>
<td>50 mm</td>
</tr>
</tbody>
</table>

#### Cerium Oxide - Gadolinium doped (20 mol% Gd) (Gd0.2Ce0.8O2-d (20-GDC))

<table>
<thead>
<tr>
<th>Description</th>
<th>Diameter</th>
<th>Condition</th>
<th>Side Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lump</td>
<td>5 mm</td>
<td>Fuel cell pellets</td>
<td>25 mm to 100 mm</td>
</tr>
</tbody>
</table>

#### Sheet

<table>
<thead>
<tr>
<th>Description</th>
<th>Thickness</th>
<th>Condition</th>
<th>Side Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>DU 603006</td>
<td>6 mm</td>
<td>Hot-pressed</td>
<td>295x300 mm</td>
</tr>
<tr>
<td>DU 603010</td>
<td>10 mm</td>
<td>Hot-pressed</td>
<td>295x300 mm</td>
</tr>
<tr>
<td>DU 603015</td>
<td>15 mm</td>
<td>Hot-pressed</td>
<td>295x300 mm</td>
</tr>
<tr>
<td>DU 603020</td>
<td>20 mm</td>
<td>Hot-pressed</td>
<td>295x300 mm</td>
</tr>
<tr>
<td>DU 603025</td>
<td>25 mm</td>
<td>Hot-pressed</td>
<td>295x300 mm</td>
</tr>
<tr>
<td>DU 603040</td>
<td>40 mm</td>
<td>Hot-pressed</td>
<td>120x300 mm</td>
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</tbody>
</table>

#### Bar

<table>
<thead>
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<th>Diameter</th>
<th>Side Length</th>
<th>Condition</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>DU 608125</td>
<td>25 mm</td>
<td>Side Length</td>
<td>25 mm to 100 mm</td>
<td></td>
</tr>
<tr>
<td>DU 608140</td>
<td>40 mm</td>
<td>Side Length</td>
<td>40 mm to 100 mm</td>
<td></td>
</tr>
<tr>
<td>DU 608150</td>
<td>50 mm</td>
<td>Side Length</td>
<td>50 mm to 100 mm</td>
<td></td>
</tr>
</tbody>
</table>

#### Lanthanum Strontium Cobalt Ferrite (LSCF)

<table>
<thead>
<tr>
<th>Description</th>
<th>Diameter</th>
<th>Condition</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lump</td>
<td>5 mm</td>
<td>Fuel cell pellets</td>
<td>25 mm to 100 mm</td>
</tr>
</tbody>
</table>

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## Ceramics

### Leachable Ceramic
(SiO$_2$ 50/ZrSiO$_4$ 40/Al$_2$O$_3$ 10)

<table>
<thead>
<tr>
<th>Rod</th>
<th>Diameter: 1.5mm, Length: 25 mm to 50 mm</th>
<th>K 603153</th>
<th>Thickness: 0.15mm, Condition: Clear Ruby, Diameter: 8 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>SI657915</td>
<td>Diameter: 2.5mm, Length: 50 mm to 150 mm</td>
<td>K 603152</td>
<td>Thickness: 0.15mm, Condition: Clear Ruby, Diameter: 16 mm</td>
</tr>
<tr>
<td>SI657925</td>
<td>Diameter: 5.0mm, Length: 47 mm to 150 mm</td>
<td>K 603150</td>
<td>Thickness: 0.15mm, Condition: Clear Ruby, Size: 25x25 mm to 100x100 mm</td>
</tr>
<tr>
<td>SI657950</td>
<td>Diameter: 10.0mm, Length: 150 mm</td>
<td>K 603155</td>
<td>Thickness: 0.15mm, Condition: Clear Green, Size: 200x200 mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tube</th>
<th>Outside Diameter: 6.0mm, Wall Thickness: 2.0mm, Inside Diameter: 2mm, Length: 150 mm</th>
<th>K 603158</th>
<th>Thickness: 0.19mm, Condition: Clear Ruby, Size: 100x100 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>SI657120</td>
<td>Outside Diameter: 16.0mm, Wall Thickness: 5.75mm, Inside Diameter: 4.5mm, Length: 150 mm</td>
<td>K 603160</td>
<td>Thickness: 0.20mm, Condition: Clear Ruby, Size: 50x50 mm</td>
</tr>
<tr>
<td>SI657322</td>
<td>Outside Diameter: 16.0mm, Wall Thickness: 5.0mm, Inside Diameter: 6mm, Length: 50 mm to 100 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SI657320</td>
<td>Outside Diameter: 25.0mm, Wall Thickness: 8.3mm, Inside Diameter: 8.4mm, Length: 150 mm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Potassium Aluminosilicate
(Muscovite Mica)

<table>
<thead>
<tr>
<th>Sheet</th>
<th>K 603011</th>
<th>Thickness: 0.012mm, Condition: Clear Ruby, Size: 25x25 mm to 50x50 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>K 603012</td>
<td>Thickness: 0.012mm, Condition: Clear Ruby, Size: 100x100 mm</td>
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</tr>
<tr>
<td>K 603016</td>
<td>Thickness: 0.016mm, Condition: Clear Ruby, Size: 25x25 mm to 100x100 mm</td>
<td></td>
</tr>
<tr>
<td>K 603020</td>
<td>Thickness: 0.020mm, Condition: Clear Ruby, Size: 25x25 mm to 100x100 mm</td>
<td></td>
</tr>
<tr>
<td>K 603025</td>
<td>Thickness: 0.025mm, Condition: Clear Ruby, Size: 25x25 mm to 100x100 mm</td>
<td></td>
</tr>
<tr>
<td>K 603050</td>
<td>Thickness: 0.050mm, Condition: Clear Ruby, Size: 25x25 mm to 100x100 mm</td>
<td></td>
</tr>
<tr>
<td>K 603100</td>
<td>Thickness: 0.10mm, Condition: Clear Ruby, Size: 25x25 mm to 100x100 mm</td>
<td></td>
</tr>
<tr>
<td>K 603151</td>
<td>Thickness: 0.15mm, Condition: Clear Ruby, Diameter: 12 mm</td>
<td></td>
</tr>
</tbody>
</table>

### Pyrophyllite
(Silica 56.8%, Alumina 33.4%, TiO$_2$, Fe$_3$O$_4$)

<table>
<thead>
<tr>
<th>Powder</th>
<th>TJ636050 Max. Particle size: 500micron</th>
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</table>

### Quartz - Fused (SiO$_2$)

<table>
<thead>
<tr>
<th>Sheet</th>
<th>SI613051</th>
<th>Thickness: 0.25mm, Condition: Polished both sides, Size: 25x25 mm to 50x50 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>SI613075</td>
<td>Thickness: 0.50mm, Condition: Polished both sides, Size: 10x10 mm</td>
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</tr>
<tr>
<td>SI613100</td>
<td>Thickness: 1.0mm, Condition: Polished both sides, Size: 20x20 mm to 25x25 mm</td>
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<tr>
<td>SI613101</td>
<td>Thickness: 1.0mm, Condition: Polished both sides, Size: 50x50 mm</td>
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</tr>
<tr>
<td>SI613105</td>
<td>Thickness: 1.0mm, Condition: Polished both sides, Size: 150x150 mm</td>
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<tr>
<td>SI613120</td>
<td>Thickness: 2.0mm, Condition: Polished both sides, Size: 25x25 mm</td>
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</tr>
<tr>
<td>SI613122</td>
<td>Thickness: 2.0mm, Condition: Polished both sides, Diameter: 23 mm</td>
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</tr>
<tr>
<td>SI613121</td>
<td>Thickness: 2.0mm, Condition: Polished both sides, Size: 50x50 mm</td>
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</tr>
<tr>
<td>SI613200</td>
<td>Thickness: 2.0mm, Condition: Translucent, Size: 150x150 mm</td>
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<tr>
<td>SI613205</td>
<td>Thickness: 2.0mm, Condition: Polished both sides, Size: 150x150 mm</td>
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<tr>
<td>SI613206</td>
<td>Thickness: 2.5mm, Condition: Polished both sides, Size: 150x150 mm</td>
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<tr>
<td>SI613140</td>
<td>Thickness: 3.0mm, Condition: Polished both sides, Size: 25x25 mm</td>
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<tr>
<td>SI613145</td>
<td>Thickness: 3.0mm, Condition: Polished both sides, Size: 34x89 mm</td>
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<tr>
<td>SI613142</td>
<td>Thickness: 3.0mm, Condition: Ground, Size: 50x50 mm</td>
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</tr>
<tr>
<td>SI613141</td>
<td>Thickness: 3.0mm, Condition: Polished both sides, Size: 50x50 mm to 150x150 mm</td>
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<tr>
<td>SI613300</td>
<td>Thickness: 6.0mm, Condition: Polished both sides, Diameter: 25 mm</td>
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</tr>
<tr>
<td>SI613305</td>
<td>Thickness: 6.35mm, Condition: Polished both sides, Diameter: 63.5 mm</td>
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</tr>
<tr>
<td>SI613320</td>
<td>Thickness: 16.0mm, Condition: Polished both sides, Diameter: 7.95 mm</td>
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</tbody>
</table>

### Magnesium Oxide (MgO)

<table>
<thead>
<tr>
<th>Rod</th>
<th>Diameter: 6.35mm, Stabilized with: 3% Yttria, Length: 135 mm to 275 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>MG607920</td>
<td>Shape: Cylindrical, Outside Diameter: 11mm, Inside Diameter: 7mm, Height: 30mm, Quantity: 5 pcs</td>
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### Magnesium Silicate (MgSiO$_3$)

<table>
<thead>
<tr>
<th>Powder</th>
<th>MG626010 Max. Particle size: 10micron</th>
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</thead>
</table>

### Peridot (Mg$_2$Fe$_2$/SiO$_4$)

<table>
<thead>
<tr>
<th>Powder</th>
<th>MG646010 Max. Particle size: 100micron, Condition: Gemstone powder</th>
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</thead>
</table>

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## Ceramics

### Sputtering Target

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Outside Diameter</th>
<th>Wall Thickness</th>
<th>Inside Diameter</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>SI617300</td>
<td>SI617280</td>
<td>SI617180</td>
<td>SI617150</td>
<td>SI617120</td>
</tr>
<tr>
<td>SI619601</td>
<td>SI619600</td>
<td>SI61950</td>
<td>SI61930</td>
<td>SI61928</td>
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<td></td>
<td>SI61925</td>
<td>SI61920</td>
<td>SI61910</td>
<td>SI61810</td>
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<tr>
<td></td>
<td>SI618615</td>
<td>SI618610</td>
<td>SI618600</td>
<td>SI616820</td>
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<tr>
<td></td>
<td>SI616822</td>
<td>SI616820</td>
<td>SI616815</td>
<td>SI616810</td>
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<td></td>
<td>SI616815</td>
<td>SI616810</td>
<td>SI616800</td>
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### Monofilament

<table>
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<tr>
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<th>Length</th>
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<tbody>
<tr>
<td>SI615910</td>
<td>0.1mm</td>
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### Rod

<table>
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<th>Length</th>
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<tbody>
<tr>
<td>SI617905</td>
<td>0.5mm</td>
<td>50 mm</td>
</tr>
<tr>
<td>SI617910</td>
<td>1.0mm</td>
<td>100 mm to 1000 mm</td>
</tr>
<tr>
<td>SI617920</td>
<td>2.0mm</td>
<td>100 mm to 1000 mm</td>
</tr>
<tr>
<td>SI617925</td>
<td>2.5mm</td>
<td>400 mm</td>
</tr>
<tr>
<td>SI617930</td>
<td>3.0mm</td>
<td>100 mm to 1000 mm</td>
</tr>
<tr>
<td>SI617950</td>
<td>5.0mm</td>
<td>100 mm to 1000 mm</td>
</tr>
<tr>
<td>SI617975</td>
<td>10.0mm</td>
<td>100 mm to 1000 mm</td>
</tr>
<tr>
<td>SI617978</td>
<td>12.0mm</td>
<td>100 mm to 1000 mm</td>
</tr>
<tr>
<td>SI617980</td>
<td>15.0mm</td>
<td>100 mm to 1000 mm</td>
</tr>
<tr>
<td>SI617990</td>
<td>20.0mm</td>
<td>100 mm to 1000 mm</td>
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### Tube

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Outside Diameter</th>
<th>Wall Thickness</th>
<th>Inside Diameter</th>
<th>Length</th>
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<tbody>
<tr>
<td>SI617020</td>
<td>0.7mm</td>
<td></td>
<td>0.1mm</td>
<td>100 mm</td>
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<tr>
<td>SI617028</td>
<td>1.0mm</td>
<td>0.25mm</td>
<td>0.5mm</td>
<td>60 mm</td>
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<tr>
<td>SI617030</td>
<td>1.0mm</td>
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<td>0.1mm</td>
<td>200 mm</td>
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<tr>
<td>SI617040</td>
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<td>0.75mm</td>
<td>1.4mm</td>
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<td>3.0mm</td>
<td>0.9mm</td>
<td>1.2mm</td>
<td>300 mm</td>
</tr>
<tr>
<td>SI617050</td>
<td>4.0mm</td>
<td></td>
<td>1.0mm</td>
<td>1000 mm</td>
</tr>
<tr>
<td>SI617080</td>
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<td>1000 mm</td>
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<tr>
<td>SI617120</td>
<td>6.0mm</td>
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<td>1.0mm</td>
<td>200 mm</td>
</tr>
<tr>
<td>SI617150</td>
<td>7.0mm</td>
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<td>1.0mm</td>
<td>1000 mm</td>
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<tr>
<td>SI617180</td>
<td>9.0mm</td>
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<td>1.0mm</td>
<td>1000 mm</td>
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<tr>
<td>SI617260</td>
<td>12.0mm</td>
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<td>1.0mm</td>
<td>1000 mm</td>
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<tr>
<td>SI617280</td>
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<td>1.0mm</td>
<td>1000 mm</td>
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### Crucible

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Shape</th>
<th>Outside Diameter</th>
<th>Height</th>
<th>Capacity</th>
<th>Color</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>SI618610</td>
<td>Classic</td>
<td>28mm</td>
<td>30mm</td>
<td>10</td>
<td>Clear</td>
<td>1 pcs</td>
</tr>
<tr>
<td>SI618615</td>
<td>Classic</td>
<td>33mm</td>
<td>35mm</td>
<td>15</td>
<td>Clear</td>
<td>1 pcs</td>
</tr>
<tr>
<td>SI618620</td>
<td>Classic</td>
<td>36mm</td>
<td>38mm</td>
<td>20</td>
<td>Clear</td>
<td>1 pcs</td>
</tr>
<tr>
<td>SI618630</td>
<td>Classic</td>
<td>43mm</td>
<td>38mm</td>
<td>30</td>
<td>Clear</td>
<td>1 pcs</td>
</tr>
<tr>
<td>SI618650</td>
<td>Classic</td>
<td>51mm</td>
<td>51mm</td>
<td>50</td>
<td>Clear</td>
<td>1 pcs</td>
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<tr>
<td>SI618695</td>
<td>Classic</td>
<td>62mm</td>
<td>66mm</td>
<td>100</td>
<td>Clear</td>
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<tr>
<td>SI618698</td>
<td>Classic</td>
<td>79mm</td>
<td>62mm</td>
<td>150</td>
<td>Clear</td>
<td>1 pcs</td>
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### Powder

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Max</th>
<th>Particle size</th>
</tr>
</thead>
<tbody>
<tr>
<td>SI616010</td>
<td>1 pcs</td>
<td>45micron</td>
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</tbody>
</table>

### Granule

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Nominal Granule Size</th>
<th>Lower Limit</th>
<th>Upper Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>SI616301</td>
<td>0.85-1.7mm</td>
<td>0.80-1.8mm</td>
<td>0.85-1.7mm</td>
</tr>
<tr>
<td>SI616302</td>
<td>1 to 2mm</td>
<td>0.80-1.8mm</td>
<td>1 to 2mm</td>
</tr>
<tr>
<td>SI616303</td>
<td>2 to 3mm</td>
<td>0.80-1.8mm</td>
<td>2 to 3mm</td>
</tr>
<tr>
<td>SI616304</td>
<td>2 to 4mm</td>
<td>0.80-1.8mm</td>
<td>2 to 4mm</td>
</tr>
<tr>
<td>SI616300</td>
<td>3mm</td>
<td>0.85-1.7mm</td>
<td>3mm</td>
</tr>
</tbody>
</table>

### Sphere

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Diameter</th>
<th>Tolerance</th>
<th>Sphericity</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>SI616810</td>
<td>0.35mm</td>
<td>± 2.5µm</td>
<td>0.625µm</td>
<td>Polished</td>
</tr>
<tr>
<td>SI616815</td>
<td>0.80mm</td>
<td>± 2.5µm</td>
<td>0.625µm</td>
<td>Polished</td>
</tr>
<tr>
<td>SI616820</td>
<td>1.25mm</td>
<td>± 2.5µm</td>
<td>0.625µm</td>
<td>Polished</td>
</tr>
<tr>
<td>SI616822</td>
<td>1.50mm</td>
<td>± 2.5µm</td>
<td>0.625µm</td>
<td>Polished</td>
</tr>
</tbody>
</table>
## Ceramics

### Ruby (Al₂O₃ /Cr₂O₃ /Si₂O₃)

#### Sheet

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Description</th>
<th>Diameter</th>
<th>Tolerance</th>
<th>Sphericity</th>
<th>Condition</th>
<th>Grade</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL66808</td>
<td>Diameter: 0.127 mm, Tolerance: ±2.5 μm, Sphericity: 0.625μm, Polished, Grade: Structural</td>
<td>0.127 mm</td>
<td>±2.5 μm</td>
<td>0.625μm</td>
<td>Polished</td>
<td>Grade</td>
<td>25 mm</td>
</tr>
<tr>
<td>AL66811</td>
<td>Diameter: 0.166 mm, Tolerance: ±2.5 μm, Sphericity: 0.625μm, Polished, Grade: Structural</td>
<td>0.166 mm</td>
<td>±2.5 μm</td>
<td>0.625μm</td>
<td>Polished</td>
<td>Grade</td>
<td>25 mm</td>
</tr>
<tr>
<td>AL66815</td>
<td>Diameter: 0.3 mm, Tolerance: ±2.5 μm, Sphericity: 0.625μm, Polished, Grade: Structural</td>
<td>0.3 mm</td>
<td>±2.5 μm</td>
<td>0.625μm</td>
<td>Polished</td>
<td>Grade</td>
<td>25 mm</td>
</tr>
<tr>
<td>AL66820</td>
<td>Diameter: 0.5 mm, Tolerance: ±2.5 μm, Sphericity: 0.625μm, Polished, Grade: Structural</td>
<td>0.5 mm</td>
<td>±2.5 μm</td>
<td>0.625μm</td>
<td>Polished</td>
<td>Grade</td>
<td>25 mm</td>
</tr>
<tr>
<td>AL66825</td>
<td>Diameter: 1.0 mm, Tolerance: ±2.5 μm, Sphericity: 0.625μm, Polished, Grade: Structural</td>
<td>1.0 mm</td>
<td>±2.5 μm</td>
<td>0.625μm</td>
<td>Polished</td>
<td>Grade</td>
<td>25 mm</td>
</tr>
<tr>
<td>AL66830</td>
<td>Diameter: 1.5 mm, Tolerance: ±2.5 μm, Sphericity: 0.625μm, Polished, Grade: Structural</td>
<td>1.5 mm</td>
<td>±2.5 μm</td>
<td>0.625μm</td>
<td>Polished</td>
<td>Grade</td>
<td>25 mm</td>
</tr>
<tr>
<td>AL66835</td>
<td>Diameter: 2.0 mm, Tolerance: ±2.5 μm, Sphericity: 0.625μm, Polished, Grade: Structural</td>
<td>2.0 mm</td>
<td>±2.5 μm</td>
<td>0.625μm</td>
<td>Polished</td>
<td>Grade</td>
<td>25 mm</td>
</tr>
<tr>
<td>AL66840</td>
<td>Diameter: 3.0 mm, Tolerance: ±2.5 μm, Sphericity: 0.625μm, Polished, Grade: Structural</td>
<td>3.0 mm</td>
<td>±2.5 μm</td>
<td>0.625μm</td>
<td>Polished</td>
<td>Grade</td>
<td>25 mm</td>
</tr>
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<td>AL66845</td>
<td>Diameter: 4.0 mm, Tolerance: ±2.5 μm, Sphericity: 0.625μm, Polished, Grade: Structural</td>
<td>4.0 mm</td>
<td>±2.5 μm</td>
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<td>Grade</td>
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<td>AL66860</td>
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<td>±2.5 μm</td>
<td>0.625μm</td>
<td>Polished</td>
<td>Grade</td>
<td>25 mm</td>
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#### Bar

<table>
<thead>
<tr>
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<th>Description</th>
<th>Diameter</th>
<th>Tolerance</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJ60100</td>
<td>Side Length: 2 mm, Size: 12 mm</td>
<td>12 mm</td>
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#### Powder

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Description</th>
<th>Diameter</th>
<th>Tolerance</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJ60100</td>
<td>Max. Particle size: 45 micron, Cr₂O₃ content: 0.1%</td>
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<td>±2.5 μm</td>
<td>45 micron</td>
</tr>
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</table>

### Sapphire (Al₂O₃ 99.9)

#### Sheet

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Description</th>
<th>Diameter</th>
<th>Tolerance</th>
<th>Sphericity</th>
<th>Condition</th>
<th>Grade</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL663010</td>
<td>Thickness: 0.10 mm, Condition: Single crystal - Random orientation, Polished both sides, Polish: 0.05 - 0.1μm Ra, Diameter: 12 mm</td>
<td>0.10 mm</td>
<td>±2.5 μm</td>
<td>0.625μm</td>
<td>Polished</td>
<td>Grade</td>
<td>12 mm</td>
</tr>
<tr>
<td>AL663026</td>
<td>Thickness: 0.25 mm, Condition: Single crystal - Random orientation, Polished both sides, Polish: 0.05 - 0.1μm Ra, Diameter: 12 mm</td>
<td>0.25 mm</td>
<td>±2.5 μm</td>
<td>0.625μm</td>
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<td>Grade</td>
<td>12 mm</td>
</tr>
<tr>
<td>AL663024</td>
<td>Thickness: 0.25 mm, Condition: Single crystal - Random orientation, Polished both sides, Polish: 0.05 - 0.1μm Ra, Size: 8x8 mm</td>
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<td>±2.5 μm</td>
<td>0.625μm</td>
<td>Polished</td>
<td>Grade</td>
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### Monofilament

<table>
<thead>
<tr>
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<th>Description</th>
<th>Diameter</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Diameter: 0.075mm, Grade: Structural</td>
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<tr>
<td>AL665920</td>
<td>Diameter: 0.125mm, Grade: Structural</td>
<td>0.125 mm</td>
<td>Structural</td>
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<tr>
<td>AL665922</td>
<td>Diameter: 0.165mm, Grade: Structural</td>
<td>0.165 mm</td>
<td>Structural</td>
</tr>
<tr>
<td>AL665925</td>
<td>Diameter: 0.185mm, Grade: Structural</td>
<td>0.185 mm</td>
<td>Structural</td>
</tr>
<tr>
<td>AL665927</td>
<td>Diameter: 0.215mm, Grade: Structural</td>
<td>0.215 mm</td>
<td>Structural</td>
</tr>
<tr>
<td>AL665930</td>
<td>Diameter: 0.25 mm, Grade: Structural</td>
<td>0.25 mm</td>
<td>Structural</td>
</tr>
</tbody>
</table>

### Rod

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Description</th>
<th>Diameter</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL67915</td>
<td>Diameter: 1.5 mm, Condition: Ground, Length: 15 mm</td>
<td>1.5 mm</td>
<td>15 mm</td>
</tr>
<tr>
<td>AL67920</td>
<td>Diameter: 2.0 mm, Length: 50 mm</td>
<td>2.0 mm</td>
<td>50 mm</td>
</tr>
<tr>
<td>AL67940</td>
<td>Diameter: 4.0 mm, Length: 50 mm</td>
<td>4.0 mm</td>
<td>50 mm</td>
</tr>
<tr>
<td>AL67968</td>
<td>Diameter: 6.8 mm, Condition: Ground, Polished both ends, Length: 50 mm</td>
<td>6.8 mm</td>
<td>50 mm</td>
</tr>
</tbody>
</table>

#### Powder

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Description</th>
<th>Diameter</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL666010</td>
<td>Max. Particle size: 60 micron</td>
<td>60 micron</td>
<td>Structural</td>
</tr>
</tbody>
</table>

---

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## Ceramics

### Silicon Carbide - Hot-pressed (SiC)

<table>
<thead>
<tr>
<th>Sheet</th>
<th>Thickness:</th>
<th>Size:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SJ03209</td>
<td>2.0mm</td>
<td>10x10 mm</td>
</tr>
<tr>
<td>SJ03210</td>
<td>2.0mm</td>
<td>50x50 mm</td>
</tr>
</tbody>
</table>

### Silicon Carbide - Reaction Bonded (SiC)

#### REFEL F

<table>
<thead>
<tr>
<th>Sheet</th>
<th>Thickness:</th>
<th>Size:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SJ63251</td>
<td>5.0mm</td>
<td>50x50 mm</td>
</tr>
<tr>
<td>SJ63250</td>
<td>5.0mm</td>
<td>50x50 mm</td>
</tr>
<tr>
<td>SJ63300</td>
<td>6.0mm</td>
<td>50x50 mm</td>
</tr>
</tbody>
</table>

### Rod

<table>
<thead>
<tr>
<th>Diameter:</th>
<th>Length:</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.0mm</td>
<td>100 mm to 200 mm</td>
</tr>
<tr>
<td>10.0mm</td>
<td>100 mm to 200 mm</td>
</tr>
</tbody>
</table>

### Tube

<table>
<thead>
<tr>
<th>Outside Diameter:</th>
<th>Wall Thickness:</th>
<th>Length:</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.0mm</td>
<td>2.8mm</td>
<td>4.4mm, 45mm to 150 mm</td>
</tr>
<tr>
<td>15.0mm</td>
<td>4.0mm</td>
<td>7mm, 150 mm</td>
</tr>
</tbody>
</table>

### Silicon Nitride (Si₃N₄)

#### Powder

<table>
<thead>
<tr>
<th>Max. Particle size:</th>
<th>Purity:</th>
</tr>
</thead>
<tbody>
<tr>
<td>75micron</td>
<td>98.7%</td>
</tr>
</tbody>
</table>

### Silicon Nitride - Gas Pressure Sintered (Si₃N₄)

<table>
<thead>
<tr>
<th>Sheet</th>
<th>Thickness:</th>
<th>Size:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SJ636060</td>
<td>6mm</td>
<td>47x47 mm</td>
</tr>
</tbody>
</table>

### Silicon Nitride - Hot-pressed (Si₃N₄)

#### Sputtering Target

<table>
<thead>
<tr>
<th>Thickness:</th>
<th>Condition:</th>
<th>Size:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0mm</td>
<td>Hot-pressed</td>
<td>25.4mm to 76.2 mm</td>
<td></td>
</tr>
<tr>
<td>6.0mm</td>
<td>Hot-pressed</td>
<td>25.4mm to 76.2 mm</td>
<td></td>
</tr>
</tbody>
</table>

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February 2017
### Silicon Nitride - Reaction Bonded

#### Sheet

- **SI63303**
  - Thickness: 1.0mm, Size: 50x50 mm
  - Thickness: 0.32mm, Thermal Conductivity: 100 W/mK, Roughness: < 1μm Ra (As Fired), Size: 100x100 mm

- **SI633110**
  - Thickness: 1.0mm, Size: 50x50 mm

- **SI633210**
  - Thickness: 2.0mm, Size: 50x50 mm

- **SI633220**
  - Thickness: 2.0mm, Size: 100x100 mm

- **SI633400**
  - Thickness: 4.0mm, Size: 25x25 mm

- **SI633410**
  - Thickness: 4.0mm, Size: 50x50 mm

- **SI633420**
  - Thickness: 4.0mm, Size: 100x100 mm

#### Rod

- **SI637920**
  - Diameter: 2.0mm, Length: 100 mm

- **SI637950**
  - Diameter: 5.0mm, Length: 100 mm

- **SI637975**
  - Diameter: 10.0mm, Length: 150 mm

#### Tube

- **SI637250**
  - Outside Diameter: 5.0mm, Wall Thickness: 1.0mm, Inside Diameter: 3mm, Length: 100 mm

- **SI637400**
  - Outside Diameter: 8.0mm, Wall Thickness: 1.5mm, Inside Diameter: 5mm, Length: 100 mm

- **SI637500**
  - Outside Diameter: 10.0mm, Wall Thickness: 2.5mm, Inside Diameter: 5mm, Length: 150 mm

#### Sphere

- **SI636810**
  - Diameter: 3mm, Tolerance: ± 0.25μm, Sphericity: 0.625μm, Condition: Polished, Grade: Precision Sphere, Condition: Grade 25

- **SI636820**
  - Diameter: 6mm, Tolerance: ± 0.25μm, Sphericity: 0.625μm, Condition: Polished, Grade: Precision Sphere, Condition: Grade 25

- **SI636840**
  - Diameter: 10mm, Tolerance: ± 0.25μm, Sphericity: 0.625μm, Condition: Polished, Grade: Precision Sphere, Condition: Grade 25

### Silicon carbide/Silica/Alumina/Magnesia (SiC 90/SiO₂ 7/Al₂O₃ 1.5)

#### Sheet

- **SJ683810**
  - Thickness: 10mm, Bulk density: 0.46g.cm⁻³, Pores/cm²: 24, Size: 100x100 mm

### Superwool™ (Silica/Calcia/Magnesia)

#### Sheet

- **SU603010**
  - Thickness: 10mm, Grade: HT, Size: 295x295 mm

- **SU60325**
  - Thickness: 25mm, Grade: HT, Size: 300x300 mm

### Non-Woven Fabric

- **SU603702**
  - Weight: 420g, Coil width: 500mm, Thickness: 2mm, Length: 20m, Density: 210kg.m⁻³, Grade: HT, Type: Paper, Length: 1 rolls

- **SU603706**
  - Weight: 768g, Coil width: 610mm, Thickness: 6mm, Length: 5.5m, Density: 128kg.m⁻³, Grade: HT, Type: Blanket, Length: 1 rolls to 5 rolls

- **SU603704**
  - Weight: 840g, Coil width: 610mm, Thickness: 4mm, Length: 10m, Density: 210kg.m⁻³, Grade: HT, Type: Paper, Length: 1 rolls to 5 rolls

- **SU603713**
  - Weight: 1664g, Coil width: 610mm, Thickness: 13mm, Length: 14.64m, Density: 128kg.m⁻³, Grade: HT, Type: Blanket, Length: 1 rolls to 5 rolls

- **SU603725**
  - Weight: 3200g, Coil width: 610mm, Thickness: 25mm, Length: 7.32m, Density: 128kg.m⁻³, Grade: HT, Type: Blanket, Length: 1 rolls to 5 rolls

### Titanium Diboride (TiB₂)

#### Sheet

- **TI613300**
  - Thickness: 3.0mm, Size: 25x25 mm

#### Sputtering Target

- **TI619600**
  - Thickness: 6mm, Size: 50 mm

### Titanium Dioxide (TiO₂ 99.6%)

#### Sheet

- **TI603200**
  - Thickness: 2.0mm, Size: 25x25 mm

- **TI603300**
  - Thickness: 3.0mm, Size: 25x25 mm

#### Sputtering Target

- **TI609300**
  - Thickness: 3mm, Size: 25.4 mm to 76.2 mm

- **TI609600**
  - Thickness: 6.35mm, Size: 50.8 mm to 76.2 mm

#### Powder

- **TI606010**
  - Max. Particle size: 45micron

#### Single Crystal

- **TI602010**
  - Oriented: (100), Thickness: 1mm, Condition: Polished on 1 side, Size: 1x10x10 mm

- **TI602008**
  - Oriented: (111), Thickness: 1mm, Diameter: 8mm, Condition: Polished on both sides
Ceramics

**Tungsten Carbide/Cobalt (WC 94/Co 6)**

- **Sheet**
  - W 603100 Thickness: 1.0mm, Size: 100x100 mm
  - W 603200 Thickness: 2.0mm, Size: 25x25 mm
  - W 603400 Thickness: 5.0mm, Size: 25x25 mm

- **Sputtering Target**
  - W 609300 Thickness: 3mm, Size: 50.8 mm

- **Wire**
  - W 605130 Diameter: 0.25mm, Condition: Straight wire

- **Rod**
  - W 607900 Diameter: 0.5mm, Length: 30 mm
  - W 607902 Diameter: 2.0mm, Length: 100 mm to 150 mm
  - W 607905 Diameter: 3.0mm, Length: 150 mm
  - W 607907 Diameter: 4.0mm, Condition: Ground, Length: 100 mm
  - W 607910 Diameter: 6.35mm, Length: 150 mm
  - W 607915 Diameter: 12mm, Condition: Ground, Length: 100 mm

- **Tube**
  - W 607120 Outside Diameter: 0.5mm, Wall Thickness: 0.2mm, Inside Diameter: 0.1mm, Condition: Centerless ground, Length: 150 mm
  - W 607140 Outside Diameter: 1.0mm, Wall Thickness: 0.3mm, Inside Diameter: 0.4mm, Condition: Centerless ground, Length: 150 mm
  - W 607160 Outside Diameter: 2.0mm, Wall Thickness: 0.6mm, Inside Diameter: 0.8mm, Condition: Centerless ground, Length: 150 mm

- **Sphere**
  - W 606801 Diameter: 0.2mm, Tolerance: ±2.5µm, Sphericity: 0.625µm, Condition: Polished, Grade: Precision Sphere, Condition: Grade 25
  - W 606802 Diameter: 0.25mm, Tolerance: ±2.5µm, Sphericity: 0.625µm, Condition: Polished, Grade: Precision Sphere, Condition: Grade 25
  - W 606803 Diameter: 0.30mm, Tolerance: ±2.5µm, Sphericity: 0.625µm, Condition: Polished, Grade: Precision Sphere, Condition: Grade 25
  - W 606804 Diameter: 0.35mm, Tolerance: ±2.5µm, Sphericity: 0.625µm, Condition: Polished, Grade: Precision Sphere, Condition: Grade 25
  - W 606805 Diameter: 0.40mm, Tolerance: ±2.5µm, Sphericity: 0.625µm, Condition: Polished, Grade: Precision Sphere, Condition: Grade 25
  - W 606810 Diameter: 0.5mm, Tolerance: ±2.5µm, Sphericity: 0.625µm, Condition: Polished, Grade: Precision Sphere, Condition: Grade 25
  - W 606840 Diameter: 6.0mm, Tolerance: ±2.5µm, Sphericity: 0.625µm, Condition: Polished, Grade: Precision Sphere, Condition: Grade 25

**Tungsten Carbide/Cobalt (Co 10%) (WC90/Co10)**

- **Rod**
  - W 617905 Diameter: 5mm, Length: 100 mm

- **Vycor® 7913 (SiO₂ 96)**
  - **Sheet**
    - Si623010 Thickness: 0.5mm, Size: 5x5 mm to 10x10 mm
    - Si623320 Thickness: 3.2mm, Size: 25x25 mm to 50x50 mm
    - Si623063 Thickness: 6.35mm, Size: 150x150 mm

- **Wurtzite Boron Nitride (w-BN)**
  - **Powder**
    - B 656010 Max. Particle size: 10 micron, Condition: Polycrystalline

- **Yttrium Oxide (Y₂O₃ )**
  - **Sheet**
    - Y 603010 Thickness: 0.5mm, Diameter: 10 mm
    - Y 603020 Thickness: 2.0mm, Diameter: 10 mm
    - Y 603030 Thickness: 3.0mm, Diameter: 10 mm
    - Y 603060 Thickness: 6.0mm, Diameter: 10 mm
  - **Powder**
    - Y 606030 Mean Particle size: 5-10 micron, Purity: 99.9%

- **Zinc Oxide/Aluminium Oxide (ZnO 99/Al₂O₃ 1)**
  - **Sputtering Target**
    - ZN619300 Thickness: 3.0mm, Size: 25.4 mm

- **Zinc Oxide/Aluminium Oxide (ZnO 96/Al₂O₃ 4)**
  - **Sputtering Target**
    - ZN629300 Thickness: 3.0mm, Size: 25.4 mm

- **Zinc Oxide/Aluminium Oxide (ZnO 98/Al₂O₃ 2)**
  - **Sputtering Target**
    - ZN609500 Thickness: 5.0mm, Size: 25 mm
    - ZN609600 Thickness: 6.35mm, Size: 51 mm

- **Zirconia - stabilized with Magnesia (ZrO₂/MgO)**
  - **Sheet**
    - ZR623020 Thickness: 2.15 mm, Stabilized with: 4% Magnesia, Size: 50x50 mm
    - ZR623040 Thickness: 4.0mm, Stabilized with: 4% Magnesia, Size: 50x50 mm
    - ZR623080 Thickness: 8.0mm, Stabilized with: 4% Magnesia, Size: 53x77 mm
  - **Rod**
    - ZR627905 Diameter: 5.0mm, Stabilized with: 4% Magnesia, Length: 50 mm to 100 mm
    - ZR627910 Diameter: 10.0mm, Stabilized with: 4% Magnesia, Length: 50 mm to 100 mm
## Ceramics

### Zirconia-stabilized with Yttria (ZrO$_2$/Y$_2$O$_3$)

#### Powder
- **ZR626010**
  - Mean Particle size: 0.8micron, Stabilized with: 2.8% Magnesia

#### Sheet
- **ZR613051**
  - Thickness: 0.5mm, Stabilized with: 5% Yttria, Size: 25x25 mm
- **ZR613052**
  - Thickness: 0.5mm, Stabilized with: 5% Yttria, Size: 100x100 mm
- **ZR613076**
  - Thickness: 0.75mm, Stabilized with: 5% Yttria, Size: 25x25 mm
- **ZR613101**
  - Thickness: 1.0mm, Stabilized with: 3% Yttria, Size: 10x10 mm

#### Sputtering Target
- **ZR619200**
  - Thickness: 2.0mm, Condition: Hot-pressed, Size: 15 mm
- **ZR619300**
  - Thickness: 3.0mm, Condition: Hot-pressed, Size: 50.8 mm
- **ZR619301**
  - Thickness: 3.0mm, Condition: Pressed, Size: 50.8 mm
- **ZR619600**
  - Thickness: 6.0mm, Condition: Hot-pressed, Size: 50.8 mm to 76.2 mm

#### Non-Woven Fabric
- **ZR613710**
  - Weight: 310g, Thickness: 1.3mm, Stabilized with: 8% Yttria, Size: 150x150 mm to 450x600 mm
- **ZR613720**
  - Weight: 600g, Thickness: 2.5mm, Stabilized with: 8% Yttria, Size: 150x150 mm to 450x600 mm

#### Tube
- **ZR617251**
  - Outside Diameter: 3.5mm, Wall Thickness: 0.25mm, Inside Diameter: 3.0mm, Length: 100 mm

#### Bolt
- **ZR61BO21**
  - Size: M2 x 10mm, Head Style: Hexagonal, Pitch: 0.4mm, Standard: ANSI B18.6.7M-1985, Quantity: 10 pcs
- **ZR61BO20**
  - Size: M2 x 5mm, Head Style: Hexagonal, Pitch: 0.4mm, Standard: ANSI B18.6.7M-1985, Quantity: 10 pcs
- **ZR61BO31**
  - Size: M3 x 10mm, Head Style: Hexagonal, Pitch: 0.5mm, Standard: ANSI B18.6.7M-1985, Quantity: 10 pcs
- **ZR61BO30**
  - Size: M3 x 5mm, Head Style: Hexagonal, Pitch: 0.5mm, Standard: ANSI B18.6.7M-1985, Quantity: 10 pcs
- **ZR61BO41**
  - Size: M4 x 10mm, Head Style: Hexagonal, Pitch: 0.7mm, Standard: ANSI B18.6.7M-1985, Quantity: 10 pcs
- **ZR61BO44**
  - Size: M4 x 25mm, Head Style: Hexagonal, Pitch: 0.7mm, Standard: ANSI B18.6.7M-1985, Quantity: 10 pcs
- **ZR61BO55**
  - Size: M5 x 30mm, Head Style: Hexagonal, Pitch: 0.8mm, Standard: ANSI B18.6.7M-1985, Quantity: 10 pcs
- **ZR61BO63**
  - Size: M6 x 20mm, Head Style: Hexagonal, Pitch: 1.0mm, Standard: ANSI B18.6.7M-1985, Quantity: 10 pcs

#### Nut
- **ZR61NU02**
  - Size: M2, Head Style: Hexagonal, Pitch: 0.4, Standard: ANSI B18.2.4.1M-1979 (R1995), Quantity: 10 pcs
- **ZR61NU03**
  - Size: M3, Head Style: Hexagonal, Pitch: 0.5, Standard: ANSI B18.2.4.1M-1979 (R1995), Quantity: 10 pcs
- **ZR61NU04**
  - Size: M4, Head Style: Hexagonal, Pitch: 0.7, Standard: ANSI B18.2.4.1M-1979 (R1995), Quantity: 10 pcs
- **ZR61NU05**
  - Size: M5, Head Style: Hexagonal, Pitch: 0.8, Standard: ANSI B18.2.4.1M-1979 (R1995), Quantity: 10 pcs
- **ZR61NU06**
  - Size: M6, Head Style: Hexagonal, Pitch: 1.0, Standard: ANSI B18.2.4.1M-1979 (R1995), Quantity: 10 pcs

#### Washer
- **ZR61WA02**
  - Size: M2 (ANSI), Outside Diameter: 5.70 - 6.00 mm, Inside Diameter: 2.50 - 2.64 mm, Thickness: 0.60 - 0.90 mm, Standard: ANSI B18.22M-1981, R1990 (Reg), Quantity: 10 pcs
- **ZR61WA03**
  - Size: M3 (ANSI), Outside Diameter: 9.64 - 10.00 mm, Inside Diameter: 3.50 - 3.68 mm, Thickness: 0.80 - 1.20 mm, Standard: ANSI B18.22M-1981, R1990 (Reg), Quantity: 10 pcs
- **ZR61WA04**
  - Size: M4 (ANSI), Outside Diameter: 11.57 - 12.00 mm, Inside Diameter: 4.70 - 4.88 mm, Thickness: 1.00 - 1.40 mm, Standard: ANSI B18.22M-1981, R1990 (Reg), Quantity: 10 pcs
- **ZR61WA05**
  - Size: M5 (ANSI), Outside Diameter: 14.57 - 15.00 mm, Inside Diameter: 5.50 - 5.78 mm, Thickness: 1.20 - 1.75 mm, Standard: ANSI B18.22M-1981, R1990 (Reg), Quantity: 10 pcs
- **ZR61WA06**

#### Crucible
- **ZR618510**
  - Shape: Classic, Outside Diameter: 31 mm, Inside Diameter: 28 mm, Height: 25 mm, Capacity: 7 ml, Quantity: 5 pcs
- **ZR618520**
  - Shape: Classic, Outside Diameter: 31 mm, Inside Diameter: 28 mm, Height: 28 mm, Capacity: 14 ml, Quantity: 5 pcs
- **ZR618530**
  - Shape: Classic, Outside Diameter: 42 mm, Inside Diameter: 38 mm, Height: 41 mm, Capacity: 45 ml, Quantity: 5 pcs
- **ZR618540**
  - Shape: Classic, Outside Diameter: 42 mm, Inside Diameter: 38 mm, Height: 48 mm, Capacity: 45 ml, Quantity: 5 pcs
- **ZR618550**
  - Shape: Classic, Outside Diameter: 52 mm, Inside Diameter: 47 mm, Height: 62 mm, Capacity: 80 ml, Quantity: 5 pcs
- **ZR618560**
  - Shape: Classic, Outside Diameter: 59 mm, Inside Diameter: 54 mm, Height: 61 mm, Capacity: 95 ml, Quantity: 5 pcs

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| Shape: Classic | Outside Diameter: 80mm, Inside Diameter: 73mm, Height: 90mm, Capacity: 280ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 81mm, Inside Diameter: 74mm, Height: 107mm, Capacity: 350ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 96mm, Inside Diameter: 90mm, Height: 145mm, Capacity: 700ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 5.5mm, Inside Diameter: 4.5mm, Height: 4mm, Capacity: 0.05ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 6mm, Inside Diameter: 5mm, Height: 4mm, Capacity: 0.09ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 10mm, Inside Diameter: 9.5mm, Height: 18mm, Capacity: 1ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 12mm, Inside Diameter: 9.5mm, Height: 14mm, Capacity: 0.6ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 12mm, Inside Diameter: 7.5mm, Height: 40mm, Capacity: 1ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 13mm, Inside Diameter: 10.5mm, Height: 25mm, Capacity: 2ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 12mm, Inside Diameter: 16mm, Height: 21mm, Capacity: 2.5ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 19mm, Inside Diameter: 16.5mm, Height: 20mm, Capacity: 3.7ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 21mm, Inside Diameter: 18mm, Height: 25mm, Capacity: 5ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 22mm, Inside Diameter: 19mm, Height: 80mm, Capacity: 20ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 25mm, Inside Diameter: 22mm, Height: 50mm, Capacity: 15ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 25.5mm, Inside Diameter: 22mm, Height: 14mm, Capacity: 4.5ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 27mm, Inside Diameter: 23.5mm, Height: 32mm, Capacity: 10ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 29mm, Inside Diameter: 25.5mm, Height: 67mm, Capacity: 38ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 33mm, Inside Diameter: 28.5mm, Height: 46mm, Capacity: 30ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 33mm, Inside Diameter: 28.5mm, Height: 90mm, Capacity: 60ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 33mm, Inside Diameter: 29mm, Height: 64mm, Capacity: 38ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 33mm, Inside Diameter: 29.5mm, Height: 33mm, Capacity: 20ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 34mm, Inside Diameter: 29.5mm, Height: 110mm, Capacity: 65ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 34mm, Inside Diameter: 34mm, Height: 90mm, Capacity: 75ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 42mm, Inside Diameter: 37.5mm, Height: 56mm, Capacity: 75ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 42mm, Inside Diameter: 38mm, Height: 33mm, Capacity: 27ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 43mm, Inside Diameter: 38mm, Height: 106mm, Capacity: 110ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 47mm, Inside Diameter: 42mm, Height: 49mm, Capacity: 55ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 47mm, Inside Diameter: 42mm, Height: 65mm, Capacity: 80ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 49mm, Inside Diameter: 44mm, Height: 80mm, Capacity: 105ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 56mm, Inside Diameter: 51mm, Height: 98mm, Capacity: 170ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 62mm, Inside Diameter: 54mm, Height: 120mm, Capacity: 280ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 62mm, Inside Diameter: 56.5mm, Height: 62mm, Capacity: 140ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 63mm, Inside Diameter: 57.5mm, Height: 107mm, Capacity: 230ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 68mm, Inside Diameter: 62mm, Height: 71mm, Capacity: 200ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 69mm, Inside Diameter: 62mm, Height: 105mm, Capacity: 340ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 80mm, Inside Diameter: 73mm, Height: 85mm, Capacity: 150ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 92mm, Inside Diameter: 85mm, Height: 80mm, Capacity: 420ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 92mm, Inside Diameter: 85mm, Height: 100mm, Capacity: 500ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 92mm, Inside Diameter: 92mm, Height: 135mm, Capacity: 830ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 112mm, Inside Diameter: 102mm, Height: 168mm, Capacity: 1300ml, Quantity: 5 pcs |
| Shape: Cylindrical | Outside Diameter: 126mm, Inside Diameter: 118mm, Height: 167mm, Capacity: 1900ml, Quantity: 5 pcs |
| Shape: Round, shallow, straight sides | Outside Diameter: 52mm, Inside Diameter: 42mm, Height: 14.5mm, Capacity: 12ml, Quantity: 5 pcs |
| Shape: Round, shallow, straight sides | Outside Diameter: 42mm, Inside Diameter: 32mm, Height: 14.5mm, Capacity: 12ml, Quantity: 5 pcs |
### Ceramics

<table>
<thead>
<tr>
<th>Code</th>
<th>Shape</th>
<th>Outside Diameter</th>
<th>Inside Diameter</th>
<th>Capacity</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZR618645</td>
<td>Round, shallow, straight sides</td>
<td>115mm</td>
<td>22mm</td>
<td>180ml</td>
<td>5 pcs</td>
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<tr>
<td>ZR618630</td>
<td>Round, shallow, straight sides</td>
<td>69mm</td>
<td>23mm</td>
<td>60ml</td>
<td>5 pcs</td>
</tr>
<tr>
<td>ZR618620</td>
<td>Round, shallow, straight sides</td>
<td>50mm</td>
<td>25mm</td>
<td>35ml</td>
<td>5 pcs</td>
</tr>
<tr>
<td>ZR618640</td>
<td>Round, shallow, straight sides</td>
<td>81mm</td>
<td>28mm</td>
<td>120ml</td>
<td>5 pcs</td>
</tr>
<tr>
<td>ZR618635</td>
<td>Round, shallow, straight sides</td>
<td>62mm</td>
<td>40mm</td>
<td>80ml</td>
<td>5 pcs</td>
</tr>
<tr>
<td>ZR618660</td>
<td>Round, shallow, straight sides</td>
<td>120mm</td>
<td>40mm</td>
<td>300ml</td>
<td>5 pcs</td>
</tr>
<tr>
<td>ZR618650</td>
<td>Round, shallow, straight sides</td>
<td>84mm</td>
<td>54mm</td>
<td>240ml</td>
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</tr>
<tr>
<td>ZR618655</td>
<td>Round, shallow, straight sides</td>
<td>94mm</td>
<td>54mm</td>
<td>280ml</td>
<td>5 pcs</td>
</tr>
</tbody>
</table>

#### Zirconia - unstabilized (ZrO₂ 99)

- **Powder**
  - ZR606010 Mean Particle size: 2micron

#### Zirconia Toughened Alumina (ZTA - Al₂O₃ / ZrO₂)

- **Powder**
  - AJ686020 Max. Particle size: 1micron

#### Zirconium Oxide - Scandia Stabilized (10 mol%) (ScSZ-10)

- **Lump**
  - ZR646105 Max. Lump size: 5mm, Condition: Fuel cell pellets

#### Zirconium Phosphate machineable Ceramic (Ba Zr₄P₆O₂₄)

- **Sheet**
  - ZR633200 Thickness: 12.7mm, Size: 101x101 mm

- **Rod**
  - ZR637900 Diameter: 12.7mm, Length: 127 mm
<table>
<thead>
<tr>
<th>Polymers</th>
<th>Metallized Film</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acrylonitrile/Methacrylate copolymer</td>
<td>AC311850 Thickness: 0.05mm, Coil width: 300mm, Ohms/\text{Square}: 0.2, Metallized with: Aluminum, Length: 0.5 m to 10 m</td>
</tr>
</tbody>
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**Cellulose Acetate Butyrate (CAB)**

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<thead>
<tr>
<th>Celluloid B, Tenite Butyrate</th>
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</thead>
<tbody>
<tr>
<td>Sheet</td>
</tr>
<tr>
<td>Granule</td>
</tr>
<tr>
<td>Film</td>
</tr>
<tr>
<td>Tube</td>
</tr>
<tr>
<td>Granule</td>
</tr>
<tr>
<td>Film</td>
</tr>
<tr>
<td>Tube</td>
</tr>
</tbody>
</table>

**Cellulose (Regenerated Cellulose)**

<table>
<thead>
<tr>
<th>Cellulophane, Rayophane</th>
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<tbody>
<tr>
<td>Film</td>
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<td>Film</td>
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<tr>
<td>Film</td>
</tr>
<tr>
<td>Film</td>
</tr>
<tr>
<td>Film</td>
</tr>
</tbody>
</table>

**Cellulose Acetate (CA)**

<table>
<thead>
<tr>
<th>Clarifoil, Dexel, Tenite Acetate</th>
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</thead>
<tbody>
<tr>
<td>Film</td>
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<tr>
<td>Film</td>
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<tr>
<td>Film</td>
</tr>
<tr>
<td>Film</td>
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</tbody>
</table>

**Copolymer**

<table>
<thead>
<tr>
<th>Polymers — Acrylonitrile/Methacrylate copolymer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barex, Tenite Acetate, Celluloid, Rayophane, Cellidor B, Tenite Butyrate, Metallized Film, Cellulose Acetate Butyrate (CAB), Cellulose (Regenerated Cellulose), Cellulose Acetate (CA), Cyclo-olefin copolymer (Topas), Ethylene-Chlorotrifluoroethylene copolymer (E-CTFE), Ethylene-Tetrafluoroethylene Copolymer (ETFE), Polymers — Acrylonitrile/Methacrylate copolymer, Metallized Film, Cellulose Acetate Butyrate (CAB), Cellulose (Regenerated Cellulose), Cellulose Acetate (CA), Cyclo-olefin copolymer (Topas), Ethylene-Chlorotrifluoroethylene copolymer (E-CTFE), Ethylene-Tetrafluoroethylene Copolymer (ETFE), Polymers — Acrylonitrile/Methacrylate copolymer</td>
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</tbody>
</table>

February 2017

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<table>
<thead>
<tr>
<th>Polymers</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mesh</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FP368703</td>
<td>Nominal Aperture: 85µm, Monofil diameter: 80µm, Threads/cm: 60.7, Open area: 26.5%, Type: Plain weave mesh, Size: 250x250 mm to 500x500 mm</td>
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<tr>
<td>FP368705</td>
<td>Nominal Aperture: 300µm, Monofil diameter: 200µm, Threads/cm: 20, Open area: 36%, Type: Plain weave mesh, Size: 250x250 mm to 500x500 mm</td>
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<tr>
<td>FP368710</td>
<td>Nominal Aperture: 1000µm, Monofil diameter: 500µm, Threads/cm: 6.7, Open area: 44%, Type: Plain weave mesh, Size: 250x250 mm to 500x500 mm</td>
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</tr>
<tr>
<td>Rod</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FP367920</td>
<td>Diameter: 11mm, Length: 100 mm to 900 mm</td>
<td></td>
</tr>
<tr>
<td>FP367930</td>
<td>Diameter: 19mm, Length: 100 mm to 900 mm</td>
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</tr>
<tr>
<td>FP367990</td>
<td>Diameter: 80mm, Length: 25 mm to 50 mm</td>
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<tr>
<td>Flax (Flax)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fabric</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FL303510</td>
<td>Weight: 420g, Coil width: 1250mm, Weave: 2x2 Twill, Length: 0.5 m</td>
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<tr>
<td>FL303515</td>
<td>Weight: 510g, Coil width: 1250mm, Weave: 4x4 Hopsack, Length: 0.5 m</td>
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<tr>
<td>FL303520</td>
<td>Weight: 600g, Coil width: 1270mm, Weave: +/-45 biaxial, Length: 0.5 m</td>
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<tr>
<td>Flax/MAPP (40% Flax / MAPP)</td>
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<tr>
<td>Fabric</td>
<td></td>
<td></td>
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<tr>
<td>FL333510</td>
<td>Weight: 420g, Coil width: 1250mm, Weave: 2x2 Twill, Length: 0.5 m</td>
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<tr>
<td>FL333515</td>
<td>Weight: 530g, Coil width: 1250mm, Weave: 4x4 Hopsack, Length: 0.5 m</td>
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<tr>
<td>Flax/PLA (40% Flax / PLA)</td>
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<tr>
<td>Fabric</td>
<td></td>
<td></td>
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<tr>
<td>FL313510</td>
<td>Weight: 420g, Coil width: 1250mm, Weave: 2x2 Twill, Length: 0.5 m</td>
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<tr>
<td>FL313515</td>
<td>Weight: 530g, Coil width: 1250mm, Weave: 4x4 Hopsack, Length: 0.5 m</td>
<td></td>
</tr>
<tr>
<td>Flax/PP (40% Flax / PP)</td>
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<tr>
<td>Fabric</td>
<td></td>
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<tr>
<td>FL323510</td>
<td>Weight: 420g, Coil width: 1250mm, Weave: 2x2 Twill, Length: 0.5 m</td>
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<tr>
<td>FL323515</td>
<td>Weight: 530g, Coil width: 1250mm, Weave: 4x4 Hopsack, Length: 0.5 m</td>
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<tr>
<td>Fluorinated Ethylene Propylene Copolymer (FEP)</td>
<td>Hostaflon FEP</td>
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<tr>
<td>Film</td>
<td></td>
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<tr>
<td>FP341013</td>
<td>Thickness: 0.0125mm, Color: Natural, Coil width: 305 mm, Size: 150x150 mm to 300x300 mm</td>
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<tr>
<td>FP341025</td>
<td>Thickness: 0.025mm, Coil width: 300 mm, Size: 150x150 mm to 300x300 mm</td>
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<tr>
<td>FP341050</td>
<td>Thickness: 0.05mm, Coil width: 610 mm, Size: 150x150 mm to 300x300 mm</td>
<td></td>
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<tr>
<td>FP341075</td>
<td>Thickness: 0.075mm, Coil width: 610 mm, Size: 150x150 mm to 300x300 mm</td>
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<tr>
<td>Sheet</td>
<td></td>
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</tr>
<tr>
<td>FL303510</td>
<td>Thickness: 0.025mm, Coil width: 150 mm to 300 mm</td>
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</tr>
<tr>
<td>FP341100</td>
<td>Thickness: 0.1mm, Coil width: 150 mm to 300 mm</td>
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<tr>
<td>FP341150</td>
<td>Thickness: 0.125mm, Coil width: 150 mm to 300 mm</td>
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<tr>
<td>FP341250</td>
<td>Thickness: 0.25mm, Coil width: 150 mm to 300 mm</td>
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<tr>
<td>FP341400</td>
<td>Thickness: 0.5mm, Coil width: 150 mm to 300 mm</td>
<td></td>
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<tr>
<td>FP341440</td>
<td>Thickness: 1.0mm, Size: 150x150 mm to 300x300 mm</td>
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<tr>
<td>FP341470</td>
<td>Thickness: 2.3mm, Size: 150x150 mm to 300x300 mm</td>
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<tr>
<td>Monofilament</td>
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<tr>
<td>FP345925</td>
<td>Diameter: 0.28mm</td>
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<tr>
<td>FP345971</td>
<td>Diameter: 0.71mm, Tolerance: +/-0.05 mm, Color: Natural</td>
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<tr>
<td>Rod</td>
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<tr>
<td>FP347905</td>
<td>Diameter: 3mm, Length: 300 mm to 900 mm</td>
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</tr>
<tr>
<td>FP347910</td>
<td>Diameter: 9.5mm, Length: 300 mm to 900 mm</td>
<td></td>
</tr>
<tr>
<td>FP347930</td>
<td>Diameter: 25mm, Length: 100 mm to 500 mm</td>
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<tr>
<td>Hexafluoropropylene-vinylidenefluoride copolymer (FKM)</td>
<td>Fluorel</td>
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</tr>
<tr>
<td>Sheet</td>
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<tr>
<td>FV313050</td>
<td>Thickness: 0.5mm, Color: Black, Type: Semi-conducting, Size: 250x250 mm to 500x500 mm</td>
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<tr>
<td>FV313051</td>
<td>Thickness: 0.5mm, Tolerance: 20%, Color: Green, Type: Non-conducting, Size: 150x150 mm</td>
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<td>FV313100</td>
<td>Thickness: 1.0mm, Tolerance: 20%, Color: Black, Type: Semi-conducting, Size: 200x200 mm to 1000x1000 mm</td>
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<td>FV313150</td>
<td>Thickness: 1.5mm, Tolerance: 20%, Color: White, Type: Non-conducting, Size: 150x150 mm to 300x300 mm</td>
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<tr>
<td>FV313300</td>
<td>Thickness: 3.0mm, Color: Black, Type: Semi-conducting, Size: 150x185 mm to 300x300 mm</td>
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<tr>
<td>Sphere</td>
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<tr>
<td>FV316820</td>
<td>Diameter: 3.18mm, Tolerance: +/-0.08mm, Sphericity: 0.04mm, Color: Black, Type: Semi-conducting, Grade: Precision Sphere</td>
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<tr>
<td>Natural Latex Rubber (Latex)</td>
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<tr>
<td>Tube</td>
<td></td>
<td></td>
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<tr>
<td>NL307300</td>
<td>Outside Diameter: 9.5mm, Wall Thickness: 1.5mm, Inside Diameter: 6.5mm, Length: 1 m</td>
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<tr>
<td>Poly L lactic acid - Biopolymer (PLLA)</td>
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<tr>
<td>Film</td>
<td></td>
<td></td>
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<tr>
<td>ME331050</td>
<td>Thickness: 0.05mm, Condition: Biopolymer, Condition: Biodegradable, Coil width: 330 mm, Size: 150x150 mm to 300x300 mm</td>
<td></td>
</tr>
</tbody>
</table>
### Polymers

#### Polyacrylamide/acrylate (Hydrogel)

| Granule | AC336310 Nominal Granule Size: 2.5mm |

#### Polyacrylonitrile (PAN)

| Powder | AN316010 Mean Particle size: 50micron, Condition: Copolymer (99.6% AN / 0.5% MA) |
|        | AN316020 Mean Particle size: 50micron, Bulk density: 0.34 - 0.39 g.cm⁻³, Condition: Copolymer (93.9% AN / 5.8% MA / 0.3 % MS), Molecular weight: 85,000 g/mol |

#### Polyacrylonitrile-butadiene-styrene (ABS)

| Sheet | AB303090 Thickness: 0.85mm, Color: White, Size: 100x100 mm to 350x350 mm |
|       | AB303100 Thickness: 1.0mm, Color: Black, Size: 150x150 mm to 600x600 mm |
|       | AB303101 Thickness: 1mm, Color: White, Size: 100x100 mm to 660x660 mm |
|       | AB303150 Thickness: 1.5mm, Color: White, Size: 150x150 mm to 600x600 mm |
|       | AB303159 Thickness: 1.59mm, Color: White, Size: 100x100 mm to 600x600 mm |
|       | AB303200 Thickness: 2.00mm, Color: Black, Size: 100x100 mm |
|       | AB303201 Thickness: 2.00mm, Color: White, Size: 100x100 mm |
|       | AB303300 Thickness: 3.0mm, Color: White, Size: 150x150 mm to 600x600 mm |
|       | AB303400 Thickness: 6.0mm, Color: White, Size: 150x150 mm to 600x600 mm |
| Rod   | AB307910 Diameter: 10mm, Color: Natural, Length: 100 mm to 1000 mm |
|       | AB307913 Diameter: 12.7mm, Color: Natural, Length: 100 mm to 1200 mm |
|       | AB307925 Diameter: 25mm, Tolerance: +0.2/+1.2 mm, Color: Gray, Length: 100 mm to 1000 mm |
|       | AB307930 Diameter: 30mm, Color: Gray, Length: 100 mm to 200 mm |

#### Polyamide - Nylon 4, 6 (PA 4,6)

| Film | AM347925 Diameter: 50mm, Length: 50 mm to 500 mm |
|      | AM301015 Thickness: 0.015mm, Color: Colorless, Oriented: Uni-axially oriented, Coil width 600 mm, Size: 100x100 mm to 600x600 mm |
|      | AM301025 Thickness: 0.025mm, Color: Light blue, Condition: Heat stabilized, Coil width 500 mm, Size: 100x100 mm to 300x300 mm |
|      | AM301026 Thickness: 0.025mm, Color: Colorless, Oriented: Uni-axially oriented, Coil width 600 mm, Size: 100x100 mm to 600x600 mm |
|      | AM301052 Thickness: 0.06mm, Coil width: 605mm, Color: Natural, Length: 1 m |
|      | AM301051 Thickness: 0.060mm, Color: Natural, Coil width 914.4 mm, Size: 150x150 mm to 900x900 mm |
|      | AM301075 Thickness: 0.075mm, Condition: Crystalline, Coil width 600 mm, Size: 100x100 mm to 600x600 mm |
|      | AM301100 Thickness: 0.1mm, Color: Translucent, Condition: Semi-crystalline, Size: 150x150 mm to 300x300 mm |
|      | AM301170 Thickness: 0.17mm, Coil width 200 mm, Size: 100x100 mm to 200x200 mm |
|      | AM301200 Thickness: 0.2mm, Coil width 190mm, Length: 0.5 m to 10 m |
|      | AM301350 Thickness: 0.35mm, Coil width 200 mm, Size: 100x100 mm to 200x200 mm |
|      | AM301400 Thickness: 0.5mm, Natural, Coil width 605 mm, Size: 300x300 mm to 600x600 mm |
| Sheet | AM303010 Thickness: 1mm, Size: 100x100 mm to 500x500 mm |
|       | AM303020 Thickness: 2mm, Size: 250x250 mm to 500x500 mm |
|       | AM303025 Thickness: 3.0mm, Size: 250x250 mm to 500x500 mm |
|       | AM303050 Thickness: 5mm, Size: 150x150 mm to 300x300 mm |
|       | AM303100 Thickness: 10mm, Size: 100x100 mm to 500x500 mm |
|       | AM303300 Thickness: 10mm, Condition: Oil-filled Nylon '6', Size: 100x100 mm to 300x300 mm |
| Rod   | AM305915 Diameter: 0.15 mm, Condition: Nylon 6/66 copolymer |
|       | AM305925 Diameter: 0.25 mm, Condition: Nylon 6/66 copolymer |
|       | AM305938 Diameter: 0.35 mm, Condition: Nylon 6/66 copolymer |
|       | AM305950 Diameter: 0.5 mm, Condition: Nylon 6/66 copolymer |
|       | AM305970 Diameter: 0.7 mm, Condition: Nylon 6/66 copolymer |
|       | AM305990 Diameter: 1.0 mm, Condition: Nylon 6/66 copolymer |
|       | AM305992 Diameter: 1.2 mm, Condition: Nylon 6/66 copolymer |
|       | AM305994 Diameter: 1.4 mm, Condition: Nylon 6/66 copolymer |
| Monofilament | AM305915 Diameter: 0.15 mm, Condition: Nylon 6/66 copolymer |
|       | AM305925 Diameter: 0.25 mm, Condition: Nylon 6/66 copolymer |
|       | AM305938 Diameter: 0.35 mm, Condition: Nylon 6/66 copolymer |
|       | AM305950 Diameter: 0.5 mm, Condition: Nylon 6/66 copolymer |
|       | AM305970 Diameter: 0.7 mm, Condition: Nylon 6/66 copolymer |
|       | AM305990 Diameter: 1.0 mm, Condition: Nylon 6/66 copolymer |
|       | AM305992 Diameter: 1.2 mm, Condition: Nylon 6/66 copolymer |
|       | AM305994 Diameter: 1.4 mm, Condition: Nylon 6/66 copolymer |

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### Polymers

#### Rod
- **AM307902** Diameter: 2mm, Length: 1000 mm
- **AM307903** Diameter: 3mm, Length: 1000 mm
- **AM307905** Diameter: 5mm, Tolerance: +0.1/+0.6 mm, Color: Natural, Length: 1000 mm
- **AM307907** Diameter: 6mm, Color: Black, Contains: 3-5% MoS₂, Length: 1000 mm
- **AM307910** Diameter: 10mm, Length: 1000 mm
- **AM307913** Diameter: 10mm, Color: Black, Contains: 3-5% MoS₂, Length: 500 mm to 1000 mm
- **AM307914** Diameter: 15mm, Length: 1000 mm
- **AM307917** Diameter: 20mm, Length: 500 mm to 1000 mm
- **AM307916** Diameter: 25mm, Length: 500 mm to 1000 mm
- **AM307918** Diameter: 25mm, Color: Black, Contains: 3-5% MoS₂, Length: 100 mm to 1000 mm
- **AM307928** Diameter: 50mm, Condition: Oil-filled Nylon 6, Length: 100 mm to 1000 mm
- **AM307926** Diameter: 50mm, Length: 200 mm to 1000 mm
- **AM307950** Diameter: 100mm, Condition: Oil-filled Nylon 6, Length: 100 mm to 1000 mm
- **AM307951** Diameter: 100mm, Length: 100 mm to 500 mm
- **AM307975** Diameter: 150mm, Condition: Oil-filled Nylon 6, Length: 50 mm to 500 mm
- **AM307990** Diameter: 150mm, Length: 50 mm to 1000 mm

#### Tube
- **AM307013** Outside Diameter: 1.34mm, Wall Thickness: 0.17mm, Inside Diameter: 1.0mm, Length: 1 m to 20 m
- **AM307027** Outside Diameter: 2.77mm, Wall Thickness: 0.45mm, Inside Diameter: 1.87mm, Length: 1 m to 20 m
- **AM307030** Outside Diameter: 3.1mm, Wall Thickness: 0.6mm, Inside Diameter: 1.9mm, Length: 1 m to 20 m

#### Powder
- **AM306010** Max. Particle size: 50micron, Min. Particle size: 5micron, Mean Particle size: 15-20micron

#### Granule
- **AM306321** Nominal Granule Size: 3mm, Color: Natural
- **AM306300** Nominal Granule Size: 3mm, Condition: Additive free polymer, Color: Natural, Molecular weight: 10,000 g/mol

#### Polyamide - Nylon 6 - 30% Glass Fiber Reinforced (PA 6 30% GFR)

#### Rod
- **AN337920** Diameter: 20mm, Color: Black, Length: 100 mm to 1000 mm
- **AN337960** Diameter: 60mm, Color: Black, Length: 100 mm to 500 mm

#### Polyamide - Nylon 6, 6 (PA 6,6)
- Akulon S, Maranyl A, Utramid A, Zytel

#### Film
- **AM321017** Thickness: 0.017mm, Coil width: 300mm, Length: 0.5 m
- **AM321025** Thickness: 0.025mm, Coil width 995 mm, Size: 150x150 mm to 600x600 mm

#### Sheet
- **AM323010** Thickness: 1mm, Size: 100x100 mm to 500x600 mm
- **AM323025** Thickness: 3.0mm, Size: 100x100 mm to 300x300 mm
- **AM323050** Thickness: 5mm, Size: 100x100 mm to 300x300 mm
- **AM323100** Thickness: 12mm, Size: 100x100 mm to 300x300 mm

#### Mesh
- **AM328710** Nominal Aperture: 50µm, Monofil diameter: 3µm, Threads/cm: 110, Open area: 32%, Type: Plain weave mesh, Size: 250x250 mm to 500x500 mm

#### Fiber
- **AM325705** Tex Number: 1.3, Filament diameter: 0.01mm, Number of filaments: 14, Condition: Medium Tenacity
- **AM325710** Tex Number: 1.7, Filament diameter: 0.025mm, Number of filaments: 3, Condition: Medium Tenacity
- **AM325720** Tex Number: 3.3, Filament diameter: 0.019mm, Number of filaments: 10, Condition: High Tenacity
- **AM325750** Tex Number: 15.6, Filament diameter: 0.023mm, Number of filaments: 34, Condition: High Tenacity
- **AM325790** Tex Number: 94, Filament diameter: 0.0275mm, Number of filaments: 140, Condition: High Tenacity

#### Rod
- **AM327901** Diameter: 1.6mm, Length: 300 mm to 1200 mm
- **AM327903** Diameter: 3.2mm, Length: 1000 mm
- **AM327905** Diameter: 5mm, Length: 1000 mm
- **AM327910** Diameter: 10mm, Length: 1000 mm
- **AM327915** Diameter: 25mm, Color: Natural, Length: 500 mm to 1000 mm
- **AM327925** Diameter: 50mm, Length: 200 mm to 1000 mm
- **AM327950** Diameter: 100mm, Length: 50 mm to 500 mm

#### Granule
- **AM326310** Nominal Granule Size: 3mm, Color: Natural, Condition: Additive free polymer
- **AM326315** Nominal Granule Size: 3mm, Grade: Super-tough
- **AM326330** Nominal Granule Size: 8mm, Color: Natural

#### Sphere
- **AM326810** Diameter: 1.59mm, Tolerance: ±0.05mm, Sphericity: 0.0254mm, Grade: Precision Sphere
- **AM326820** Diameter: 3.18mm, Tolerance: ±0.05mm, Sphericity: 0.0127mm, Grade: Precision Sphere
- **AM326840** Diameter: 6mm, Tolerance: ±0.05mm, Sphericity: 0.0127mm, Grade: Precision Sphere

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The page also includes additional information on various types of polymers, including their properties, dimensions, and grades. The page is from Goodfellow Cambridge Limited, providing detailed specifications for different polymer types. The information is organized in a clear, readable format, with each category (Rod, Tube, Powder, Granule, etc.) listed with specific details such as diameter, length, and color. The page also notes the use of specific types of polymers for various applications and includes a footer with a website URL and contact information.
<table>
<thead>
<tr>
<th>Polymers — Polyamide - Nylon 6, 6 - 30% Glass Fiber Reinforced (PA 6,6 30% GFR)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Akulon S, Maranyl A, Utramid A, Zytel</strong></td>
</tr>
<tr>
<td><strong>Sheet</strong></td>
</tr>
<tr>
<td>AM363080 Thickness: 8mm, Color: Black, Size: 100x100 mm to 500x500 mm</td>
</tr>
<tr>
<td>AM363200 Thickness: 20mm, Color: Black, Size: 100x100 mm to 300x300 mm</td>
</tr>
<tr>
<td><strong>Rod</strong></td>
</tr>
<tr>
<td>AM367910 Diameter: 10mm, Color: Black, Length: 200 mm to 1000 mm</td>
</tr>
<tr>
<td>AM367930 Diameter: 30mm, Color: Black, Length: 100 mm to 1000 mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Polyamide - Nylon 6, 6 - 30% Carbon Fiber Reinforced (PA 6, 6 - 30% CFR)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Granule</strong></td>
</tr>
<tr>
<td>AM396310 Nominal Granule Size: 3mm, Color: Black</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Polyamide - Nylon 6,10 (PA 6,10)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Granule</strong></td>
</tr>
<tr>
<td>AN356345 Nominal Granule Size: 5mm, Color: Natural, Condition: Injection molding grade</td>
</tr>
<tr>
<td>AN356375 Nominal Granule Size: 5mm, Color: Natural, Condition: Extrusion grade, Condition: Medium viscosity</td>
</tr>
<tr>
<td>AN356395 Nominal Granule Size: 5mm, Color: Natural, Condition: Extrusion grade, Condition: High viscosity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Polyamide - Nylon 11 (PA 11)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rilsan B</strong></td>
</tr>
<tr>
<td>AM337913 Diameter: 15mm, Color: Black, Length: 100 mm to 995 mm</td>
</tr>
<tr>
<td>AM337915 Diameter: 25mm, Color: Black, Length: 100 mm to 980 mm</td>
</tr>
<tr>
<td>AM337930 Diameter: 55mm, Grade: Rilsan BMN TLD, Color: Black, Length: 50 mm to 1000 mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Polyamide - Nylon 12 (PA 12)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rilsan A, Vestamid</strong></td>
</tr>
<tr>
<td>AM371050 Thickness: 0.50mm, Coil width 320 mm, Size: 150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td><strong>Sheet</strong></td>
</tr>
<tr>
<td>AM373120 Thickness: 1.5mm, Size: 250x250 mm to 500x500 mm</td>
</tr>
<tr>
<td>AM373130 Thickness: 3.0mm, Size: 150x150 mm to 600x600 mm</td>
</tr>
<tr>
<td>AM373140 Thickness: 4.0mm, Size: 150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td>AM373200 Thickness: 10mm, Condition: Machining feeding, Size: 150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td><strong>Rod</strong></td>
</tr>
<tr>
<td>AM377910 Diameter: 10mm, Length: 500 mm to 1000 mm</td>
</tr>
<tr>
<td>AM377925 Diameter: 25.0mm, Length: 500 mm to 1000 mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Polyamide - Nylon 12 - 30% Glass Fiber Reinforced (PA 12 - 30% GFR)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rod</strong></td>
</tr>
<tr>
<td>AN327960 Diameter: 92mm, Color: Cream, Length: 50 mm to 200 mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Polyamide/imide (PAI)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kerimid, Torlon®</strong></td>
</tr>
<tr>
<td>AM313050 Thickness: 6.35mm, Tolerance: -10/+20%, Color: Brown, Condition: Electrical grade, Grade: Torlon® 4203, Size: 50x50 mm to 200x200 mm</td>
</tr>
<tr>
<td>AM313100 Thickness: 9.5mm, Color: Brown, Condition: Electrical grade, Grade: Torlon® 4203, Size: 50x50 mm to 150x150 mm</td>
</tr>
<tr>
<td><strong>Sheet</strong></td>
</tr>
<tr>
<td>AM317910 Diameter: 2.4mm, Color: Brown, Condition: Electrical grade, Grade: Torlon® 4203, Length: 500 mm to 1000 mm</td>
</tr>
<tr>
<td>AM317940 Diameter: 6.7mm, Color: Brown, Condition: Electrical grade, Grade: Torlon® 4203, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>AM317980 Diameter: 12.7mm, Color: Brown, Condition: Electrical grade, Grade: Torlon® 4203, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>AM317981 Diameter: 12.7mm, Condition: Bearing grade, Grade: Torlon® 4435, Length: 50 mm to 500 mm</td>
</tr>
<tr>
<td>AM317990 Diameter: 25.4mm, Color: Brown, Condition: Electrical grade, Grade: Torlon® 4203, Length: 50 mm to 200 mm</td>
</tr>
<tr>
<td>AM317995 Diameter: 50.8mm, Color: Brown, Condition: Electrical grade, Grade: Torlon® 4435, Length: 25 mm to 100 mm</td>
</tr>
<tr>
<td><strong>Rod</strong></td>
</tr>
<tr>
<td>AM318145 Diameter: 0.05mm, Tolerance: -10/+20%, Color: Brown, Condition: Electrical grade, Grade: Torlon® 4203, Length: 100 mm</td>
</tr>
<tr>
<td>AM318150 Diameter: 1mm, Color: Brown, Condition: Electrical grade, Grade: Torlon® 4203, Length: 100 mm</td>
</tr>
<tr>
<td>AM318160 Diameter: 50micron, Min. Particle size: 25-30micron</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Polyaramid (Polyparaphenylene terephthalamide)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DuPont™ Kevlar®, Twaron®</strong></td>
</tr>
<tr>
<td>AM316820 Diameter: 3.18mm, Tolerance: ±0.05mm, Sphericity: 0.0254mm, Grade: Torlon® 4203, Grade: Precision Sphere</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Textures — Polyaramid - Polyaramid, Polyethylene (PE), Polyethylene terephthalate (PET)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>fabric</strong></td>
</tr>
<tr>
<td>AR303520 Weight.m²: 60g, Thickness: 0.1mm, Warp Yarn: 22Tex, Weft Yarn: 22Tex, Ends x Picks/10cm: 134x134, Weave: Plain, Coil width 1270 mm, Size: 150x150 mm to 500x500 mm</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Name</th>
<th>Thickness</th>
<th>Type</th>
<th>Condition</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR31140</td>
<td>0.51 mm</td>
<td>DuPont™ Nomex® T410</td>
<td>Calendered paper</td>
<td>200x304 mm</td>
</tr>
<tr>
<td>AR311450</td>
<td>0.76 mm</td>
<td>DuPont™ Nomex® T410</td>
<td>Calendered paper</td>
<td>0.5 m to 5 m</td>
</tr>
<tr>
<td>Honeycomb</td>
<td>5 mm</td>
<td>Cell size: 3mm, Cell Wall: 0.05mm, Core Density: 0.048g.cm⁻³, Adhesive (Resin): Phenolic, Size: 300x300 mm to 600x600 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR312610</td>
<td>5 mm</td>
<td>Cell size: 6mm, Cell Wall: 0.05mm, Core Density: 0.032g.cm⁻³, Adhesive (Resin): Phenolic, Size: 300x300 mm to 600x600 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR312710</td>
<td>5 mm</td>
<td>Cell size: 6mm, Cell Wall: 0.09mm, Core Density: 0.064g.cm⁻³, Adhesive (Resin): Phenolic, Size: 300x300 mm to 600x600 mm</td>
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</tr>
<tr>
<td>AR312620</td>
<td>6mm</td>
<td>Cell size: 6mm, Cell Wall: 0.05mm, Core Density: 0.048g.cm⁻³, Adhesive (Resin): Phenolic, Size: 300x300 mm to 600x600 mm</td>
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</tr>
<tr>
<td>AR312620</td>
<td>7mm</td>
<td>Cell size: 6mm, Cell Wall: 0.05mm, Core Density: 0.032g.cm⁻³, Adhesive (Resin): Phenolic, Size: 300x300 mm to 600x600 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR312720</td>
<td>7mm</td>
<td>Cell size: 6mm, Cell Wall: 0.05mm, Core Density: 0.048g.cm⁻³, Adhesive (Resin): Phenolic, Size: 300x300 mm to 600x600 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR312725</td>
<td>10mm</td>
<td>Cell size: 5mm, Cell Wall: 0.05mm, Core Density: 0.064g.cm⁻³, Adhesive (Resin): Phenolic, Size: 300x300 mm to 600x600 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR312650</td>
<td>10mm</td>
<td>Cell size: 5mm, Cell Wall: 0.05mm, Core Density: 0.048g.cm⁻³, Adhesive (Resin): Phenolic, Size: 300x300 mm to 600x600 mm</td>
<td></td>
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</tr>
<tr>
<td>AR312750</td>
<td>20mm</td>
<td>Cell size: 5mm, Cell Wall: 0.05mm, Core Density: 0.048g.cm⁻³, Adhesive (Resin): Phenolic, Size: 300x300 mm to 600x600 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR312850</td>
<td>20mm</td>
<td>Cell size: 6mm, Cell Wall: 0.05mm, Core Density: 0.048g.cm⁻³, Adhesive (Resin): Phenolic, Size: 300x300 mm to 600x600 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR312755</td>
<td>20mm</td>
<td>Cell size: 5mm, Cell Wall: 0.05mm, Core Density: 0.064g.cm⁻³, Adhesive (Resin): Phenolic, Size: 300x300 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR313100</td>
<td>1.0mm</td>
<td>Condition: Pressboard, Type: DuPont™ Nomex® T994 - High density Pressboard, Size: 150x150 mm to 300x300 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR313100</td>
<td>1.0mm</td>
<td>Condition: Pressboard, Type: DuPont™ Nomex® T993 - Medium density Pressboard, Size: 100x100 mm to 500x500 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR313150</td>
<td>1.5mm</td>
<td>Condition: Pressboard, Type: DuPont™ Nomex® T992 - Low density Pressboard, Size: 100x100 mm to 500x500 mm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Polymers

#### Polybenzimidazole (PBI)
- **Celazole**
  - **Sheet**
    - AR316575: Nominal Diameter: 0.012mm, Fiber length: 75mm
- **Polybutylene terephthalate (PBT)**
  - **Celanex, Orgater, Valox**
    - **Film**
      - AR313310: Thickness: 3.0mm, Condition: Pressboard, Type: DuPont® Nomex® T994 - High density Pressboard, Size: 150x150 mm to 300x300 mm
    - **Sheet**
      - AR313300: Thickness: 3.0mm, Condition: Pressboard, Type: DuPont® Nomex® T993 - Medium density Pressboard, Size: 140x150 mm to 300x300 mm
    - **Granule**
      - AR313450: Thickness: 9.6mm, Condition: Pressboard, Type: DuPont® Nomex® T994 - High density Pressboard, Size: 150x150 mm to 300x300 mm
- **Fiber**
  - AR315722: Tex Number: 22, Filament diameter: 0.01mm, Number of filaments: 100
- **Chopped Fiber**
  - AR316575

#### Polybutylene terephthalate - 30% Glass Fiber Reinforced (PBT 30% GFR)
- **Celanex, Orgater, Valox**
  - **Rod**
    - ES357920: Diameter: 2.0 mm, Condition: Machining feedstock, Length: 100 mm to 1000 mm
    - ES357930: Diameter: 3.0 mm, Condition: Machining feedstock, Length: 100 mm to 1000 mm
    - ES357940: Diameter: 4.0 mm, Condition: Machining feedstock, Length: 100 mm to 1000 mm
  - **Film**
    - CT301025: Thickness: 0.002mm, Grade - Makrofol® KG: monaxially oriented and crystallized, Coil width 315 mm, Size: 210x290 mm
    - CT301020: Thickness: 0.002mm, Coil width 465 mm, Size: 150x150 mm to 300x300 mm
    - CT301030: Thickness: 0.003mm, Grade - Makrofol® KG: monaxially oriented and crystallized, Coil width 465 mm, Size: 100x100 mm to 300x300 mm
    - CT301060: Thickness: 0.006mm, Coil width 300 mm, Size: 150x150 mm to 300x300 mm
    - CT301210: Thickness: 0.02mm, Color: Yellow, Grade - Makrofol® N: cast isotropic, Coil width 600 mm, Size: 100x100 mm to 600x600 mm
    - CT301300: Thickness: 0.1mm, Grade - DE 1: extruded isotropic, Size: 100x100 mm to 300x300 mm
    - CT301305: Thickness: 0.125mm, Color: Clear, Coil width 610 mm, Size: 100x100 mm to 600x600 mm
    - CT301310: Thickness: 0.175mm, Color: Clear, Coil width 610 mm, Size: 150x150 mm to 600x600 mm
    - CT301327: Thickness: 0.25mm, Color: Black, Grade: Lexan® FR700-701, Size: 170x210 mm
    - CT301326: Thickness: 0.25 mm, Color: Transparent white 82728, Grade: Lexan® 8B28, Coil width 600 mm, Size: 150x150 mm to 300x300 mm
    - CT301325: Thickness: 0.25mm, Color: Clear, Size: 100x100 mm to 600x600 mm
    - CT301340: Thickness: 0.375mm, Size: 100x100 mm to 500x500 mm
    - CT301351: Thickness: 0.5 mm, Color: Transparent white 82728, Grade: Lexan® 8B28, Coil width 600 mm, Size: 150x150 mm to 600x600 mm
    - CT301350: Thickness: 0.5mm, Color: Clear, Size: 100x100 mm to 610x915 mm
    - CT301375: Thickness: 0.75mm, Color: Clear, Size: 100x100 mm to 1000x1250 mm
  - **Metallized Film**
    - CT301820: Thickness: 0.002mm, Ohms/Square: 4, Metallized with: Aluminum, Coil width 160 mm, Size: 100x100 mm to 160x300 mm

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February 2017

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<table>
<thead>
<tr>
<th>Polymers — Polycarbonate - 20% Glass Fiber Filled</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sheet</strong></td>
</tr>
<tr>
<td>CT303040 Thickness: 0.5mm, Grade: Makrofol® DE 1-4, Color: White, Size: 100x100 mm to 500x1000 mm</td>
</tr>
<tr>
<td>CT303050 Thickness: 1.0mm, Color: Clear, Size: 150x150 mm to 1000x1000 mm</td>
</tr>
<tr>
<td>CT303100 Thickness: 2.0mm, Color: Clear, Size: 150x150 mm to 600x600 mm</td>
</tr>
<tr>
<td>CT303120 Thickness: 3.0mm, Color: Clear, Size: 150x150 mm to 500x500 mm</td>
</tr>
<tr>
<td>CT303150 Thickness: 5.0mm, Color: Clear, Size: 150x150 mm to 500x500 mm</td>
</tr>
<tr>
<td>CT303350 Thickness: 10.0mm, Color: Clear, Size: 150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td>CT303400 Thickness: 12.0mm, Color: Clear, Size: 150x150 mm to 500x500 mm</td>
</tr>
<tr>
<td>CT303451 Thickness: 25mm, Size: 150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td>CT303450 Thickness: 25 mm, Condition: Machining feedstock, Size: 150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td><strong>Rod</strong></td>
</tr>
<tr>
<td>CT307907 Diameter: 6.35 mm, Condition: Machining feedstock, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>CT307910 Diameter: 10 mm, Condition: Machining feedstock, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>CT307912 Diameter: 12mm, Color: Black, Grade: Lexan® 940, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>CT307915 Diameter: 15 mm, Condition: Machining feedstock, Grade: Lexan® 943, Color: Blue, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>CT307925 Diameter: 25 mm, Condition: Machining feedstock, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>CT307932 Diameter: 32 mm, Condition: Machining feedstock, Surface finish: Matt, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>CT307950 Diameter: 50 mm, Condition: Machining feedstock, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>CT307980 Diameter: 100 mm, Condition: Machining feedstock, Length: 50 mm to 500 mm</td>
</tr>
<tr>
<td>CT307990 Diameter: 150 mm, Condition: Machining feedstock, Length: 50 mm to 500 mm</td>
</tr>
<tr>
<td><strong>Tube</strong></td>
</tr>
<tr>
<td>CT307400 Outside Diameter: 9.5mm, Wall Thickness: 1.5mm, Inside Diameter: 6.5mm, Length: 500 mm to 1000 mm</td>
</tr>
<tr>
<td>CT307500 Outside Diameter: 20mm, Wall Thickness: 2mm, Inside Diameter: 16mm, Length: 200 mm to 1000 mm</td>
</tr>
<tr>
<td><strong>Granule</strong></td>
</tr>
<tr>
<td>CT306310 Nominal Granule Size: 3mm, Color: Clear, Additives: Heat stabilizer only, Melt Flow Rate (MFR): 6.5</td>
</tr>
<tr>
<td><strong>Polymer - Polycarbonate - 30% Carbon Fiber Reinforced (PC - 30% CFR)</strong></td>
</tr>
<tr>
<td><strong>Granule</strong></td>
</tr>
<tr>
<td>CT356310 Nominal Granule Size: 3mm, Color: Black</td>
</tr>
<tr>
<td><strong>Polymer - Polycarbonate - 30% Glass Fiber Filled (PC - 30% GFR)</strong></td>
</tr>
<tr>
<td><strong>Rod</strong></td>
</tr>
<tr>
<td>CT337920 Diameter: 20mm, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>CT337940 Diameter: 40 mm, Condition: Machining feedstock, Size: 50 mm to 200 mm</td>
</tr>
<tr>
<td><strong>Polychlorotrifluoroethylene (PCTFE)</strong></td>
</tr>
<tr>
<td>Kel-F, Neoflon</td>
</tr>
<tr>
<td><strong>Sheet</strong></td>
</tr>
<tr>
<td>FP353010 Thickness: 1.2mm, Size: 150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td>FP353015 Thickness: 1.5mm, Tolerance: +/-0.3 mm, Color: Colorless, Condition: Compression molded, Size: 50x50 mm to 300x300 mm</td>
</tr>
<tr>
<td>FP353020 Thickness: 2.0mm, Size: 150x150 mm to 280x300 mm</td>
</tr>
<tr>
<td>FP353050 Thickness: 5.0mm, Size: 50x50 mm to 150x150 mm</td>
</tr>
<tr>
<td>FP353100 Thickness: 10.0mm, Color: Natural, Size: 70x70 mm to 300x300 mm</td>
</tr>
<tr>
<td><strong>Rod</strong></td>
</tr>
<tr>
<td>FP357905 Diameter: 1.6mm, Color: Natural, Length: 900 mm to 1800 mm</td>
</tr>
<tr>
<td>FP357910 Diameter: 3.2mm, Color: Natural, Length: 900 mm to 1800 mm</td>
</tr>
<tr>
<td>FP357920 Diameter: 4.8mm, Color: Natural, Length: 300 mm to 1800 mm</td>
</tr>
<tr>
<td>FP357930 Diameter: 6.35mm, Color: Natural, Length: 300 mm to 1800 mm</td>
</tr>
<tr>
<td>FP357907 Diameter: 7mm, Color: Natural, Length: 100 mm to 2000 mm</td>
</tr>
<tr>
<td>FP357908 Diameter: 8mm, Color: Natural, Length: 100 mm to 2000 mm</td>
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<tr>
<td>FP357940 Diameter: 9.5mm, Length: 300 mm to 900 mm</td>
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<tr>
<td>FP357911 Diameter: 10mm, Color: Natural, Length: 100 mm to 2000 mm</td>
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<tr>
<td>FP357912 Diameter: 12mm, Color: Natural, Length: 100 mm to 2000 mm</td>
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<tr>
<td>FP357950 Diameter: 12.7mm, Length: 300 mm to 900 mm</td>
</tr>
<tr>
<td>FP357913 Diameter: 13mm, Color: Natural, Length: 100 mm to 2000 mm</td>
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<tr>
<td>FP357955 Diameter: 15mm, Length: 300 mm to 900 mm</td>
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<tr>
<td>FP357922 Diameter: 22mm, Color: Natural, Length: 100 mm to 1000 mm</td>
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<tr>
<td>FP357960 Diameter: 25.4mm, Length: 150 mm to 1828 mm</td>
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<tr>
<td>FP357970 Diameter: 40mm, Color: Natural, Length: 100 mm to 1000 mm</td>
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<tr>
<td><strong>Polymers</strong> — <strong>Polyetheretherketone</strong></td>
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<tr>
<td>----------------------------------------</td>
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<tr>
<td><strong>Polyetheretherketone (PEEK)</strong></td>
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<tr>
<td>Victrex PEEK, Zyex, Vestakeep</td>
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<tr>
<td><strong>Film</strong></td>
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<tr>
<td>EK301006 Thickness: 0.006 mm, Color: Transparent pale amber, Condition: Amorphous, Coil width 600 mm, Size: 150x150 mm to 300x300 mm</td>
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<tr>
<td>EK301012 Thickness: 0.012 mm, Color: Transparent pale amber, Condition: Amorphous, Size: 150x150 mm to 300x300 mm</td>
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<tr>
<td>EK301025 Thickness: 0.025 mm, Color: Transparent pale amber, Condition: Amorphous, Coil width 650 mm, Size: 150x150 mm to 650x650 mm</td>
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<tr>
<td>EK301038 Thickness: 0.038 mm, Color: Transparent pale amber, Condition: Amorphous, Size: 150x150 mm to 300x300 mm</td>
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<tr>
<td>EK301050 Thickness: 0.05 mm, Color: Transparent pale amber, Condition: Amorphous, Coil width 600 mm, Size: 150x150 mm to 300x300 mm</td>
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<tr>
<td>EK301075 Thickness: 0.075 mm, Color: Transparent pale amber, Condition: Amorphous, Coil width 610 mm, Size: 150x150 mm to 300x300 mm</td>
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<td>EK301100 Thickness: 0.1 mm, Color: Transparent pale amber, Condition: Amorphous, Coil width 600 mm, Size: 150x150 mm to 300x300 mm</td>
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<tr>
<td>EK301125 Thickness: 0.125 mm, Color: Transparent pale amber, Condition: Amorphous, Coil width 600 mm, Size: 150x150 mm to 300x300 mm</td>
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<td>EK301150 Thickness: 0.15 mm, Color: Transparent pale amber, Condition: Amorphous, Coil width 600 mm, Size: 150x150 mm to 600x600 mm</td>
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<tr>
<td>EK301200 Thickness: 0.2 mm, Color: Transparent pale amber, Condition: Amorphous, Coil width 630 mm, Size: 150x150 mm to 300x300 mm</td>
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<tr>
<td>EK301250 Thickness: 0.25 mm, Color: Transparent pale amber, Condition: Amorphous, Coil width 650 mm, Size: 100x100 mm to 300x300 mm</td>
</tr>
<tr>
<td>EK301400 Thickness: 0.50 mm, Color: Opaque grey, Condition: Semi-crystalline, Coil width 610 mm, Size: 100x100 mm to 300x300 mm</td>
</tr>
<tr>
<td><strong>Sheet</strong></td>
</tr>
<tr>
<td>EK303010 Thickness: 1.0 mm, Color: Opaque grey, Condition: Semi-crystalline, Polished on 1 side / dull on 1 side, Size: 100x100 mm to 450x600 mm</td>
</tr>
<tr>
<td>EK303450 Thickness: 5.5 mm, Color: Opaque grey, Condition: Semi-crystalline, Size: 40x150 mm to 154x190 mm</td>
</tr>
<tr>
<td>EK303460 Thickness: 6.5 mm, Color: Opaque grey, Condition: Semi-crystalline, Size: 150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td><strong>Mesh</strong></td>
</tr>
<tr>
<td>EK308704 Nominal Aperture: 300 μm, Monofil diameter: 200 μm, Threads/cm: 19, Open area: 36%, Type: Plain weave mesh, Size: 150x150 mm to 600x600 mm</td>
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<tr>
<td><strong>Fiber</strong></td>
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<tr>
<td>EK305723 Tex Number: 23, Filament diameter: 0.034 mm, Number of filaments: 30</td>
</tr>
<tr>
<td><strong>Monofilament</strong></td>
</tr>
<tr>
<td>EK305915 Diameter: 0.15 mm, Condition: Type C, pigmented</td>
</tr>
<tr>
<td>EK305920 Diameter: 0.2 mm, Condition: Type A</td>
</tr>
<tr>
<td>EK305945 Diameter: 0.45 mm, Condition: Type C, additive free</td>
</tr>
<tr>
<td>EK305990 Diameter: 0.9 mm, Condition: Type A</td>
</tr>
<tr>
<td>EK305995 Diameter: 1.2 mm, Condition: Type B</td>
</tr>
<tr>
<td><strong>Rod</strong></td>
</tr>
<tr>
<td>EK307906 Diameter: 6 mm, Color: Opaque grey, Condition: Semi-crystalline, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>EK307910 Diameter: 10 mm, Color: Opaque grey, Condition: Semi-crystalline, Length: 100 mm to 1000 mm</td>
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<tr>
<td>EK307925 Diameter: 25 mm, Color: Opaque grey, Condition: Semi-crystalline, Length: 100 mm to 1000 mm</td>
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<tr>
<td>EK307950 Diameter: 50 mm, Color: Opaque grey, Condition: Semi-crystalline, Length: 50 mm to 200 mm</td>
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<tr>
<td>EK307980 Diameter: 100 mm, Color: Opaque grey, Condition: Semi-crystalline, Length: 50 mm to 200 mm</td>
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<tr>
<td><strong>Tube</strong></td>
</tr>
<tr>
<td>EK307115 Outside Diameter: 1.15 mm, Wall Thickness: 0.175 mm, Inside Diameter: 0.8 mm, Color: Transparent pale amber, Length: 200 mm to 1000 mm</td>
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<tr>
<td>EK307160 Outside Diameter: 1.6 mm, Wall Thickness: 0.675 mm, Inside Diameter: 0.25 mm, Color: Opaque grey, Length: 200 mm to 1000 mm</td>
</tr>
<tr>
<td>EK307165 Outside Diameter: 1.6 mm, Wall Thickness: 0.3 mm, Inside Diameter: 1 mm, Color: Opaque grey, Length: 200 mm to 1000 mm</td>
</tr>
<tr>
<td>EK307170 Outside Diameter: 1.6 mm, Wall Thickness: 0.1 mm, Inside Diameter: 1.4 mm, Color: Transparent pale amber, Length: 200 mm to 1000 mm</td>
</tr>
<tr>
<td>EK307200 Outside Diameter: 3.2 mm, Wall Thickness: 0.6 mm, Inside Diameter: 2 mm, Color: Opaque grey, Length: 200 mm to 1000 mm</td>
</tr>
<tr>
<td>EK307225 Outside Diameter: 3.9 mm, Wall Thickness: 0.5 mm, Inside Diameter: 2.9 mm, Color: Opaque grey, Length: 250 mm to 1000 mm</td>
</tr>
<tr>
<td>EK307235 Outside Diameter: 4.6 mm, Wall Thickness: 0.4 mm, Inside Diameter: 3.8 mm, Color: Opaque grey, Length: 500 mm to 1000 mm</td>
</tr>
</tbody>
</table>
## Polymers

### Polymers — Polyetheretherketone, 30% Glass Fiber Reinforced

<table>
<thead>
<tr>
<th>Bolt</th>
<th>EK30BO20 Size: M2 x 10 mm, Head Style: Cross recessed pan head, Pitch: 0.4 mm, Quantity: 10 pcs</th>
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</thead>
<tbody>
<tr>
<td>EK30BO18 Size: M2 x 6 mm, Head Style: Cross recessed pan head, Pitch: 0.4 mm, Quantity: 10 pcs</td>
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<tr>
<td>EK30BO40 Size: M4 x 10 mm, Head Style: Cross recessed pan head, Pitch: 0.7 mm, Quantity: 10 pcs</td>
<td></td>
</tr>
<tr>
<td>EK30BO60 Size: M6 x 10 mm, Head Style: Cross recessed pan head, Pitch: 1 mm, Quantity: 10 pcs</td>
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</tr>
<tr>
<td>EK30BO80 Size: M8 x 12 mm, Head Style: Cross recessed pan head, Pitch: 1.25 mm, Quantity: 10 pcs</td>
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</tbody>
</table>

### Nut

| EK30NU02 Size: M2, Style: Hexagonal, Pitch: 0.4 mm, Quantity: 10 pcs |
| EK30NU04 Size: M4, Style: Hexagonal, Pitch: 0.7 mm, Quantity: 10 pcs |
| EK30NU06 Size: M6, Style: Hexagonal, Pitch: 1 mm, Quantity: 10 pcs |
| EK30NU08 Size: M8, Style: Hexagonal, Pitch: 1.25 mm, Quantity: 10 pcs |

### Washer

| EK30WA02 Size: M2, Outside Diameter: 4 mm, Inside Diameter: 2.1 mm, Thickness: 0.5 mm, Quantity: 10 pcs |
| EK30WA04 Size: M4, Outside Diameter: 9 mm, Inside Diameter: 4.3 mm, Thickness: 0.8 mm, Quantity: 10 pcs |
| EK30WA06 Size: M6, Outside Diameter: 12.5 mm, Inside Diameter: 6.4 mm, Thickness: 1.6 mm, Quantity: 10 pcs |
| EK30WA08 Size: M8, Outside Diameter: 17 mm, Inside Diameter: 8.4 mm, Thickness: 1.8 mm, Quantity: 10 pcs |

### Powder

| EK306010 Mean Particle size: 80 micron |

### Granule

| EK306300 Nominal Granule Size: 6mm |
| EK306301 Nominal Granule Size: 6mm, Condition: High viscosity, Grade: Vestakeep® L4000G |
| EK306303 Nominal Granule Size: 6mm, Condition: High viscosity, Grade: Vestakeep® 5000G |
| EK306302 Nominal Granule Size: 6mm, Condition: Medium viscosity, Condition: Lubricated grade |

### Polyetheretherketone, 30% Glass Fiber Reinforced (PEEK - 30% GFR)

| Granule | EK326300 Nominal Granule Size: 6mm, Condition: High viscosity, Grade: Vestakeep® 4000GF30 |

### Polyetherimide (PEI)

| Ultem | EK311025 Thickness: 0.025mm, Color: Clear amber, Coil width 610 mm, Size: 150x150 mm to 600x600 mm |

### Sheet

| EK313020 Thickness: 0.16mm, Color: Clear amber, Size: 150x150 mm to 600x600 mm |
| EK313040 Thickness: 0.36mm, Color: Black, Condition: Injection molded, Condition: center-gated, Size: 155x155 mm |
| EK313060 Thickness: 0.64mm, Color: Clear amber, Size: 100x100 mm to 300x300 mm |

### Rod

| EK317906 Diameter: 6.4mm, Color: Clear amber, Length: 100 mm to 1000 mm |
| EK317912 Diameter: 12.7mm, Color: Clear amber, Length: 100 mm to 1000 mm |
| EK317925 Diameter: 25mm, Color: Clear amber, Length: 100 mm to 1000 mm |

### Tube

| EK317200 Outside Diameter: 2.3mm, Wall Thickness: 0.7mm, Inside Diameter: 0.9mm, Color: Clear amber, Length: 1 m to 20 m |

### Granule

| EK316300 Nominal Granule Size: 3mm, Color: Natural, Grade: Ultem® 1000 |

### Polyetherimide - 30% Glass Fiber Reinforced (PEI 30% GFR)

### Rod

| EK307975 Diameter: 75mm, Color: Brown, Condition: Machining feedstock, Length: 100 mm to 200 mm |

### Polyetherketone (PEK) Film

| EK351040 Thickness: 0.040mm, Coil width 420 mm, Size: 100x100 mm to 420x420 mm |
| EK351050 Thickness: 0.050mm, Coil width 420 mm, Size: 100x100 mm to 420x420 mm |
| EK351100 Thickness: 0.100mm, Coil width 420 mm, Size: 100x100 mm to 420x420 mm |

### Polyetherketone (PEKK) Granule

| EK316300 Nominal Granule Size: 3mm, Color: Natural, Condition: Semi-crystalline, Condition: Injection molding grade |

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February 2017
## Polymers

### Polyethersulfone (PES)
- **Ultrason E, Victrex PES**
  - **Film**
    - SU301025 Thickness: 0.025mm, Color: Clear amber, Coil width 600 mm, Size: 150x150 mm to 300x300 mm
    - SU301050 Thickness: 0.05mm, Color: Clear amber, Coil width 550 mm, Size: 100x100 mm to 500x500 mm
    - SU301100 Thickness: 0.1mm, Color: Clear amber, Coil width 530 mm, Size: 100x100 mm to 500x500 mm
    - SU301125 Thickness: 0.125mm, Coil width 570mm, Color: Clear amber, Length: 0.2 m to 1 m
    - SU301250 Thickness: 0.25mm, Color: Clear amber, Coil width 374 mm, Size: 100x100 mm to 300x300 mm
  - **Sheet**
    - SU303200 Thickness: 2mm, Color: Clear amber, Condition: Injection molded, Size: 48x48 mm to 102x102 mm
    - SU303350 Thickness: 6.35mm, Color: Clear amber, Size: 150x150 mm to 300x300 mm
    - SU303450 Thickness: 25.4mm, Clear amber, Size: 150x150 mm to 300x300 mm
  - **Rod**
    - SU307913 Diameter: 12.7mm, Length: 100 mm to 1200 mm
    - SU307919 Diameter: 19mm, Length: 100 mm to 1200 mm
    - SU307920 Diameter: 20mm, Color: Clear amber, Length: 100 mm to 1000 mm
    - SU307925 Diameter: 25.4mm, Length: 100 mm to 1200 mm
    - SU307950 Diameter: 50mm, Color: Clear amber, Length: 50 mm to 1000 mm
    - SU307955 Diameter: 55mm, Color: Dark amber, Length: 100 mm to 500 mm
  - **Granule**
    - SU306311 Nominal Granule Size: 3mm, Color: Clear amber, Condition: Medium viscosity, Molecular weight: 58,000 g/mol
    - SU306300 Nominal Granule Size: 3mm, Color: Black, Molecular weight: 58,000 g/mol

### Polyethylene - Carbon filled (PE)
- **Film**
  - ET331080 Thickness: 0.08 mm, Condition: Conductive polymer, Coil width 800 mm, Size: 100x100 mm to 500x500 mm
- **Sheet**
  - ET323100 Thickness: 1mm, Size: 150x150 mm to 500x500 mm

### Polyethylene - High density (HDPE)
- **Film**
  - ET321010 Thickness: 0.01mm, Coil width 600 mm, Size: 100x100 mm to 600x600 mm
- **Sheet**
  - ET323100 Thickness: 1mm, Size: 150x150 mm to 500x500 mm

### Polyethylene - Low Density (LDPE)
- **Film**
  - ET311115 Thickness: 0.015mm, Coil width 500 mm, Size: 150x150 mm to 500x500 mm
  - ET311126 Thickness: 0.025mm, Coil width: 600mm, Length: 0.5 m to 10 m
  - ET311130 Thickness: 0.03mm, Coil width 900 mm, Size: 150x150 mm to 600x900 mm
  - ET311135 Thickness: 0.035mm, Coil width 600 mm, Size: 150x150 mm to 600x600 mm
  - ET311150 Thickness: 0.05mm, Coil width 300 mm, Size: 150x150 mm to 300x300 mm
  - ET311151 Thickness: 0.05 mm, Condition: Additive free polymer, Coil width 600 mm, Size: 150x150 mm to 300x300 mm

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<table>
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<tr>
<th>Diameter</th>
<th>ET311201</th>
<th>Thickness</th>
<th>0.1 mm</th>
<th>Condition</th>
<th>Additive free polymer, Coil width 600 mm, Size: 150x150 mm to 300x300 mm</th>
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<tr>
<td>Diameter</td>
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<td>Size:</td>
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<td>Size:</td>
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<td>Size:</td>
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<tr>
<td>Thickness</td>
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<td>Sphere</td>
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<td>Polyethylene - Medium Density (MDPE)</td>
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<td>Tube</td>
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<td>Tube</td>
<td>ET317640</td>
<td>Outside Diameter: 6.4 mm, Wall Thickness: 1.1 mm, Inside Diameter: 4.2 mm, Length: 1 m to 20 m</td>
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<td>Tube</td>
<td>ET317690</td>
<td>Outside Diameter: 12.7 mm, Wall Thickness: 1.6 mm, Inside Diameter: 9.5 mm, Length: 1 m to 20 m</td>
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<td>Thickness: 0.075 mm, Coil width 610 mm, Size: 150x150 mm to 300x300 mm</td>
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<td>Film</td>
<td>ET301200</td>
<td>Thickness: 0.2 mm, Coil width 610 mm, Size: 150x150 mm to 300x300 mm</td>
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<tr>
<td>Film</td>
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<td>Sheet</td>
<td>ET303400</td>
<td>Thickness: 10.0 mm, Size: 100x100 mm to 300x300 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheet</td>
<td>ET303200</td>
<td>Thickness: 20 mm, Color: Natural, Size: 100x100 mm to 500x500 mm</td>
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<td></td>
</tr>
<tr>
<td>Sheet</td>
<td>ET303450</td>
<td>Thickness: 25.0 mm, Size: 150x150 mm to 500x500 mm</td>
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<td></td>
<td></td>
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</tbody>
</table>
Polymers

**Fabric**

<table>
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<tr>
<th>Code</th>
<th>Thickness:</th>
<th>Color:</th>
<th>Condition:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET303510</td>
<td>0.05mm</td>
<td>Clear</td>
<td>Biaxially Oriented, Size: 620 mm to 300x300 mm</td>
</tr>
<tr>
<td>ES361050</td>
<td>0.075mm</td>
<td>Clear</td>
<td>Biaxially Oriented, Size: 150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td>ES361075</td>
<td>0.125mm</td>
<td>Natural</td>
<td>Biaxially Oriented, Size: 125x150 mm to 300x300 mm</td>
</tr>
<tr>
<td>ES361090</td>
<td>0.25mm</td>
<td>Clear</td>
<td>Biaxially Oriented, Size: 150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td>ES361150</td>
<td>0.5mm</td>
<td>Clear</td>
<td>Biaxially Oriented, Size: 300x300 mm</td>
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</tbody>
</table>

**Granule**

<table>
<thead>
<tr>
<th>Code</th>
<th>Color:</th>
<th>Condition:</th>
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</thead>
<tbody>
<tr>
<td>ET306300</td>
<td>Natural</td>
<td>Injection molding grade</td>
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</table>

**Polyethylene naphthalate (PEN)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Thickness:</th>
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<th>Condition:</th>
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</thead>
<tbody>
<tr>
<td>ES361010</td>
<td>0.0013mm</td>
<td>Clear</td>
<td>Biaxially Oriented, Size: 150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td>ES361015</td>
<td>0.012mm</td>
<td>Clear</td>
<td>Biaxially Oriented, Size: 630 mm to 360x360 mm</td>
</tr>
<tr>
<td>ES361025</td>
<td>0.025mm</td>
<td>Clear</td>
<td>Biaxially Oriented, Size: 625 mm to 300x300 mm</td>
</tr>
<tr>
<td>ES361030</td>
<td>0.003mm</td>
<td>Clear</td>
<td>Biaxially Oriented, Length: 0.5 m</td>
</tr>
<tr>
<td>ES361035</td>
<td>0.0035mm</td>
<td>Clear</td>
<td>Biaxially Oriented, Length: 0.5 m to 5 m</td>
</tr>
<tr>
<td>ES361061</td>
<td>0.006mm</td>
<td>Clear</td>
<td>Biaxially Oriented, Length: 0.5 m to 20 m</td>
</tr>
<tr>
<td>ES361130</td>
<td>0.013mm</td>
<td>Clear</td>
<td>Biaxially Oriented, Size: 100x100 mm to 600x600 mm</td>
</tr>
<tr>
<td>ES361230</td>
<td>0.023mm</td>
<td>Clear</td>
<td>Biaxially Oriented, Length: 0.5 m</td>
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**Polyethylene naphthalate (PET, PETP)**

<table>
<thead>
<tr>
<th>Code</th>
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<th>Condition:</th>
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<tbody>
<tr>
<td>ES36120</td>
<td>Clear</td>
<td>Biaxially Oriented, Size: 500x500 mm</td>
</tr>
<tr>
<td>ES361621</td>
<td>Clear</td>
<td>Biaxially Oriented, Size: 250x250 mm to 500x500 mm</td>
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**Film**

<table>
<thead>
<tr>
<th>Code</th>
<th>Thickness:</th>
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<th>Condition:</th>
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</thead>
<tbody>
<tr>
<td>ES301005</td>
<td>0.0005mm</td>
<td>Clear</td>
<td>Biaxially Oriented, Length: 0.1 m to 5 m</td>
</tr>
<tr>
<td>ES301007</td>
<td>0.0007mm</td>
<td>Clear</td>
<td>Biaxially Oriented, Length: 0.1 m to 5 m</td>
</tr>
<tr>
<td>ES301009</td>
<td>0.0009mm</td>
<td>Clear</td>
<td>Biaxially Oriented, Length: 0.1 m to 5 m</td>
</tr>
<tr>
<td>ES301025</td>
<td>0.0025mm</td>
<td>Clear</td>
<td>Biaxially Oriented, Length: 0.5 m to 5 m</td>
</tr>
<tr>
<td>ES301030</td>
<td>0.003mm</td>
<td>Clear</td>
<td>Biaxially Oriented, Length: 0.5 m</td>
</tr>
<tr>
<td>ES301035</td>
<td>0.0035mm</td>
<td>Clear</td>
<td>Biaxially Oriented, Length: 0.5 m to 5 m</td>
</tr>
<tr>
<td>ES301061</td>
<td>0.006mm</td>
<td>Clear</td>
<td>Biaxially Oriented, Length: 0.5 m to 20 m</td>
</tr>
<tr>
<td>ES301130</td>
<td>0.013mm</td>
<td>Clear</td>
<td>Biaxially Oriented, Size: 100x100 mm to 600x600 mm</td>
</tr>
<tr>
<td>ES301230</td>
<td>0.023mm</td>
<td>Clear</td>
<td>Biaxially Oriented, Length: 0.5 m</td>
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**Laminate**

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter:</th>
<th>Color:</th>
<th>Length:</th>
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<tbody>
<tr>
<td>ES367940</td>
<td>18mm</td>
<td>Clear</td>
<td>100 mm to 1000 mm</td>
</tr>
<tr>
<td>ES367950</td>
<td>25mm</td>
<td>Clear</td>
<td>50 mm to 500 mm</td>
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</tbody>
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**Powder**

<table>
<thead>
<tr>
<th>Code</th>
<th>Mean Particle size:</th>
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<tbody>
<tr>
<td>ET306010</td>
<td>150 micron</td>
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</tbody>
</table>

**Ryntie, Terylene, Trevira**

<table>
<thead>
<tr>
<th>Code</th>
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<th>Condition:</th>
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<tbody>
<tr>
<td>ET305711</td>
<td>Clear</td>
<td>Biaxially Oriented, Size: 625 mm</td>
</tr>
<tr>
<td>ET305720</td>
<td>Clear</td>
<td>Biaxially Oriented, Size: 630 mm</td>
</tr>
<tr>
<td>ET305740</td>
<td>Clear</td>
<td>Biaxially Oriented, Size: 630 mm</td>
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</tbody>
</table>

**Additive free polymer**

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>ET307930</td>
<td>Clear</td>
<td>Biaxially Oriented, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>ET307970</td>
<td>Clear</td>
<td>Biaxially Oriented, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>ET307989</td>
<td>Clear</td>
<td>Biaxially Oriented, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>ET307991</td>
<td>Clear</td>
<td>Biaxially Oriented, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>ET307992</td>
<td>Clear</td>
<td>Biaxially Oriented, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>ET307994</td>
<td>Clear</td>
<td>Biaxially Oriented, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>ET307996</td>
<td>Clear</td>
<td>Biaxially Oriented, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>ET307999</td>
<td>Clear</td>
<td>Biaxially Oriented, Length: 50 mm to 1000 mm</td>
</tr>
</tbody>
</table>

Please visit www.goodfellow.com or www.goodfellowusa.com for latest prices.
<table>
<thead>
<tr>
<th>Polymers — Polyethylene terephthalate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Metallized Film</strong></td>
</tr>
<tr>
<td>ES301232 Thickness: 0.038mm, Color: Clear, Grade: Pealable - Heat sealable, Coil width 610 mm, Size: 150x150 mm to 610x610 mm</td>
</tr>
<tr>
<td>ES301250 Thickness: 0.055mm, Color: Clear, Condition: Biaxially Oriented, Coil width 600 mm, Size: 150x150 mm to 600x600 mm</td>
</tr>
<tr>
<td>ES301302 Thickness: 0.075mm, Color: Clear, Condition: Biaxially Oriented, Coil width 254 mm, Size: 125x125 mm to 254x254 mm</td>
</tr>
<tr>
<td>ES301300 Thickness: 0.075mm, Color: Clear, Condition: Biaxially Oriented, Coil width 600 mm, Size: 150x150 mm to 600x600 mm</td>
</tr>
<tr>
<td>ES301301 Thickness: 0.075mm, Color: Gray, Condition: Biaxially Oriented, Length: 0.5 m to 10 m</td>
</tr>
<tr>
<td>ES301400 Thickness: 0.1mm, Color: Clear, Condition: Biaxially Oriented, Coil width 600 mm, Size: 100x100 mm to 300x300 mm</td>
</tr>
<tr>
<td>ES301401 Thickness: 0.1mm, Color: Black, Condition: Biaxially Oriented, Coil width 610 mm, Size: 150x150 mm to 600x600 mm</td>
</tr>
<tr>
<td>ES301402 Thickness: 0.1mm, Color: Gray, Condition: Biaxially Oriented, Coil width 610 mm, Size: 150x150 mm to 600x600 mm</td>
</tr>
<tr>
<td>ES301425 Thickness: 0.125mm, Color: Clear, Condition: Biaxially Oriented, Coil width 600 mm, Size: 300x300 mm to 600x600 mm</td>
</tr>
<tr>
<td>ES301440 Thickness: 0.175mm, Color: Clear, Condition: Biaxially Oriented, Coil width 600 mm, Size: 150x150 mm to 600x600 mm</td>
</tr>
<tr>
<td>ES301451 Thickness: 0.25mm, Color: Opaque white, Condition: Biaxially Oriented, Condition: Printable both sides, Size: 210x295 mm</td>
</tr>
<tr>
<td>ES301450 Thickness: 0.25mm, Color: Clear, Condition: Biaxially Oriented, Coil width 600 mm, Size: 300x300 mm to 600x600 mm</td>
</tr>
<tr>
<td>ES301445 Thickness: 0.25mm, Color: Transparent, Condition: Amorphous, Coil width 610 mm, Size: 300x300 mm to 610x610 mm</td>
</tr>
<tr>
<td>ES301460 Thickness: 0.35mm, Color: Biaxially Oriented, Coil width 600 mm, Size: 150x150 mm to 600x600 mm</td>
</tr>
<tr>
<td>ES301485 Thickness: 0.50mm, Color: Gray, Condition: Biaxially Oriented, Coil width 600 mm, Size: 100x100 mm to 600x600 mm</td>
</tr>
<tr>
<td><strong>Laminate</strong></td>
</tr>
<tr>
<td>ES301821 Thickness: 0.002mm, Coil width: 315mm, Ohms/Square: 1.4, Metallized on both sides with: Aluminum - 0.7 Ohms/Square, Metallized width: 305mm, Length: 0.2 m</td>
</tr>
<tr>
<td>ES301820 Thickness: 0.002mm, Coil width: 315mm, Ohms/Square: 1.5, Metallized with: Aluminum, Metallized width: 305mm, Length: 0.2 m</td>
</tr>
<tr>
<td>ES301835 Thickness: 0.0035mm, Coil width: 300mm, Ohms/Square: 2, Metallized with: Aluminum, Length: 0.5 m to 10 m</td>
</tr>
<tr>
<td>ES301840 Thickness: 0.0004mm, Coil width: 9mm, Ohms/Square: 3, Metallized with: Aluminum, Length: 1 m to 10 m</td>
</tr>
<tr>
<td>ES301855 Thickness: 0.0005mm, Coil width: 315mm, Ohms/Square: 2, Metallized with: Aluminum, Metallized width: 305mm, Length: 0.5 m to 10 m</td>
</tr>
<tr>
<td>ES301860 Thickness: 0.006mm, Coil width: 27mm, Ohms/Square: 3, Metallized with: Aluminum, Length: 1 m to 100 m</td>
</tr>
<tr>
<td><strong>Sheet</strong></td>
</tr>
<tr>
<td>ES301865 Thickness: 0.006mm, Coil width: 315mm, Ohms/Square: 1.4, Metallized on both sides with: Aluminum - 0.7 Ohms/Square, Length: 0.5 m to 10 m</td>
</tr>
<tr>
<td>ES301914 Thickness: 0.012mm, Metallized on both sides with: Aluminum - 1 Ohms/Square, Coil width 350 mm, Size: 115x115 mm to 350x350 mm</td>
</tr>
<tr>
<td>ES301912 Thickness: 0.012mm, Ohms/Square: 2, Metallized with: Aluminum, Coil width 300 mm, Size: 100x100 mm to 300x300 mm</td>
</tr>
<tr>
<td>ES301913 Thickness: 0.012mm, Ohms/Square: 2, Metallized with: Aluminum, Length: 0.5 m</td>
</tr>
<tr>
<td>ES301923 Thickness: 0.023mm, Ohms/Square: 2, Metallized with: Aluminum, Coil width 300 mm, Size: 150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td>ES301900 Thickness: 0.036mm, Ohms/Square: &gt;2500, Metallized with: Stainless Steel, Size: 150x150 mm to 1000x1000 mm</td>
</tr>
<tr>
<td>ES301920 Thickness: 0.036mm, Ohms/Square: 25, Metallized with: S1St-Cu-S1St, Coil width 1500 mm, Size: 150x150 mm to 500x500 mm</td>
</tr>
<tr>
<td>ES301902 Thickness: 0.036mm, Ohms/Square: 200, Metallized with: Stainless Steel, Size: 150x150 mm to 1000x1000 mm</td>
</tr>
<tr>
<td>ES301911 Thickness: 0.036mm, Ohms/Square: 200, Metallized with: Titanium, Size: 150x150 mm to 1000x1000 mm</td>
</tr>
<tr>
<td>ES301901 Thickness: 0.036mm, Ohms/Square: 200, Metallized with: Stainless Steel, Size: 150x150 mm to 1000x1000 mm</td>
</tr>
<tr>
<td>ES301910 Thickness: 0.036mm, Ohms/Square: 200, Metallized with: Titanium, Size: 150x150 mm to 1000x1000 mm</td>
</tr>
<tr>
<td>ES301955 Thickness: 0.05mm, Ohms/Square: 2, Metallized with: Aluminum, Coil width 540 mm, Size: 150x150 mm to 540x540 mm</td>
</tr>
<tr>
<td>ES301980 Thickness: 0.10mm, Ohms/Square: 2, Metallized with: Aluminum, Coil width 610 mm, Size: 150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td>ES301520 Thickness: 0.06mm, Polymer Thickness: 0.025mm, Backing Material: 0.018mm Copper, Coil width 610 mm, Size: 100x100 mm to 600x600 mm</td>
</tr>
<tr>
<td>ES301532 Thickness: 0.1mm, Polymer Thickness: 0.05mm, Backing Material: 0.035mm Copper, Coil width 610 mm, Size: 100x100 mm to 300x300 mm</td>
</tr>
<tr>
<td>ES301554 Thickness: 0.16mm, Polymer Thickness: 0.075mm, Backing Material: 0.07mm Copper, Coil width 610 mm, Size: 100x100 mm to 300x300 mm</td>
</tr>
<tr>
<td>ES303010 Thickness: 1mm, Condition: Amorphous, Size: 150x150 mm to 600x600 mm</td>
</tr>
<tr>
<td>ES303015 Thickness: 1.5mm, Condition: Amorphous, Size: 150x150 mm to 600x600 mm</td>
</tr>
<tr>
<td>ES303020 Thickness: 2mm, Condition: Amorphous, Size: 150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td>ES303021 Thickness: 2mm, Color: Clear, Condition: Copolymer, Size: 100x100 mm to 300x300 mm</td>
</tr>
<tr>
<td>ES303030 Thickness: 3mm, Condition: Amorphous, Size: 150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td>ES303050 Thickness: 5mm, Color: White, Condition: Semi-crystalline, Size: 100x100 mm to 300x300 mm</td>
</tr>
</tbody>
</table>
### Polymers — Polyhydroxyalkaonate - Biopolymer

<table>
<thead>
<tr>
<th>Name</th>
<th>Nominal Granule Size</th>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PH326301</strong></td>
<td>3mm</td>
<td>Biopolymer</td>
<td>Biopolymer</td>
</tr>
<tr>
<td><strong>PH326302</strong></td>
<td>3mm</td>
<td>Biopolymer</td>
<td>Biopolymer, Biodegradable</td>
</tr>
<tr>
<td><strong>PH326300</strong></td>
<td>3mm</td>
<td>Biopolymer, Biodegradable, Extrusion grade</td>
<td>Biopolymer, Biodegradable</td>
</tr>
</tbody>
</table>

### Polyhydroxybutyrate - Biopolymer (PHB)

<table>
<thead>
<tr>
<th>Name</th>
<th>Nominal Granule Size</th>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BU397920</strong></td>
<td>15mm</td>
<td>Biopolymer</td>
<td>Biopolymer</td>
</tr>
</tbody>
</table>

### Polyhydroxybutyrate/ Polyhydroxyvalerate 1% - Biopolymer (Biopolymer)

<table>
<thead>
<tr>
<th>Name</th>
<th>Nominal Granule Size</th>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BV346030</strong></td>
<td>300 micron</td>
<td>Biopolymer</td>
<td>Biopolymer</td>
</tr>
</tbody>
</table>

### Polyhydroxybutyrate/ Polyhydroxyvalerate 2% - Biopolymer (Biopolymer)

<table>
<thead>
<tr>
<th>Name</th>
<th>Nominal Granule Size</th>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BV336010</strong></td>
<td>300 micron</td>
<td>Biopolymer</td>
<td>Biopolymer</td>
</tr>
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</table>

### Polyhydroxybutyrate/ Polyhydroxyvalerate 8% - Biopolymer (PHB92/PHV 8)

<table>
<thead>
<tr>
<th>Name</th>
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</thead>
<tbody>
<tr>
<td><strong>BV301010</strong></td>
<td>100mm</td>
<td>Biopolymer</td>
<td>Biopolymer</td>
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### Polyhydroxybutyrate/ Polyhydroxyvalerate 12% - Biopolymer (PHB88/PHV12)

<table>
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<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BV326301</strong></td>
<td>5mm</td>
<td>Biopolymer</td>
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### Polyimide (PI)

<table>
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<tr>
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<th>Nominal Granule Size</th>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IM301080</strong></td>
<td>0.008mm</td>
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<td>Biopolymer</td>
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</tbody>
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**Granule**

<table>
<thead>
<tr>
<th>Name</th>
<th>Nominal Granule Size</th>
<th>Condition</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>ES303100</strong></td>
<td>10mm</td>
<td>Semi-crystalline</td>
<td>Biopolymer</td>
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</table>

**Mesh**

<table>
<thead>
<tr>
<th>Name</th>
<th>Nominal Granule Size</th>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ES305620</strong></td>
<td>105mm</td>
<td>Biopolymer</td>
<td>Biopolymer</td>
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</tbody>
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**Fiber**

<table>
<thead>
<tr>
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<th>Nominal Granule Size</th>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ES305910</strong></td>
<td>0.14mm</td>
<td>Medium Tenacity</td>
<td>Biopolymer</td>
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</tbody>
</table>

**Rod**

<table>
<thead>
<tr>
<th>Name</th>
<th>Nominal Granule Size</th>
<th>Condition</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>ES307906</strong></td>
<td>6mm</td>
<td>Semi-crystalline</td>
<td>Biopolymer</td>
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</tbody>
</table>

**Powder**

<table>
<thead>
<tr>
<th>Name</th>
<th>Nominal Granule Size</th>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ES306030</strong></td>
<td>300 micron</td>
<td>Natural</td>
<td>Biopolymer</td>
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</tbody>
</table>

**Granule**

<table>
<thead>
<tr>
<th>Name</th>
<th>Nominal Granule Size</th>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ES306311</strong></td>
<td>3mm</td>
<td>Biopolymer</td>
<td>Biopolymer</td>
</tr>
</tbody>
</table>

**Polyhydroxyalkaonate - Biopolymer (PHA)**

<table>
<thead>
<tr>
<th>Name</th>
<th>Nominal Granule Size</th>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PH326303</strong></td>
<td>3mm</td>
<td>Injection molding grade</td>
<td>Biopolymer</td>
</tr>
</tbody>
</table>

---

**Fabric**

<table>
<thead>
<tr>
<th>Name</th>
<th>Nominal Granule Size</th>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ES303250</strong></td>
<td>25mm</td>
<td>Semi-crystalline</td>
<td>Biopolymer</td>
</tr>
</tbody>
</table>

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**Mesh**

<table>
<thead>
<tr>
<th>Name</th>
<th>Nominal Granule Size</th>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ES308704</strong></td>
<td>21µm</td>
<td>Medium Tenacity</td>
<td>Biopolymer</td>
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</tbody>
</table>

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**Fiber**

<table>
<thead>
<tr>
<th>Name</th>
<th>Nominal Granule Size</th>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ES305710</strong></td>
<td>3.3</td>
<td>Medium Tenacity</td>
<td>Biopolymer</td>
</tr>
</tbody>
</table>

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**Monofilament**

<table>
<thead>
<tr>
<th>Name</th>
<th>Nominal Granule Size</th>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ES305910</strong></td>
<td>0.1mm</td>
<td>Semi-crystalline</td>
<td>Biopolymer</td>
</tr>
</tbody>
</table>

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**Rod**

<table>
<thead>
<tr>
<th>Name</th>
<th>Nominal Granule Size</th>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ES307906</strong></td>
<td>6mm</td>
<td>Semi-crystalline</td>
<td>Biopolymer</td>
</tr>
</tbody>
</table>

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**Granule**

<table>
<thead>
<tr>
<th>Name</th>
<th>Nominal Granule Size</th>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ES306311</strong></td>
<td>3mm</td>
<td>Biopolymer</td>
<td>Biopolymer</td>
</tr>
</tbody>
</table>

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**Polyhydroxyalkaonate - Biopolymer (PHA)**

<table>
<thead>
<tr>
<th>Name</th>
<th>Nominal Granule Size</th>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PH326303</strong></td>
<td>3mm</td>
<td>Injection molding grade</td>
<td>Biopolymer</td>
</tr>
</tbody>
</table>

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**Polyimide (PI)**

<table>
<thead>
<tr>
<th>Name</th>
<th>Nominal Granule Size</th>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IM301080</strong></td>
<td>0.008mm</td>
<td>Biopolymer</td>
<td>Biopolymer</td>
</tr>
</tbody>
</table>
## Polymers

### Polyimide

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Thickness</th>
<th>Grade</th>
<th>Size</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>IM301130</td>
<td>0.013 mm</td>
<td>DuPont Kapton H</td>
<td>100x100 mm to 250x250 mm</td>
<td></td>
</tr>
<tr>
<td>IM301202</td>
<td>0.025 mm</td>
<td>DuPont Kapton H</td>
<td>100x100 mm to 300x300 mm</td>
<td></td>
</tr>
<tr>
<td>IM301214</td>
<td>0.025 mm</td>
<td>Color: Black</td>
<td>100x100 mm to 300x300 mm</td>
<td></td>
</tr>
<tr>
<td>IM301212</td>
<td>0.025 mm</td>
<td>DuPont Kapton H</td>
<td>100x100 mm to 300x300 mm</td>
<td></td>
</tr>
<tr>
<td>IM301210</td>
<td>0.025 mm</td>
<td>DuPont Kapton H</td>
<td>100x100 mm to 300x300 mm</td>
<td></td>
</tr>
<tr>
<td>IM301200</td>
<td>0.025 mm</td>
<td>DuPont Kapton H</td>
<td>100x100 mm to 300x300 mm</td>
<td></td>
</tr>
<tr>
<td>IM301215</td>
<td>0.025 mm</td>
<td>Color: Black</td>
<td>100x100 mm to 300x300 mm</td>
<td></td>
</tr>
<tr>
<td>IM301301</td>
<td>0.05 mm</td>
<td>Upilex S</td>
<td>50 mm to 200 mm</td>
<td></td>
</tr>
<tr>
<td>IM301303</td>
<td>0.05 mm</td>
<td>DuPont Kapton H</td>
<td>100x100 mm to 300x300 mm</td>
<td></td>
</tr>
<tr>
<td>IM301300</td>
<td>0.05 mm</td>
<td>DuPont Kapton H</td>
<td>100x100 mm to 300x300 mm</td>
<td></td>
</tr>
<tr>
<td>IM301304</td>
<td>0.05 mm</td>
<td>DuPont Kapton H</td>
<td>100x100 mm to 300x300 mm</td>
<td></td>
</tr>
<tr>
<td>IM301402</td>
<td>0.075 mm</td>
<td>DuPont Kapton H</td>
<td>100x100 mm to 300x300 mm</td>
<td></td>
</tr>
<tr>
<td>IM301400</td>
<td>0.075 mm</td>
<td>DuPont Kapton H</td>
<td>100x100 mm to 300x300 mm</td>
<td></td>
</tr>
<tr>
<td>IM301403</td>
<td>0.075 mm</td>
<td>DuPont Kapton H</td>
<td>100x100 mm to 300x300 mm</td>
<td></td>
</tr>
<tr>
<td>IM301404</td>
<td>0.075 mm</td>
<td>DuPont Kapton H</td>
<td>100x100 mm to 300x300 mm</td>
<td></td>
</tr>
<tr>
<td>IM301414</td>
<td>0.075 mm</td>
<td>DuPont Kapton H</td>
<td>100x100 mm to 200x200 mm</td>
<td></td>
</tr>
<tr>
<td>IM301449</td>
<td>0.125 mm</td>
<td>DuPont Kapton H</td>
<td>100x100 mm to 300x300 mm</td>
<td></td>
</tr>
<tr>
<td>IM301450</td>
<td>0.125 mm</td>
<td>DuPont Kapton H</td>
<td>100x100 mm to 300x300 mm</td>
<td></td>
</tr>
<tr>
<td>IM301451</td>
<td>0.125 mm</td>
<td>DuPont Kapton H</td>
<td>100x100 mm to 300x300 mm</td>
<td></td>
</tr>
<tr>
<td>IM301448</td>
<td>0.125 mm</td>
<td>Color: Black</td>
<td>100x100 mm to 300x300 mm</td>
<td></td>
</tr>
<tr>
<td>IM301452</td>
<td>0.15 mm</td>
<td>Cirlex CL</td>
<td>140x150 mm to 250x300 mm</td>
<td></td>
</tr>
<tr>
<td>IM301455</td>
<td>0.23 mm</td>
<td>Cirlex CL</td>
<td>40x150 mm to 597x597 mm</td>
<td></td>
</tr>
<tr>
<td>IM301470</td>
<td>0.5 mm</td>
<td>Upilex</td>
<td>50x50 mm to 150x150 mm</td>
<td></td>
</tr>
<tr>
<td>IM301465</td>
<td>0.5 mm</td>
<td>Cirlex CL</td>
<td>70x100 mm to 342x597 mm</td>
<td></td>
</tr>
</tbody>
</table>

### Metallized Film

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Thickness</th>
<th>Condition</th>
<th>Grade</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>IM301825</td>
<td>0.025 mm</td>
<td>Metallized on one side with 30 nm Aluminum</td>
<td>DuPont Kapton H</td>
<td>100x100 mm to 300x300 mm</td>
</tr>
<tr>
<td>IM301835</td>
<td>0.075 mm</td>
<td>Metallized on one side with 30 nm Aluminum</td>
<td>DuPont Kapton H</td>
<td>100x100 mm to 300x300 mm</td>
</tr>
</tbody>
</table>

### Laminate

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Thickness</th>
<th>Polymer Thickness</th>
<th>Grade</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>IM301510</td>
<td>0.05 mm</td>
<td>0.025 mm</td>
<td>DuPont</td>
<td>100x100 mm to 300x300 mm</td>
</tr>
<tr>
<td>IM301522</td>
<td>0.06 mm</td>
<td>0.025 mm</td>
<td>DuPont</td>
<td>100x100 mm to 300x300 mm</td>
</tr>
<tr>
<td>IM301512</td>
<td>0.07 mm</td>
<td>0.025 mm</td>
<td>DuPont</td>
<td>100x100 mm to 300x300 mm</td>
</tr>
<tr>
<td>IM301536</td>
<td>0.1 mm</td>
<td>0.05 mm</td>
<td>DuPont</td>
<td>100x100 mm to 300x300 mm</td>
</tr>
<tr>
<td>IM301560</td>
<td>0.16 mm</td>
<td>0.075 mm</td>
<td>DuPont</td>
<td>100x100 mm to 300x300 mm</td>
</tr>
<tr>
<td>IM301620</td>
<td>0.16 mm</td>
<td>0.025 mm</td>
<td>DuPont</td>
<td>100x100 mm to 300x300 mm</td>
</tr>
<tr>
<td>IM301650</td>
<td>0.4 mm</td>
<td>0.025 mm</td>
<td>DuPont</td>
<td>100x100 mm to 300x300 mm</td>
</tr>
</tbody>
</table>

### Sheet

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Thickness</th>
<th>Grade</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>IM303076</td>
<td>0.076 mm</td>
<td>Cirlex CL</td>
<td>70x145 mm to 290x290 mm</td>
</tr>
<tr>
<td>IM303110</td>
<td>1 mm</td>
<td>Cirlex CL</td>
<td>100x140 mm to 597x597 mm</td>
</tr>
<tr>
<td>IM303120</td>
<td>1.5 mm</td>
<td>Cirlex CL</td>
<td>140x140 mm to 296x296 mm</td>
</tr>
</tbody>
</table>

### Chopped Fiber

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Nominal Diameter</th>
<th>Fiber length</th>
</tr>
</thead>
<tbody>
<tr>
<td>IM306560</td>
<td>0.014 mm</td>
<td>60 mm, Grade: P64</td>
</tr>
</tbody>
</table>

### Rod

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Diameter</th>
<th>Grade</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>IM307910</td>
<td>6.35 mm</td>
<td>Vespel SP1</td>
<td>50 mm to 500 mm</td>
</tr>
<tr>
<td>IM307920</td>
<td>12.7 mm</td>
<td>Vespel SP1</td>
<td>50 mm to 400 mm</td>
</tr>
<tr>
<td>IM307930</td>
<td>19 mm</td>
<td>Meldin 7001</td>
<td>50 mm to 200 mm</td>
</tr>
<tr>
<td>IM307940</td>
<td>25.4 mm</td>
<td>Vespel SP1</td>
<td>50 mm to 200 mm</td>
</tr>
<tr>
<td>IM307941</td>
<td>25.4 mm</td>
<td>Meldin 7001</td>
<td>50 mm to 200 mm</td>
</tr>
<tr>
<td>IM307950</td>
<td>38 mm</td>
<td>Meldin 7001</td>
<td>25 mm to 100 mm</td>
</tr>
<tr>
<td>IM307961</td>
<td>50.8 mm</td>
<td>Vespel SP1</td>
<td>25 mm to 100 mm</td>
</tr>
</tbody>
</table>
### Polymers

<table>
<thead>
<tr>
<th>Polymers</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyketone (PK)</td>
<td>Akrotek®</td>
</tr>
<tr>
<td><strong>Granule</strong></td>
<td><strong>PK306300</strong> Nominal Granule Size: 3-5mm, Color: Natural, Condition: Medium viscosity</td>
</tr>
<tr>
<td><strong>PK306310</strong> Nominal Granule Size: 3-5mm, Color: Natural, Condition: Low viscosity</td>
<td></td>
</tr>
<tr>
<td><strong>Polyketone 30% Glass Fibre</strong></td>
<td><strong>PK316300</strong> Nominal Granule Size: 3-5mm, Color: Black, Condition: Medium viscosity</td>
</tr>
<tr>
<td><strong>PK316310</strong> Nominal Granule Size: 3-5mm, Color: Black, Condition: Low viscosity</td>
<td></td>
</tr>
<tr>
<td><strong>Polyketone 50% Glass Fibre</strong></td>
<td><strong>PK326300</strong> Nominal Granule Size: 3-5mm, Color: Black, Condition: Bearing grade, Condition: Low viscosity</td>
</tr>
<tr>
<td><strong>PK326310</strong> Nominal Granule Size: 3-5mm, Color: Black, Condition: Low viscosity</td>
<td></td>
</tr>
<tr>
<td><strong>Polyketone Bearing Grade (PK)</strong></td>
<td><strong>PK346310</strong> Nominal Granule Size: 3-5mm, Color: Natural, Condition: Low viscosity</td>
</tr>
<tr>
<td><strong>Polylactic acid - Biopolymer (PLA)</strong></td>
<td><strong>ME346310</strong> Nominal Granule Size: 3mm, Color: Natural, Condition: Biodegradable</td>
</tr>
<tr>
<td><strong>Polymethylmethacrylate (PMMA, Acrylic)</strong></td>
<td><strong>Diakon, Lucite, Oroglas, Perspex, Plexiglas</strong></td>
</tr>
<tr>
<td><strong>Film</strong></td>
<td><strong>ME301050</strong> Thickness: 0.05mm, Condition: Impact modified, Coil width: 610 mm, Size: 150x150 mm to 600x600 mm</td>
</tr>
<tr>
<td><strong>ME301200</strong> Thickness: 0.05mm, Condition: Impact modified, Size: 150x150 mm</td>
<td></td>
</tr>
<tr>
<td><strong>Sheet</strong></td>
<td><strong>ME303016</strong> Thickness: 0.175mm, Condition: Impact modified, Color: Clear, Condition: Transparent, Size: 150x150 mm to 600x600 mm</td>
</tr>
<tr>
<td><strong>ME303005</strong> Thickness: 0.25mm, Condition: Impact modified, Size: 150x150 mm to 915x915 mm</td>
<td></td>
</tr>
<tr>
<td><strong>ME303001</strong> Thickness: 0.38mm, Condition: Impact modified, Size: 125x150 mm to 1025x1270 mm</td>
<td></td>
</tr>
</tbody>
</table>

### Tube

| IM307960 | Diameter: 50.8mm, Grade: Meldin 7001, Length: 25 mm to 50 mm |
| IM307012 | Outside Diameter: 0.168mm, Wall Thickness: 0.023mm, Inside Diameter: 0.122mm, Length: 100 mm to 1000 mm |
| IM307013 | Outside Diameter: 0.18mm, Wall Thickness: 0.02mm, Inside Diameter: 0.14mm, Length: 100 mm to 1000 mm |
| IM307014 | Outside Diameter: 0.193mm, Wall Thickness: 0.019mm, Inside Diameter: 0.155mm, Length: 100 mm to 1000 mm |
| IM307015 | Outside Diameter: 0.196mm, Wall Thickness: 0.015mm, Inside Diameter: 0.166mm, Length: 100 mm to 1000 mm |
| IM307016 | Outside Diameter: 0.201mm, Wall Thickness: 0.022mm, Inside Diameter: 0.157mm, Length: 100 mm to 1000 mm |
| IM307030 | Outside Diameter: 0.30mm, Wall Thickness: 0.025mm, Inside Diameter: 0.25mm, Length: 100 mm to 1000 mm |
| IM307040 | Outside Diameter: 0.35mm, Wall Thickness: 0.025mm, Inside Diameter: 0.3mm, Length: 100 mm to 1000 mm |
| IM307046 | Outside Diameter: 0.46mm, Wall Thickness: 0.025mm, Inside Diameter: 0.41mm, Length: 100 mm to 317 mm |
| IM307050 | Outside Diameter: 0.55mm, Wall Thickness: 0.025mm, Inside Diameter: 0.5mm, Length: 100 mm to 1000 mm |
| IM307055 | Outside Diameter: 0.67mm, Wall Thickness: 0.025mm, Inside Diameter: 0.62mm, Length: 317 mm |
| IM307100 | Outside Diameter: 1.05mm, Wall Thickness: 0.025mm, Inside Diameter: 1.0mm, Length: 100 mm to 1000 mm |
| IM307101 | Outside Diameter: 1.105mm, Wall Thickness: 0.05mm, Inside Diameter: 1.0mm, Length: 100 mm to 1000 mm |
| IM307190 | Outside Diameter: 1.90mm, Wall Thickness: 0.05mm, Inside Diameter: 1.8mm, Length: 100 mm to 1000 mm |
| IM307199 | Outside Diameter: 1.99mm, Wall Thickness: 0.032mm, Inside Diameter: 1.93mm, Length: 100 mm to 1397 mm |
| IM307200 | Outside Diameter: 2.10mm, Wall Thickness: 0.05mm, Inside Diameter: 2.0mm, Length: 100 mm to 1000 mm |
| IM307300 | Outside Diameter: 3.0mm, Wall Thickness: 0.03mm, Inside Diameter: 2.94mm, Length: 100 mm to 1000 mm |
| IM307320 | Outside Diameter: 3.48mm, Wall Thickness: 0.14mm, Inside Diameter: 3.2mm, Length: 100 mm to 1000 mm |
| IM307400 | Outside Diameter: 4.2mm, Wall Thickness: 0.07mm, Inside Diameter: 4.06mm, Length: 100 mm to 1000 mm |
| IM307500 | Outside Diameter: 5.0mm, Wall Thickness: 0.075mm, Inside Diameter: 4.85mm, Length: 100 mm to 1000 mm |
| IM307600 | Outside Diameter: 6.0mm, Wall Thickness: 0.075mm, Inside Diameter: 5.85mm, Length: 100 mm to 1000 mm |
| IM307828 | Outside Diameter: 10.28mm, Wall Thickness: 0.14mm, Inside Diameter: 10.0mm, Length: 100 mm to 1000 mm |
### Polymers

#### Polymethylpentene

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
<th>Thickness</th>
<th>Color</th>
<th>Grade</th>
<th>Condition</th>
<th>Size</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME303007</td>
<td>3.2mm</td>
<td>0.5mm</td>
<td>Dark red / black</td>
<td>High purity</td>
<td>Free from UV absorber</td>
<td>100x100 mm to 300x300 mm</td>
<td>200 mm to 1000 mm</td>
</tr>
<tr>
<td>ME303006</td>
<td></td>
<td>0.5mm</td>
<td>Natural</td>
<td>High purity</td>
<td>Free from UV absorber</td>
<td>600x600 mm</td>
<td>50 mm to 1000 mm</td>
</tr>
<tr>
<td>ME303004</td>
<td></td>
<td>0.7mm</td>
<td>Dark red / black</td>
<td>High purity</td>
<td>Free from UV absorber</td>
<td>100x100 mm to 200x200 mm</td>
<td>50 mm to 1000 mm</td>
</tr>
<tr>
<td>ME303003</td>
<td></td>
<td>0.75mm</td>
<td>Natural</td>
<td>Impact modified</td>
<td>Free from UV absorber</td>
<td>105x150 mm to 1025x1200 mm</td>
<td>50 mm to 1000 mm</td>
</tr>
<tr>
<td>ME303019</td>
<td></td>
<td>1mm</td>
<td>Dark red / black</td>
<td>IR transmitting</td>
<td>Free from UV absorber</td>
<td>95x95 mm to 390x390 mm</td>
<td>50 mm to 1000 mm</td>
</tr>
<tr>
<td>ME303017</td>
<td></td>
<td>1.0mm</td>
<td>Clear</td>
<td>High purity</td>
<td>Free from UV absorber</td>
<td>100x100 mm to 400x400 mm</td>
<td>50 mm to 1000 mm</td>
</tr>
<tr>
<td>ME303010</td>
<td></td>
<td>1.1mm</td>
<td>Clear</td>
<td>High purity</td>
<td>Free from UV absorber</td>
<td>100x100 mm to 600x600 mm</td>
<td>50 mm to 1000 mm</td>
</tr>
<tr>
<td>ME303013</td>
<td></td>
<td>1.2mm</td>
<td>Natural</td>
<td>High purity</td>
<td>Free from UV absorber</td>
<td>100x100 mm to 200x200 mm</td>
<td>50 mm to 1000 mm</td>
</tr>
<tr>
<td>ME303018</td>
<td></td>
<td>1.3mm</td>
<td>Clear</td>
<td>High purity</td>
<td>Free from UV absorber</td>
<td>100x100 mm to 600x600 mm</td>
<td>50 mm to 1000 mm</td>
</tr>
<tr>
<td>ME303021</td>
<td></td>
<td>2.0mm</td>
<td>Natural</td>
<td>High purity</td>
<td>Free from UV absorber</td>
<td>150x150 mm to 600x600 mm</td>
<td>50 mm to 1000 mm</td>
</tr>
<tr>
<td>ME303020</td>
<td></td>
<td>2.0mm</td>
<td>Natural</td>
<td>High purity</td>
<td>Free from UV absorber</td>
<td>100x100 mm to 600x600 mm</td>
<td>50 mm to 1000 mm</td>
</tr>
<tr>
<td>ME303026</td>
<td></td>
<td>2.7mm</td>
<td>Natural</td>
<td>High purity</td>
<td>Free from UV absorber</td>
<td>140x150 mm to 180x380 mm</td>
<td>50 mm to 1000 mm</td>
</tr>
<tr>
<td>ME303031</td>
<td></td>
<td>3.0mm</td>
<td>Natural</td>
<td>High purity</td>
<td>Free from UV absorber</td>
<td>100x100 mm to 250x400 mm</td>
<td>50 mm to 1000 mm</td>
</tr>
<tr>
<td>ME303032</td>
<td></td>
<td>3.0mm</td>
<td>Natural</td>
<td>High purity</td>
<td>Free from UV absorber</td>
<td>150x150 mm to 600x600 mm</td>
<td>50 mm to 1000 mm</td>
</tr>
<tr>
<td>ME303030</td>
<td></td>
<td>3.2mm</td>
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<td>High purity</td>
<td>Free from UV absorber</td>
<td>100x100 mm to 300x300 mm</td>
<td>50 mm to 1000 mm</td>
</tr>
<tr>
<td>ME303052</td>
<td></td>
<td>5.0mm</td>
<td>Natural</td>
<td>High purity</td>
<td>Free from UV absorber</td>
<td>150x150 mm to 300x300 mm</td>
<td>50 mm to 1000 mm</td>
</tr>
<tr>
<td>ME303050</td>
<td></td>
<td>5.0mm</td>
<td>Natural</td>
<td>High purity</td>
<td>Free from UV absorber</td>
<td>150x150 mm to 300x300 mm</td>
<td>50 mm to 1000 mm</td>
</tr>
<tr>
<td>ME303055</td>
<td></td>
<td>6.0mm</td>
<td>Natural</td>
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<td>50 mm to 1000 mm</td>
</tr>
<tr>
<td>ME303100</td>
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<td>10.0mm</td>
<td>Natural</td>
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<td>150x150 mm to 300x300 mm</td>
<td>50 mm to 1000 mm</td>
</tr>
<tr>
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<td>12.0mm</td>
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<td>50 mm to 1000 mm</td>
</tr>
<tr>
<td>ME303250</td>
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<td>Free from UV absorber</td>
<td>150x150 mm to 300x300 mm</td>
<td>50 mm to 1000 mm</td>
</tr>
</tbody>
</table>

**Monofilament**

<table>
<thead>
<tr>
<th>Code</th>
<th>Diameter</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME305910</td>
<td>1.0mm</td>
<td>Optical fiber</td>
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**Rod**

<table>
<thead>
<tr>
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</tr>
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<tbody>
<tr>
<td>ME307901</td>
<td>1mm</td>
<td>1000 mm</td>
</tr>
<tr>
<td>ME307902</td>
<td>2mm</td>
<td>1000 mm</td>
</tr>
<tr>
<td>ME307903</td>
<td>3mm</td>
<td>1000 mm</td>
</tr>
<tr>
<td>ME307905</td>
<td>5mm</td>
<td>500 mm to 1000 mm</td>
</tr>
<tr>
<td>ME307908</td>
<td>8mm</td>
<td>250 mm to 1000 mm</td>
</tr>
<tr>
<td>ME307911</td>
<td>10mm</td>
<td>157 mm</td>
</tr>
<tr>
<td>ME307910</td>
<td>10mm</td>
<td>250 mm to 1000 mm</td>
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**Films**

<table>
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<th>Thickness</th>
<th>Color</th>
<th>Grade</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME311050</td>
<td>0.05mm</td>
<td>Natural</td>
<td>MX004</td>
<td>Galvannealed</td>
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</tbody>
</table>

**Tube**

<table>
<thead>
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</thead>
<tbody>
<tr>
<td>ME307915</td>
<td>15mm</td>
<td>0.5mm</td>
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<td>High purity</td>
<td>Free from UV absorber</td>
</tr>
<tr>
<td>ME307925</td>
<td>20mm</td>
<td>0.5mm</td>
<td>Natural</td>
<td>High purity</td>
<td>Free from UV absorber</td>
</tr>
<tr>
<td>ME307920</td>
<td>20mm</td>
<td>0.5mm</td>
<td>Natural</td>
<td>High purity</td>
<td>Free from UV absorber</td>
</tr>
<tr>
<td>ME307930</td>
<td>25mm</td>
<td>0.5mm</td>
<td>Natural</td>
<td>High purity</td>
<td>Free from UV absorber</td>
</tr>
<tr>
<td>ME307950</td>
<td>50mm</td>
<td>0.5mm</td>
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<td>High purity</td>
<td>Free from UV absorber</td>
</tr>
<tr>
<td>ME307955</td>
<td>55mm</td>
<td>0.5mm</td>
<td>Natural</td>
<td>High purity</td>
<td>Free from UV absorber</td>
</tr>
<tr>
<td>ME307980</td>
<td>100mm</td>
<td>0.5mm</td>
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<td>High purity</td>
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**Powder**

<table>
<thead>
<tr>
<th>Code</th>
<th>Mean Particle Size</th>
<th>Color</th>
<th>Grade</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME306006</td>
<td>6micron</td>
<td>Natural</td>
<td>High purity</td>
<td>Powder</td>
</tr>
<tr>
<td>ME306009</td>
<td>10micron</td>
<td>Natural</td>
<td>High purity</td>
<td>Powder</td>
</tr>
<tr>
<td>ME306015</td>
<td>15micron</td>
<td>Natural</td>
<td>High purity</td>
<td>Powder</td>
</tr>
<tr>
<td>ME306048</td>
<td>48micron</td>
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<td>High purity</td>
<td>Powder</td>
</tr>
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<td>ME306010</td>
<td>600micron</td>
<td>Natural</td>
<td>High purity</td>
<td>Powder</td>
</tr>
</tbody>
</table>

### Polymethylpentene (TPX®)

**Film**

<table>
<thead>
<tr>
<th>Code</th>
<th>Thickness</th>
<th>Color</th>
<th>Grade</th>
<th>Condition</th>
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</thead>
<tbody>
<tr>
<td>ME311050</td>
<td>0.05mm</td>
<td>Natural</td>
<td>MX004</td>
<td>Film</td>
</tr>
</tbody>
</table>

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February 2017

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### Polymers

<table>
<thead>
<tr>
<th>Polymers</th>
<th>Diameter</th>
<th>Color</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME311051</td>
<td>0.050mm</td>
<td>Natural</td>
<td>MX002</td>
</tr>
<tr>
<td>ME311070</td>
<td>0.095mm</td>
<td>Natural</td>
<td>MX002</td>
</tr>
<tr>
<td>ME311100</td>
<td>0.125mm</td>
<td>Natural</td>
<td>MX002</td>
</tr>
<tr>
<td>ME311150</td>
<td>0.25mm</td>
<td>Natural</td>
<td>MX002</td>
</tr>
<tr>
<td>ME311250</td>
<td>0.5mm</td>
<td>Natural</td>
<td>MX002</td>
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**Sheet**

<table>
<thead>
<tr>
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<th>Diameter</th>
<th>Color</th>
<th>Grade</th>
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</thead>
<tbody>
<tr>
<td>ME313201</td>
<td>2.0mm</td>
<td>Natural</td>
<td>RT18</td>
</tr>
<tr>
<td>ME313300</td>
<td>3.0mm</td>
<td>Natural</td>
<td>RT18</td>
</tr>
<tr>
<td>ME313370</td>
<td>4.8mm</td>
<td>Natural</td>
<td>RT18</td>
</tr>
<tr>
<td>ME313380</td>
<td>5.0mm</td>
<td>Natural</td>
<td>RT18</td>
</tr>
<tr>
<td>ME313406</td>
<td>6.0mm</td>
<td>Natural</td>
<td>RT18</td>
</tr>
<tr>
<td>ME313411</td>
<td>10mm</td>
<td>Natural</td>
<td>RT18</td>
</tr>
<tr>
<td>ME313410</td>
<td>10mm</td>
<td>Natural</td>
<td>MX004</td>
</tr>
<tr>
<td>ME313415</td>
<td>12.7mm</td>
<td>Natural</td>
<td>MX004</td>
</tr>
<tr>
<td>ME313435</td>
<td>22.5mm</td>
<td>Natural</td>
<td>MX004</td>
</tr>
<tr>
<td>ME313460</td>
<td>28mm</td>
<td>Natural</td>
<td>MX004</td>
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<tr>
<td>ME313470</td>
<td>30mm</td>
<td>Natural</td>
<td>MX004</td>
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**Monofilament**

<table>
<thead>
<tr>
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<th>Diameter</th>
<th>Color</th>
<th>Grade</th>
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</thead>
<tbody>
<tr>
<td>ME315914</td>
<td>1.4mm</td>
<td>Yellow</td>
<td>MX002</td>
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**Rod**

<table>
<thead>
<tr>
<th>Polymers</th>
<th>Diameter</th>
<th>Color</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME317904</td>
<td>6.35mm</td>
<td>Natural</td>
<td>RT18</td>
</tr>
<tr>
<td>ME317906</td>
<td>6.35mm</td>
<td>Natural</td>
<td>RT18</td>
</tr>
<tr>
<td>ME317907</td>
<td>6.35mm</td>
<td>Natural</td>
<td>RT18</td>
</tr>
<tr>
<td>ME317909</td>
<td>9.5mm</td>
<td>Natural</td>
<td>MX002</td>
</tr>
<tr>
<td>ME317908</td>
<td>9.5mm</td>
<td>Natural</td>
<td>MX002</td>
</tr>
<tr>
<td>ME317915</td>
<td>9.5mm</td>
<td>Natural</td>
<td>MX002</td>
</tr>
</tbody>
</table>

**Granule**

<table>
<thead>
<tr>
<th>Polymers</th>
<th>Diameter</th>
<th>Color</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME316300</td>
<td>Nominal</td>
<td>3mm</td>
<td>RT18</td>
</tr>
</tbody>
</table>

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## Polymers — Polyoxymethylene - Copolymer

| ME316301 | Nominal Granule Size: 3mm, Grade: RT18XB |
| ME316302 | Nominal Granule Size: 3mm, Grade: DX820 |
| ME316303 | Nominal Granule Size: 3mm, Grade: MX002 |
| ME316304 | Nominal Granule Size: 3mm, Grade: MX004 |
| ME316305 | Nominal Granule Size: 3mm, Grade: DX845 |
| ME316306 | Nominal Granule Size: 3mm, Grade: DX560M |
| ME316307 | Nominal Granule Size: 3mm, Grade: RT31 |
| ME316309 | Nominal Granule Size: 3mm, Grade: DX310 |
| ME316308 | Nominal Granule Size: 3mm, Color: White, Grade: MBZ230 |
| ME316310 | Nominal Granule Size: 3mm, Grade: MX001 |

### Polyoxymethylene - Copolymer (Acetal - Copolymer POMC)

Celcon, Hostaform, Kemetal, Ultraform

#### Sheet

| OX303010 | Thickness: 1mm, Tolerance: 15 %, Size: 150x150 mm to 1000x1000 mm |
| OX303030 | Thickness: 3mm, Size: 300x300 mm |
| OX303100 | Thickness: 10mm, Size: 150x150 mm to 300x300 mm |

#### Rod

| OX307905 | Diameter: 5mm, Color: Natural, Length: 1000 mm |
| OX307910 | Diameter: 10mm, Color: Natural, Length: 1000 mm |
| OX307920 | Diameter: 20mm, Color: Natural, Length: 100 mm to 1000 mm |
| OX307925 | Diameter: 25mm, Color: Natural, Length: 200 mm to 1000 mm |
| OX307926 | Diameter: 25mm, Color: Red, Length: 200 mm to 1000 mm |
| OX307927 | Diameter: 25mm, Color: Green, Length: 200 mm to 1000 mm |
| OX307928 | Diameter: 25mm, Color: Blue, Length: 200 mm to 1000 mm |
| OX307929 | Diameter: 25mm, Color: Yellow, Length: 200 mm to 1000 mm |
| OX307930 | Diameter: 25mm, Color: Natural, Grade: ESD 90, Length: 50 mm to 500 mm |
| OX307931 | Diameter: 30mm, Color: Black, Grade: ESD 60, Length: 50 mm to 500 mm |
| OX307950 | Diameter: 50mm, Color: Natural, Length: 200 mm to 1000 mm |
| OX307970 | Diameter: 90mm, Tolerance: +20%/-10%, Color: Yellow similar to RAL 1007, Length: 100 mm to 1000 mm |
| OX307980 | Diameter: 100mm, Color: Natural, Length: 50 mm to 500 mm |
| OX307990 | Diameter: 150mm, Color: Natural, Length: 50 mm to 200 mm |

### Polyoxymethylene - Homopolymer (Acetal - Homopolymer POMH)

Delrin, Tenac

#### Film

| OX311050 | Thickness: 0.5mm, Size: 150x150 mm to 300x300 mm |

#### Sheet

| OX313050 | Thickness: 5mm, Size: 150x150 mm to 300x300 mm |
| OX313080 | Thickness: 10mm, Size: 150x150 mm to 300x300 mm |
| OX313100 | Thickness: 12mm, Size: 150x150 mm to 300x300 mm |

#### Rod

| OX317910 | Diameter: 10mm, Color: White, Length: 1000 mm |
| OX317925 | Diameter: 25mm, Color: White, Length: 100 mm to 1000 mm |
| OX317950 | Diameter: 50mm, Color: White, Length: 100 mm to 1000 mm |
| OX317980 | Diameter: 100mm, Color: White, Length: 50 mm to 500 mm |

#### Granule

| OX316300 | Nominal Granule Size: 3mm, Color: Natural, Condition: Lubricated grade, Condition: Injection molding grade |
| OX316310 | Nominal Granule Size: 3mm, Color: Natural, Condition: Lubricated grade, Condition: Injection molding grade |

#### Sphere

| OX316810 | Diameter: 1.59mm, Tolerance: ±0.05mm, Sphericity: 0.025mm, Grade: Precision Sphere |

### Polyoxymethylene/Acetal Copolymer - 10% Carbon Fiber Reinforced (POMC - 10% CFR)

Delrin

#### Granule

| OX336310 | Nominal Granule Size: 3mm, Color: Black |

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### Polymers

#### Polyphenylenoxide
(PPO (modified), PPE (modified))
Noryl, Vestoran, Luranyl

<table>
<thead>
<tr>
<th>Item Type</th>
<th>Item Code</th>
<th>Diameter</th>
<th>Color</th>
<th>Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheet</td>
<td>PH303060</td>
<td></td>
<td></td>
<td>6mm, Pale gray</td>
</tr>
<tr>
<td>Rod</td>
<td>PH307906</td>
<td></td>
<td></td>
<td>Pale gray</td>
</tr>
<tr>
<td></td>
<td>PH307910</td>
<td></td>
<td></td>
<td>10mm, Pale gray</td>
</tr>
<tr>
<td></td>
<td>PH307912</td>
<td></td>
<td></td>
<td>12mm, Pale gray</td>
</tr>
<tr>
<td></td>
<td>PH307920</td>
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<td></td>
<td>20mm, Pale gray</td>
</tr>
<tr>
<td></td>
<td>PH307930</td>
<td></td>
<td></td>
<td>30mm, Pale gray</td>
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<tr>
<td></td>
<td>PH307950</td>
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<td>50mm, Pale gray</td>
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<tr>
<td></td>
<td>PH307980</td>
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<td>100mm, Pale gray</td>
</tr>
<tr>
<td></td>
<td>PH307990</td>
<td></td>
<td></td>
<td>150mm, Pale gray</td>
</tr>
</tbody>
</table>

#### Polyphenylenoxide (modified), 30% Glass Fiber Reinforced
(PPO 30% GFR)
Noryl, Vestoran, Luranyl

<table>
<thead>
<tr>
<th>Item Type</th>
<th>Item Code</th>
<th>Diameter</th>
<th>Color</th>
<th>Thickness</th>
</tr>
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<tbody>
<tr>
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<td></td>
<td>30mm</td>
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<tr>
<td>Rod</td>
<td>PH317910</td>
<td></td>
<td></td>
<td>Yellow-Brown</td>
</tr>
<tr>
<td></td>
<td>PH317930</td>
<td></td>
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<td>Yellow-Brown</td>
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</table>

#### Polyphenylsulfide (PPS)

<table>
<thead>
<tr>
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<th>Item Code</th>
<th>Diameter</th>
<th>Color</th>
<th>Thickness</th>
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<tbody>
<tr>
<td>Film</td>
<td>SU321100</td>
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<td>Natural</td>
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<tr>
<td></td>
<td>SU321160</td>
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<td>Natural</td>
<td>0.16mm</td>
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<tr>
<td></td>
<td>SU321225</td>
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<tr>
<td></td>
<td>SU321400</td>
<td></td>
<td>Natural</td>
<td>0.4mm</td>
</tr>
</tbody>
</table>

#### Monofilament
SU325950 Diameter: 0.5 mm, Color: Transparent pale amber, Condition: Unfilled

#### Bolt
SU32BO20 Size: M2 x 10 mm, Head Style: Cross recessed pan head, Pitch: 0.4 mm, Quantity: 10 pcs
SU32BO40 Size: M4 x 10 mm, Head Style: Cross recessed pan head, Pitch: 0.7 mm, Quantity: 10 pcs

#### Nut
SU32NU02 Diameter: M2, Shape: Hexagonal, Pitch: 0.4 mm, Quantity: 10 pcs
SU32NU04 Diameter: M4, Shape: Hexagonal, Pitch: 0.7 mm, Quantity: 10 pcs
SU32NU06 Diameter: M6, Shape: Hexagonal, Pitch: 1 mm, Quantity: 10 pcs
SU32NU08 Diameter: M8, Shape: Hexagonal, Pitch: 1.25 mm, Quantity: 10 pcs

#### Washer
SU32WA02 Size: M3, Outside Diameter: 7 mm, Inside Diameter: 3.2 mm, Thickness: 0.5 mm, Quantity: 10 pcs
SU32WA04 Size: M4, Outside Diameter: 9 mm, Inside Diameter: 4.3 mm, Thickness: 0.8 mm, Quantity: 10 pcs
SU32WA06 Size: M6, Outside Diameter: 12.5 mm, Inside Diameter: 8.4 mm, Thickness: 1.6 mm, Quantity: 10 pcs
SU32WA08 Size: M8, Outside Diameter: 17 mm, Inside Diameter: 8.4 mm, Thickness: 1.6 mm, Quantity: 10 pcs

#### Polyphenylsulfide - 20% Carbon Fiber Reinforced (PPS - 20% CFR)

<table>
<thead>
<tr>
<th>Item Type</th>
<th>Item Code</th>
<th>Diameter</th>
<th>Color</th>
<th>Grade</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Granule</td>
<td>SU356310</td>
<td></td>
<td></td>
<td>Black</td>
<td>50x50 mm to 260x260 mm</td>
</tr>
</tbody>
</table>

#### Polyphenylsulfide - 40% Glass Fiber Reinforced (PPS - 40% GFR)
Fortron, Ryton, Supec

<table>
<thead>
<tr>
<th>Item Type</th>
<th>Item Code</th>
<th>Diameter</th>
<th>Color</th>
<th>Grade</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheet</td>
<td>SU313060</td>
<td></td>
<td>Black</td>
<td>440L0</td>
<td>50x50 mm to 250x250 mm</td>
</tr>
<tr>
<td></td>
<td>SU313065</td>
<td></td>
<td>Black</td>
<td>440L0</td>
<td>50x50 mm to 250x250 mm</td>
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<tr>
<td></td>
<td>SU313100</td>
<td></td>
<td>Black</td>
<td>440L0</td>
<td>48x48 mm to 152x152 mm</td>
</tr>
</tbody>
</table>

#### Rod
SU317910 Diameter: 10mm, Length: 100 mm to 1000 mm
SU317915 Diameter: 12mm, Length: 100 mm to 1000 mm
SU317920 Diameter: 20mm, Length: 100 mm to 1000 mm
SU317927 Diameter: 27mm, Length: 100 mm to 1000 mm
SU317940 Diameter: 40mm, Length: 50 mm to 1000 mm

#### Granule
SU316300 Nominal Granule Size: 3mm

#### Polyphenylsulfone (PPSu)
Radel R

<table>
<thead>
<tr>
<th>Item Type</th>
<th>Item Code</th>
<th>Diameter</th>
<th>Color</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheet</td>
<td>SU333020</td>
<td></td>
<td>Blue</td>
<td>5.5mm</td>
</tr>
</tbody>
</table>

---

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### Polymers

#### Rod

<table>
<thead>
<tr>
<th>SU337912</th>
<th>Diameter: 12.7mm, Color: Black, Length: 100 mm to 1000 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>SU337920</td>
<td>Diameter: 20mm, Color: Black, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>SU337930</td>
<td>Diameter: 30mm, Color: Black, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>SU337940</td>
<td>Diameter: 40mm, Color: Black, Length: 50 mm to 1000 mm</td>
</tr>
<tr>
<td>SU337950</td>
<td>Diameter: 50mm, Color: Black, Length: 100 mm to 1000 mm</td>
</tr>
</tbody>
</table>

#### Polyphthalamide 35% glass fiber filled (PPA)

<table>
<thead>
<tr>
<th>PH356300</th>
<th>Nominal Granule Size: 3mm, Color: Natural, Condition: Injection molding grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH366300</td>
<td>Nominal Granule Size: 3mm, Color: Natural, Condition: Heat stabilized, Condition: Lubricated grade, Condition: Injection molding grade</td>
</tr>
<tr>
<td>PH376300</td>
<td>Nominal Granule Size: 3mm, Color: Natural, Condition: Heat stabilized, Condition: Lubricated grade, Condition: Injection molding grade</td>
</tr>
</tbody>
</table>

#### Polyphthalamide 50% glass fiber filled (PPA)

<table>
<thead>
<tr>
<th>PH366300</th>
<th>Nominal Granule Size: 3mm, Color: Natural, Condition: Injection molding grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH376300</td>
<td>Nominal Granule Size: 3mm, Color: Natural, Condition: Injection molding grade</td>
</tr>
</tbody>
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#### Polyphthalamide 55% glass fiber filled (PPA)

<table>
<thead>
<tr>
<th>PH366300</th>
<th>Nominal Granule Size: 3mm, Color: Natural, Condition: Injection molding grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH376300</td>
<td>Nominal Granule Size: 3mm, Color: Natural, Condition: Injection molding grade</td>
</tr>
</tbody>
</table>

#### Polypropylene (PP)

| PP301040 | Thickness: 0.004mm, Condition: Biaxially Oriented, Coil width 315 mm, Size: 100x100 mm to 300x300 mm |
| PP301081 | Thickness: 0.008mm, Condition: Biaxially Oriented, Length: 0.5 m to 20 m |
| PP301101 | Thickness: 0.01mm, Condition: Biaxially Oriented, Length: 0.5 m to 20 m |
| PP301100 | Thickness: 0.01mm, Condition: Biaxially Oriented, Coil width 550 mm, Size: 100x100 mm to 500x500 mm |
| PP301120 | Thickness: 0.012mm, Condition: Biaxially Oriented, Coil width 300 mm, Size: 100x100 mm to 300x300 mm |
| PP301130 | Thickness: 0.013mm, Condition: Biaxially Oriented, Coil width 295 mm, Size: 100x100 mm to 150x150 mm |
| PP301150 | Thickness: 0.015mm, Condition: Biaxially Oriented, Coil width 300 mm, Size: 100x100 mm to 300x300 mm |
| PP301025 | Thickness: 0.025mm, Condition: Biaxially Oriented, Coil width 600 mm, Size: 100x100 mm to 600x600 mm |
| PP301300 | Thickness: 0.030mm, Grade: Heat sealable, Coil width 320 mm, Size: 100x100 mm to 300x300 mm |
| PP301320 | Thickness: 0.03mm, Condition: Biaxially Oriented, Coil width 600 mm, Size: 150x150 mm to 300x300 mm |
| PP301341 | Thickness: 0.04mm, Condition: Biaxially Oriented, Coil width 200 mm, Size: 200x200 mm |
| PP301340 | Thickness: 0.04mm, Condition: Biaxially Oriented, Coil width 650 mm, Size: 100x100 mm to 600x600 mm |
| PP301350 | Thickness: 0.05mm, Color: Clear, Condition: Transparent, Condition: Biaxially Oriented, Coil width 600 mm, Size: 150x150 mm to 600x600 mm |
| PP301351 | Thickness: 0.05mm, Grade: Heat sealable, Color: Clear, Condition: Transparent, Condition: Biaxially Oriented, Coil width 600 mm, Size: 150x150 mm to 300x300 mm |
| PP301418 | Thickness: 0.18mm, Condition: Copolymer, Coil width 310 mm, Size: 150x150 mm to 300x300 mm |
| PP301440 | Thickness: 0.50mm, Condition: Copolymer, Coil width 600 mm, Size: 150x150 mm to 300x300 mm |
| PP301460 | Thickness: 0.55mm, Condition: Copolymer, Coil width 920 mm, Size: 150x150 mm to 900x900 mm |
| PP301880 | Thickness: 0.008mm, Coil width: 75mm, Ohms/Square: 3, Metallized with: Aluminum, Metallization: One side only, Length: 0.5 m to 50 m |
| PP301540 | Thickness: 0.07mm, Polymer Thickness: 0.050mm, Backing Material: Polypropylene, Coil width 600 mm, Size: 150x150 mm to 600x600 mm |
| PP302880 | Thickness: 0.10mm, Cell size: 8mm, Cell Wall: 0.25mm, Core Density: 0.058g.cm\(^{-3}\), Adhesive: None - cells are fused together, Facing skin: Non-woven polyester veil, Size: 300x300 mm to 600x600 mm |
| PP302850 | Thickness: 0.10mm, Cell size: 10mm, Cell Wall: 0.25mm, Core Density: 0.064g.cm\(^{-3}\), Adhesive: None - cells are fused together, Facing skin: Non-woven polyester veil, Size: 300x300 mm to 600x600 mm |
| PP302810 | Thickness: 0.20mm, Cell size: 8mm, Cell Wall: 0.25mm, Core Density: 0.089g.cm\(^{-3}\), Adhesive: None - cells are fused together, Facing skin: Non-woven polyester veil, Size: 300x300 mm to 600x600 mm |
| PP302851 | Thickness: 0.20mm, Cell size: 10mm, Cell Wall: 0.25mm, Core Density: 0.064g.cm\(^{-3}\), Adhesive: None - cells are fused together, Facing skin: Non-woven polyester veil, Size: 300x300 mm to 600x600 mm |
| PP303100 | Thickness: 1.0mm, Size: 150x150 mm to 500x500 mm |
| PP303150 | Thickness: 1.5mm, Color: Natural, Condition: Homopolymer, Size: 150x150 mm to 600x600 mm |
| PP303030 | Thickness: 3.0mm, Color: Natural, Condition: Homopolymer, Size: 100x100 mm to 500x500 mm |
### Polymers

#### PP03050
- **Thickness:** 4.5mm, Size: 100x100 mm to 300x300 mm

#### PP03055
- **Thickness:** 5.0mm, Color: Natural, Condition: Homopolymer, Size: 100x100 mm to 500x500 mm

#### PP03300
- **Thickness:** 10mm, Size: 100x100 mm to 300x300 mm

#### PP03400
- **Thickness:** 25mm, Size: 100x100 mm to 495x495 mm

#### Mesh
- **Nominal Aperture:** 34µm, Monofil diameter: 150µm, Threads/cm: 70, Open area: 4%, Weave: Satin, Size: 250x250 mm to 500x500 mm

#### Fiber
- **Tex Number:** 47, Number of filaments: 86, Condition: Medium Tenacity

#### Rod
- **Diameter:** 8mm, Condition: Homopolymer, Length: 500 mm to 1000 mm
- **Diameter:** 10mm, Condition: Homopolymer, Length: 500 mm to 1000 mm
- **Diameter:** 25mm, Condition: Homopolymer, Length: 200 mm to 1000 mm
- **Diameter:** 50mm, Condition: Homopolymer, Length: 100 mm to 1000 mm
- **Diameter:** 100mm, Length: 100 mm to 1000 mm
- **Diameter:** 150mm, Length: 50 mm to 500 mm

#### Tube
- **Outside Diameter:** 50mm, Wall Thickness: 1.1mm, Inside Diameter: 47.8mm, Color: Gray, Condition: Biaxially Oriented, Tube: 100 mm to 500 mm

#### Granule
- **Nominal Granule Size:** 3mm, Condition: Block copolymer
- **Nominal Granule Size:** 4mm, Condition: Isotactic
- **Nominal Granule Size:** 5mm, Condition: Homopolymer, Melt Flow Rate (MFR): 6
- **Condition:** Waxy gel, Condition: Atactic

#### Sphere
- **Diameter:** 3.18mm, Tolerance: ±0.05mm, Sphericity: 0.025mm, Grade: Precision Sphere
- **Diameter:** 9mm, Color: Red
- **Diameter:** 19.05mm, Tolerance: ±0.25mm, Grade: Precision Sphere, Condition: Hollow

#### Polystyrene (PS)
- **Polystyrol, Styron**

#### Film
- **Thickness:** 0.025mm, Coil width: 300mm, Tolerance: 20%, Color: Clear, Condition: Transparent, Condition: Biaxially Oriented, Condition: Additive free polymer, Length: 1 m to 20 m

#### Sheet
- **Thickness:** 0.030mm, Coil width: 300mm, Tolerance: 20%, Color: Clear, Condition: Transparent, Condition: Biaxially Oriented, Length: 1 m to 20 m
- **Thickness:** 0.05mm, Color: Clear, Condition: Transparent, Condition: Biaxially Oriented, Additive free polymer, Coil width 600 mm, Size: 150x150 mm to 600x600 mm
- **Thickness:** 0.125mm, Color: Clear, Condition: Transparent, Biaxially Oriented, Coil width 600 mm, Size: 150x150 mm to 600x600 mm
- **Thickness:** 0.19mm, Color: Clear, Condition: Transparent, Biaxially Oriented, Coil width 350 mm, Size: 150x150 mm to 300x300 mm
- **Thickness:** 1.2mm, Condition: Crystal, Condition: Transparent, Size: 100x100 mm to 300x300 mm
- **Thickness:** 2.0mm, Condition: Crystal, Transparent, Size: 100x100 mm to 600x600 mm
- **Thickness:** 4.0mm, Condition: Crystal, Transparent, Size: 100x100 mm to 300x300 mm
- **Thickness:** 10.0mm, Condition: Crystal, Transparent, Size: 100x100 mm
- **Mean Particle size:** 250µm, Condition: Homopolymer
- **Mean Particle size:** 900µm, Condition: Expandable bead, Condition: Contains pentane
- **Nominal Granule Size:** 3.5mm, Melt Flow Rate (MFR): 2.5-3, Molecular weight: 280k g/mol

#### Polystyrene - Conductive (High Impact Conductive Polystyrene)
- **Thickness:** 1.0mm, Color: Black, Condition: Conductive polymer, Size: 100x100 mm to 300x300 mm
- **Thickness:** 2.0mm, Color: Black, Condition: Conductive polymer, Size: 100x100 mm to 300x300 mm
- **Thickness:** 3.0mm, Color: Black, Condition: Conductive polymer, Size: 100x100 mm to 300x300 mm

#### Polystyrene - Cross-linked (PS - X - Linked)
- **Q.200.5, Rexolite**

#### Sheet
- **Thickness:** 0.9mm, Size: 150x150 mm to 610x610 mm
- **Thickness:** 1.6mm, Size: 150x150 mm to 610x610 mm
- **Thickness:** 2.4mm
- **Thickness:** 3.2mm, Size: 150x150 mm to 610x610 mm
### Polymers

#### Polysulfone (PSu)

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Thickness</th>
<th>Size</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST303064</td>
<td>6.4mm</td>
<td>150x150 mm to 300x300 mm</td>
<td></td>
</tr>
<tr>
<td>ST303127</td>
<td>12.7mm</td>
<td>100x100 mm to 610x610 mm</td>
<td></td>
</tr>
<tr>
<td>ST303130</td>
<td>15.9mm</td>
<td>100x100 mm to 610x610 mm</td>
<td></td>
</tr>
<tr>
<td>ST303150</td>
<td>25.4mm</td>
<td>130x150 mm to 317x320 mm</td>
<td></td>
</tr>
<tr>
<td>ST303175</td>
<td>50.8mm</td>
<td>155x157 mm to 305x305 mm</td>
<td></td>
</tr>
</tbody>
</table>

#### Fluon, Hostaflon TF

- **Nominal Granule Size**: 2mm, Color: Natural, Grade: Udel® P 1700
- **Nominal Granule Size**: 3mm, Color: Natural, Condition: Injection molding grade

### Polytetrafluoroethylene (PTFE)

#### Film

<table>
<thead>
<tr>
<th>Tex Number</th>
<th>Thickness</th>
<th>Pore size</th>
<th>Porosity</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>FP301252</td>
<td>0.045mm</td>
<td>0.2µm</td>
<td></td>
<td>Porous Membrane, Coil width 305 mm, Size: 200x300 mm</td>
</tr>
<tr>
<td>FP301250</td>
<td>0.05mm</td>
<td>0.2µm</td>
<td>20%</td>
<td>Tolerance, Coil width 300 mm, Size: 190x100 mm to 300x300 mm</td>
</tr>
<tr>
<td>FP301253</td>
<td>0.063mm</td>
<td>0.2µm</td>
<td>78%</td>
<td>Condition: Porous Membrane, Condition: Supported, Size: 140x200 mm to 200x300 mm</td>
</tr>
<tr>
<td>FP301256</td>
<td>0.063mm</td>
<td>0.45µm</td>
<td>84%</td>
<td>Condition: Porous Membrane, Coilm width 300 mm, Size: 150x200 mm to 200x300 mm</td>
</tr>
<tr>
<td>FP301276</td>
<td>0.085mm</td>
<td>0.02µm</td>
<td>50%</td>
<td>Condition: Porous Membrane, Condition: Supported, Size: 140x200 mm to 200x300 mm</td>
</tr>
<tr>
<td>FP301300</td>
<td>0.1mm</td>
<td>610mm</td>
<td></td>
<td>0.5 mm to 10 m</td>
</tr>
<tr>
<td>FP301305</td>
<td>0.15mm</td>
<td>310 mm</td>
<td></td>
<td>150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td>FP301312</td>
<td>0.175mm</td>
<td>5.0µm</td>
<td>35%</td>
<td>Condition: Porous Membrane, B a c k i n g s u p p o r t: 0.15mm thick Webril® Polypropylene non-woven fabric, Size: 200x310 mm</td>
</tr>
<tr>
<td>FP301340</td>
<td>0.2mm</td>
<td>328 mm</td>
<td></td>
<td>150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td>FP301310</td>
<td>0.21mm</td>
<td>1.0µm</td>
<td>51.5%</td>
<td>Condition: Porous Membrane, Backing support: 0.15mm thick Webril® Polypropylene non-woven fabric, Size: 200x300 mm</td>
</tr>
<tr>
<td>FP301316</td>
<td>0.21mm</td>
<td>0.45µm</td>
<td>64%</td>
<td>Condition: Porous Membrane, Condition: Supported, Size: 200x300 mm</td>
</tr>
<tr>
<td>FP301350</td>
<td>0.25mm</td>
<td>319 mm</td>
<td></td>
<td>150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td>FP301324</td>
<td>0.263mm</td>
<td>1.0µm</td>
<td>51.5%</td>
<td>Condition: Porous Membrane, B a c k i n g s u p p o r t: Reemay® non-woven 0.2mm thick Polyester, Size: 200x300 mm</td>
</tr>
<tr>
<td>FP301375</td>
<td>0.30mm</td>
<td>300 mm</td>
<td></td>
<td>150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td>FP301400</td>
<td>0.5mm</td>
<td>610 mm</td>
<td></td>
<td>100x100 mm to 600x600 mm</td>
</tr>
</tbody>
</table>

#### Sheet

<table>
<thead>
<tr>
<th>Tex Number</th>
<th>Thickness</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>FP303050</td>
<td>1.0mm</td>
<td>100x100 mm to 600x600 mm</td>
</tr>
<tr>
<td>FP303100</td>
<td>2.0mm</td>
<td>100x100 mm to 300x300 mm</td>
</tr>
<tr>
<td>FP303150</td>
<td>3.0mm</td>
<td>100x100 mm to 300x300 mm</td>
</tr>
<tr>
<td>FP303200</td>
<td>5.0mm</td>
<td>100x100 mm to 300x300 mm</td>
</tr>
<tr>
<td>FP303250</td>
<td>10.0mm</td>
<td>100x100 mm to 300x300 mm</td>
</tr>
<tr>
<td>FP303220</td>
<td>20.0mm</td>
<td>100x100 mm to 610x610 mm</td>
</tr>
</tbody>
</table>

#### Fiber

<table>
<thead>
<tr>
<th>Tex Number</th>
<th>Filament diameter</th>
<th>Number of filaments</th>
</tr>
</thead>
<tbody>
<tr>
<td>FP305722</td>
<td>0.0211 mm</td>
<td>30</td>
</tr>
<tr>
<td>Rod</td>
<td>FP307048 Outside Diameter: 4.8mm, Wall Thickness: 0.8mm, Inside Diameter: 3.2mm, Length: 500 mm to 1000 mm</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>FP307048</td>
<td>Outside Diameter: 4.8mm, Wall Thickness: 0.8mm, Inside Diameter: 3.2mm, Length: 500 mm to 1000 mm</td>
<td></td>
</tr>
<tr>
<td>FP307050</td>
<td>Outside Diameter: 5.0mm, Wall Thickness: 1.0mm, Inside Diameter: 3mm, Length: 500 mm to 1000 mm</td>
<td></td>
</tr>
<tr>
<td>FP307055</td>
<td>Outside Diameter: 5.5mm, Wall Thickness: 1.5mm, Inside Diameter: 3.5mm, Length: 500 mm to 1000 mm</td>
<td></td>
</tr>
<tr>
<td>FP307064</td>
<td>Outside Diameter: 6.42mm, Wall Thickness: 0.51mm, Inside Diameter: 5.4mm, Length: 500 mm to 1000 mm</td>
<td></td>
</tr>
<tr>
<td>FP307066</td>
<td>Outside Diameter: 6.45mm, Wall Thickness: 0.05mm, Inside Diameter: 6.35mm, Heat-shrinkable tubing: 1.6mm minimum I/D, Length: 200 mm to 1000 mm</td>
<td></td>
</tr>
<tr>
<td>FP307068</td>
<td>Outside Diameter: 8.2mm, Wall Thickness: 0.8mm, Inside Diameter: 6.4mm, Length: 500 mm to 1000 mm</td>
<td></td>
</tr>
<tr>
<td>FP307077</td>
<td>Outside Diameter: 8.17mm, Wall Thickness: 0.25mm, Inside Diameter: 7.67mm, Heat-shrinkable tubing: 1.6mm minimum I/D, Length: 200 mm to 1200 mm</td>
<td></td>
</tr>
<tr>
<td>FP307080</td>
<td>Outside Diameter: 10.0mm, Wall Thickness: 0.05mm, Inside Diameter: 6.35mm, Heat-shrinkable tubing: 1.6mm minimum I/D, Length: 200 mm to 1000 mm</td>
<td></td>
</tr>
<tr>
<td>FP307090</td>
<td>Outside Diameter: 10.25mm, Wall Thickness: 0.375mm, Inside Diameter: 6.4mm, Length: 200 mm to 1000 mm</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Tube</th>
<th>FP307003 Outside Diameter: 0.37mm, Wall Thickness: 0.15mm, Inside Diameter: 0.07mm, Length: 1 m to 20 m</th>
</tr>
</thead>
<tbody>
<tr>
<td>FP307004</td>
<td>Outside Diameter: 0.41mm, Wall Thickness: 0.13mm, Inside Diameter: 0.15mm, Length: 1 m to 20 m</td>
</tr>
<tr>
<td>FP307006</td>
<td>Outside Diameter: 0.56mm, Wall Thickness: 0.08mm, Inside Diameter: 0.4mm, Length: 1 m to 20 m</td>
</tr>
<tr>
<td>FP307007</td>
<td>Outside Diameter: 0.8mm, Wall Thickness: 0.25mm, Inside Diameter: 0.3mm, Length: 1 m to 50 m</td>
</tr>
<tr>
<td>FP307009</td>
<td>Outside Diameter: 1.0mm, Wall Thickness: 0.3mm, Inside Diameter: 0.35mm, Length: 1 m to 20 m</td>
</tr>
<tr>
<td>FP307010</td>
<td>Outside Diameter: 1.09mm, Wall Thickness: 0.04mm, Inside Diameter: 1.01mm, Length: 1 m to 10 m</td>
</tr>
<tr>
<td>FP307012</td>
<td>Outside Diameter: 1.2mm, Wall Thickness: 0.3mm, Inside Diameter: 0.6mm, Length: 1 m to 50 m</td>
</tr>
<tr>
<td>FP307018</td>
<td>Outside Diameter: 1.82mm, Wall Thickness: 0.41mm, Inside Diameter: 1mm, Length: 1 m to 20 m</td>
</tr>
<tr>
<td>FP307024</td>
<td>Outside Diameter: 2.4mm, Wall Thickness: 0.8mm, Inside Diameter: 0.8mm, Length: 1 m to 20 m</td>
</tr>
<tr>
<td>FP307022</td>
<td>Outside Diameter: 2.5mm, Wall Thickness: 0.1mm, Inside Diameter: 2.3mm, Heat-shrinkable tubing: 0.65mm minimum I/D, Length: 200 mm to 1000 mm</td>
</tr>
<tr>
<td>FP307027</td>
<td>Outside Diameter: 2.69mm, Wall Thickness: 0.05mm, Inside Diameter: 2.59mm, Length: 1 m to 50 m</td>
</tr>
<tr>
<td>FP307032</td>
<td>Outside Diameter: 3.2mm, Wall Thickness: 0.8mm, Inside Diameter: 1.6mm, Length: 500 mm to 1000 mm</td>
</tr>
<tr>
<td>FP307035</td>
<td>Outside Diameter: 3.52mm, Wall Thickness: 0.41mm, Inside Diameter: 2.7mm, Length: 500 mm to 1000 mm</td>
</tr>
<tr>
<td>FP307030</td>
<td>Outside Diameter: 4.2mm, Wall Thickness: 0.05mm, Inside Diameter: 4.1mm, Heat-shrinkable tubing: 0.93mm minimum I/D, Length: 200 mm to 1000 mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Powder</th>
<th>FP306010 Mean Particle size: 6-9micron</th>
</tr>
</thead>
<tbody>
<tr>
<td>FP306020</td>
<td>Mean Particle size: 20micron</td>
</tr>
<tr>
<td>FP306068</td>
<td>Mean Particle size: 675micron, Color: White</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Polygons — Polytetrafluoroethylene coated Glass Fabric (PTFE 75 / Glass 25)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goodfellow Cambridge Limited</strong></td>
</tr>
</tbody>
</table>

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**February 2017**

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## Polymers

### Polytetrafluoroethylene filled with Glass (PTFE 25% GF)

<table>
<thead>
<tr>
<th>Material</th>
<th>Description</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluor, Hostaflon</td>
<td>Film</td>
<td>Thickness: 0.30mm, Size: 250x250 mm to 1000x1000 mm</td>
</tr>
<tr>
<td>CV311450</td>
<td>Sheet</td>
<td>Thickness: 1.0mm, Size: 100x100 mm to 300x300 mm</td>
</tr>
<tr>
<td>CV313025</td>
<td>Rod</td>
<td>Diameter: 5.0mm, Length: 100 mm to 1000 mm</td>
</tr>
<tr>
<td>CV317906</td>
<td>Rod</td>
<td>Diameter: 6mm, Color: Gray, Length: 500 mm to 1000 mm</td>
</tr>
<tr>
<td>CV317910</td>
<td>Tube</td>
<td>Diameter: 10mm, Color: Gray, Length: 500 mm to 1000 mm</td>
</tr>
<tr>
<td>CV317925</td>
<td>Tube</td>
<td>Diameter: 25mm, Color: Gray, Length: 250 mm to 1000 mm</td>
</tr>
</tbody>
</table>

### Polyvinylfluoride (PVF)

<table>
<thead>
<tr>
<th>Material</th>
<th>Description</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corvic, Evipol, Geon, Hostalit, Lacovyl, Lucorex</td>
<td>Film</td>
<td>Thickness: 0.2mm, Color: Clear, Condition: Copolymer, Coil width 660 mm, Size: 150x150 mm to 600x600 mm</td>
</tr>
<tr>
<td>CV311200</td>
<td>Film</td>
<td>Thickness: 0.38mm, Color: Clear, Condition: Copolymer, Coil width 660 mm, Size: 150x150 mm to 600x600 mm</td>
</tr>
<tr>
<td>CV311450</td>
<td>Film</td>
<td>Thickness: 0.2mm, Color: Clear, Condition: Piezo-electric film, Coil width 400 mm, Size: 50x50 mm to 200x200 mm</td>
</tr>
<tr>
<td>CV310150</td>
<td>Film</td>
<td>Thickness: 0.0125mm, Color: Gray, Length: 300 mm to 500 mm</td>
</tr>
<tr>
<td>CV310230</td>
<td>Tube</td>
<td>Diameter: 0.025mm, Color: Gray, Length: 0.5 mm to 10 m</td>
</tr>
<tr>
<td>CV310245</td>
<td>Tube</td>
<td>Diameter: 0.043mm, Color: Gray, Length: 134 mm, Condition: Double wound (2 x 0.0215mm), Length: 1 m</td>
</tr>
</tbody>
</table>

### Polyvinylidenechloride (PVDC)

<table>
<thead>
<tr>
<th>Material</th>
<th>Description</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floraflon, Kynar, Solef</td>
<td>Film</td>
<td>Thickness: 0.0045mm, Color: Gray, Length: 660 mm, Condition: Biaxially Oriented, Coil width 660 mm, Size: 150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td>CV310150</td>
<td>Film</td>
<td>Thickness: 0.0125mm, Color: Gray, Length: 300 mm to 500 mm</td>
</tr>
<tr>
<td>CV310230</td>
<td>Tube</td>
<td>Diameter: 0.025mm, Color: Gray, Length: 0.5 mm to 10 m</td>
</tr>
<tr>
<td>CV310245</td>
<td>Tube</td>
<td>Diameter: 0.043mm, Color: Gray, Length: 134 mm, Condition: Double wound (2 x 0.0215mm), Length: 1 m</td>
</tr>
</tbody>
</table>

### Polyvinylidenefluoride (PVDF)

<table>
<thead>
<tr>
<th>Material</th>
<th>Description</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Film</td>
<td>Film</td>
<td>Thickness: 0.0045mm, Color: Gray, Length: 660 mm, Condition: Biaxially Oriented, Coil width 660 mm, Size: 150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td>CV310150</td>
<td>Film</td>
<td>Thickness: 0.0125mm, Color: Gray, Length: 300 mm to 500 mm</td>
</tr>
<tr>
<td>CV310230</td>
<td>Tube</td>
<td>Diameter: 0.025mm, Color: Gray, Length: 0.5 mm to 10 m</td>
</tr>
<tr>
<td>CV310245</td>
<td>Tube</td>
<td>Diameter: 0.043mm, Color: Gray, Length: 134 mm, Condition: Double wound (2 x 0.0215mm), Length: 1 m</td>
</tr>
</tbody>
</table>

---

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### Polymers

<table>
<thead>
<tr>
<th>Code</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>FV301310</td>
<td>Thickness: 0.125mm, Coil width 660 mm, Size: 150x150 mm to 300x300 mm</td>
</tr>
<tr>
<td>FV301350</td>
<td>Thickness: 0.25mm, Coil width 596 mm, Size: 145x145 mm to 290x290 mm</td>
</tr>
<tr>
<td>FV301360</td>
<td>Thickness: 0.3mm, Size: 100x100 mm to 150x150 mm</td>
</tr>
<tr>
<td>FV301400</td>
<td>Thickness: 0.5mm, Size: 100x100 mm to 600x600 mm</td>
</tr>
<tr>
<td>FV301490</td>
<td>Thickness: 1.0mm, Size: 150x150 mm to 500x500 mm</td>
</tr>
<tr>
<td>FV301926</td>
<td>Thickness: 0.025mm, Ohms/Square: 2, Condition: Biaxially Oriented</td>
</tr>
<tr>
<td>FV301920</td>
<td>Thickness: 0.03mm, Ohms/Square: 2, Condition: Uniaxially oriented</td>
</tr>
<tr>
<td>FV301940</td>
<td>Thickness: 0.04mm, Ohms/Square: 2, Condition: Biaxially Oriented</td>
</tr>
<tr>
<td>FV301950</td>
<td>Thickness: 0.05mm, Ohms/Square: 2, Condition: Uniaxially oriented</td>
</tr>
<tr>
<td>FV301945</td>
<td>Thickness: 0.052mm, Condition: Uniaxially oriented</td>
</tr>
<tr>
<td>FV301960</td>
<td>Thickness: 0.11mm, Ohms/Square: 2, Condition: Uniaxially oriented</td>
</tr>
<tr>
<td>FV303200</td>
<td>Thickness: 2.0mm, Size: 150x150 mm to 500x500 mm</td>
</tr>
<tr>
<td>FV307910</td>
<td>Diameter: 3.0mm, Length: 500 mm to 1000 mm</td>
</tr>
<tr>
<td>FV307925</td>
<td>Diameter: 10.0mm, Length: 200 mm to 1000 mm</td>
</tr>
<tr>
<td>FV307940</td>
<td>Diameter: 20.0mm, Length: 200 mm to 1000 mm</td>
</tr>
<tr>
<td>FV307201</td>
<td>Outside Diameter: 20mm, Wall Thickness: 0.2mm, Inside Diameter: 19.6mm,</td>
</tr>
<tr>
<td></td>
<td>Heat-shrinkable tubing: 0.9mm minimum I/D, Length: 300 mm to 1200 mm</td>
</tr>
<tr>
<td>FV30BO30</td>
<td>Size: M3 x 10 mm, Head Style: Cross recessed pan head, Pitch: 0.5 mm</td>
</tr>
<tr>
<td>FV30BO40</td>
<td>Size: M4 x 10 mm, Head Style: Cross recessed pan head, Pitch: 0.7 mm</td>
</tr>
<tr>
<td>FV30BO50</td>
<td>Size: M5 x 10 mm, Head Style: Cross recessed pan head, Pitch: 0.8 mm</td>
</tr>
<tr>
<td>FV30NU03</td>
<td>Size: M3, Style: Hexagonal, Pitch: 0.5 mm, Quantity: 10 pcs</td>
</tr>
<tr>
<td>FV30NU04</td>
<td>Size: M4, Style: Hexagonal, Pitch: 0.7 mm, Quantity: 10 pcs</td>
</tr>
<tr>
<td>FV30NU05</td>
<td>Size: M5, Style: Hexagonal, Pitch: 0.8 mm, Quantity: 10 pcs</td>
</tr>
<tr>
<td>FV30WA03</td>
<td>Size: M3, Outside Diameter: 7 mm, Inside Diameter: 3.2 mm, Thickness: 0.5 mm, Quantity: 10 pcs</td>
</tr>
<tr>
<td>FV30WA04</td>
<td>Size: M4, Outside Diameter: 9 mm, Inside Diameter: 4.3 mm, Thickness: 0.8 mm, Quantity: 10 pcs</td>
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<tr>
<td>FV30WA05</td>
<td>Size: M5, Outside Diameter: 10 mm, Inside Diameter: 5.3 mm, Thickness: 1.0 mm, Quantity: 10 pcs</td>
</tr>
</tbody>
</table>

### Silicone Elastomer

- **Silastic, Silopren**
- **Polymer**
- **Nominal Granule Size: 5mm**, **Condition: Additive free polymer**

### Sheet

- **Silicone Elastomer**
- **Silastic, Silopren**
- **Polymer**
- **Nominal Granule Size: 5mm**, **Condition: Additive free polymer**

### Rod

- **Silicone Elastomer**
- **Silastic, Silopren**
- **Polymer**
- **Nominal Granule Size: 5mm**, **Condition: Additive free polymer**

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<table>
<thead>
<tr>
<th>Polymers — Tetrafluoroethylene-perfluoro(alkoxy vinyl ether) - Copolymer (PFA)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tube</strong></td>
</tr>
<tr>
<td>SI307150</td>
</tr>
<tr>
<td>SI307160</td>
</tr>
<tr>
<td>SI307300</td>
</tr>
<tr>
<td>SI307370</td>
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<tr>
<td>SI307371</td>
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<td>SI307450</td>
</tr>
<tr>
<td>SI307061</td>
</tr>
<tr>
<td>SI307060</td>
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<td>SI307062</td>
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<table>
<thead>
<tr>
<th><strong>Film</strong></th>
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<tbody>
<tr>
<td>FV321025</td>
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<tr>
<td>FV321050</td>
</tr>
<tr>
<td>FV321075</td>
</tr>
<tr>
<td>FV321100</td>
</tr>
<tr>
<td>FV321125</td>
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<tr>
<td>FV321200</td>
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<table>
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<tr>
<th><strong>Sheet</strong></th>
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<tbody>
<tr>
<td>FV323100</td>
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<tr>
<td>FV323300</td>
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<table>
<thead>
<tr>
<th><strong>Rod</strong></th>
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<tbody>
<tr>
<td>FV327905</td>
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<tr>
<td>FV327910</td>
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<tr>
<td>FV327930</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vectra&lt;sup&gt;®&lt;/sup&gt; A - 15% Glass Fiber Reinforced (Liquid Crystal Polyester - 15% GFR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rod</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vectra&lt;sup&gt;®&lt;/sup&gt; A - 25% PTFE Fiber Filled (Vectra A&lt;sup&gt;®&lt;/sup&gt; - 25% PTFE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rod</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vectra&lt;sup&gt;®&lt;/sup&gt; A - 30% Glass Fiber Reinforced (Vectra A&lt;sup&gt;®&lt;/sup&gt; - 30% GFR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rod</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vectra&lt;sup&gt;®&lt;/sup&gt; A - Liquid Crystal Polyester (Vectra&lt;sup&gt;®&lt;/sup&gt; A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rod</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vectra&lt;sup&gt;®&lt;/sup&gt; B - 30% Glass Fiber Reinforced (Liquid Crystal Polyester - 30% GFR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheet</td>
</tr>
<tr>
<td>Rod</td>
</tr>
<tr>
<td>ES397930</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Vectra&lt;sup&gt;®&lt;/sup&gt; B - Liquid Crystal Polyester/amide copolymer (Vectra&lt;sup&gt;®&lt;/sup&gt; B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rod</td>
</tr>
<tr>
<td>ES327905</td>
</tr>
<tr>
<td>ES327910</td>
</tr>
<tr>
<td>ES327920</td>
</tr>
<tr>
<td>ES327930</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vectra&lt;sup&gt;®&lt;/sup&gt; MT1300 - Liquid Crystalline Polyester (Vectra&lt;sup&gt;®&lt;/sup&gt; MT1300)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rod</td>
</tr>
</tbody>
</table>
## Composites

### Aluminum/Copper Metal Matrix Composite

**(Al77.9/SiC17.8/Cu 3.3/Mg 1.2/Mn 0.4)**

<table>
<thead>
<tr>
<th>Sheet</th>
<th>Diameter: 2.0 mm, Condition: Metal Matrix Composite, Reinforced with: Silicon Carbide particles, Size: 50x50 mm to 100x100 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rod</td>
<td>Diameter: 15 mm, Condition: Metal Matrix Composite, Reinforced with: Silicon Carbide particles, Size: 50 mm to 500 mm</td>
</tr>
<tr>
<td>Tube</td>
<td>Outside Diameter: 25.4 mm, Wall Thickness: 1.0 mm, Inside Diameter: 23.4 mm, Condition: Metal Matrix Composite, Reinforced with: Silicon Carbide particles, Length: 100 mm to 1000 mm</td>
</tr>
</tbody>
</table>

### Aluminum/Lithium Metal Matrix Composite

**(Al81/SiC15/Li 2/Cu 1.2/Mg 0.8)**

<table>
<thead>
<tr>
<th>Sheet</th>
<th>Diameter: 2.0 mm, Length: 500 mm to 1000 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rod</td>
<td>Diameter: 3 mm, Length: 500 mm to 1000 mm</td>
</tr>
<tr>
<td>Tube</td>
<td>Outside Diameter: 47.6 mm, Wall Thickness: 1.9 mm, Inside Diameter: 43.8 mm, Condition: Ultra-straight tube, Straightness: +/- 0.25mm over 1500mm, Length: 100 mm to 1500 mm</td>
</tr>
</tbody>
</table>

### Carbon-Carbon Composite

**(Carbon fiber - Carbon matrix)**

<table>
<thead>
<tr>
<th>Sheet</th>
<th>Thickness: 1.25 mm, Size: 50x50 mm to 150x150 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>C 413010</td>
<td>Thickness: 1.6 mm, Size: 50x50 mm to 150x150 mm</td>
</tr>
<tr>
<td>C 413020</td>
<td>Thickness: 2 mm, Size: 50x50 mm to 300x300 mm</td>
</tr>
<tr>
<td>C 413022</td>
<td>Thickness: 4 mm, Size: 50x50 mm to 305x305 mm</td>
</tr>
<tr>
<td>C 413040</td>
<td>Thickness: 5 mm, Size: 50x50 mm to 150x150 mm</td>
</tr>
<tr>
<td>C 413050</td>
<td>Thickness: 10.0 mm, Size: 50x50 mm to 300x300 mm</td>
</tr>
</tbody>
</table>

### Carbon/Epoxy Composite

**(Carbon fiber - Epoxy Resin Matrix)**

<table>
<thead>
<tr>
<th>Sheet</th>
<th>Thickness: 0.25 mm, Tolerance: ±20 %, Size: 100x100 mm to 500x500 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>C 423025</td>
<td>Thickness: 0.5 mm, Tolerance: ±20 %, Size: 100x100 mm to 1000x1250 mm</td>
</tr>
<tr>
<td>C 423050</td>
<td>Thickness: 0.65 mm, Size: 100x100 mm to 300x300 mm</td>
</tr>
<tr>
<td>C 423065</td>
<td>Thickness: 0.85 mm, Tolerance: ±20 %, Size: 50x50 mm to 300x300 mm</td>
</tr>
<tr>
<td>C 423085</td>
<td>Thickness: 1.0 mm, Tolerance: ±20 %, Size: 50x50 mm to 300x300 mm</td>
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</tbody>
</table>

### Carbon/Polyaramid Composite

**(Carbon fiber - Polyaramid fiber)**

<table>
<thead>
<tr>
<th>Fabric</th>
<th>Weight.m²: 174g, Thickness: 0.26 mm, Warp Yarn: 198T(C) 127Tex, Weft Yarn: 198T(C) 127Tex, Ends x Picks/10cm: 47, Weave: Plain, Size: 125x180 mm to 170x180 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>C 403525</td>
<td>Weight.m²: 188g, Thickness: 0.3 mm, Warp Yarn: 200(C) - 158(K)Tex, Weft Yarn: 200(C) - 158(K)Tex, Ends x Picks/10cm: 50x50, Weave: Plain, Size: 150x150 mm to 1000x1000 mm</td>
</tr>
<tr>
<td>C 403528</td>
<td>Weight.m²: 210g, Thickness: 0.25 mm, Warp Yarn: 198T(C) 127Tex, Weft Yarn: 198T(C) 127Tex, Ends x Picks/10cm: 63x63, Weave: 3/1 Twill, Size: 100x100 mm to 300x300 mm</td>
</tr>
<tr>
<td>C 403520</td>
<td>Weight.m²: 210g, Thickness: 0.25 mm, Warp Yarn: 198T(C) 127Tex, Weft Yarn: 198T(C) 127Tex, Ends x Picks/10cm: 67x67, Weave: 3/1 Twill, Size: 150x150 mm to 1000x1000 mm</td>
</tr>
</tbody>
</table>

### Carbon/Polyetheretherketone Composite

**(Carbon fiber - PEEK Matrix)**

<table>
<thead>
<tr>
<th>Sheet</th>
<th>Thickness: 1.0 mm, Grade: APC 2, Condition: 8-ply Quasi-isotropic, Size: 50x50 mm to 150x150 mm</th>
</tr>
</thead>
</table>

### Carbon/Vinylester Composite

**(Carbon fiber - Vinylester Matrix)**

<table>
<thead>
<tr>
<th>Rod</th>
<th>Diameter: 1.0 mm, Condition: Pultruded, Length: 1000 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>VE407910</td>
<td>Diameter: 5.0 mm, Condition: Pultruded, Length: 500 mm to 1000 mm</td>
</tr>
<tr>
<td>VE407930</td>
<td>Diameter: 6.0 mm, Condition: Pultruded, Length: 300 mm to 1000 mm</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Part Number</th>
<th>Diameter/Thickness</th>
<th>Condition</th>
<th>Length/Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>VE407950</td>
<td>10.0mm</td>
<td>Pultruded</td>
<td>200 mm to 1000 mm</td>
</tr>
<tr>
<td>VE407211</td>
<td>6.0mm, 0.3mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VE407320</td>
<td>8.0mm, 1.5mm</td>
<td>Pultruded</td>
<td>500 mm to 1000 mm</td>
</tr>
<tr>
<td>VE407321</td>
<td>8.0mm, 1.0mm</td>
<td>Pultruded</td>
<td>200 mm to 984 mm</td>
</tr>
<tr>
<td>VE407430</td>
<td>12.0mm, 1.5mm</td>
<td>Pultruded</td>
<td>100 mm to 1000 mm</td>
</tr>
<tr>
<td>VE407435</td>
<td>16.0mm, 1.75mm</td>
<td>Pultruded</td>
<td>500 mm to 1000 mm</td>
</tr>
<tr>
<td>VE407541</td>
<td>25.0mm, 1.5mm</td>
<td>Pultruded</td>
<td>100 mm to 1000 mm</td>
</tr>
<tr>
<td>SI403210</td>
<td>0.3mm, 150x150 mm</td>
<td>Pultruded</td>
<td>300x300 mm</td>
</tr>
<tr>
<td>SI403220</td>
<td>0.5mm, 150x150 mm</td>
<td>Pultruded</td>
<td>300x300 mm</td>
</tr>
<tr>
<td>SI403240</td>
<td>1.0mm, 600x600 mm</td>
<td>Pultruded</td>
<td>600x600 mm</td>
</tr>
<tr>
<td>SI403260</td>
<td>1.6mm, 100x100 mm</td>
<td>Pultruded</td>
<td>600x600 mm</td>
</tr>
<tr>
<td>SI403280</td>
<td>3.0mm, 300x300 mm</td>
<td>Pultruded</td>
<td>300x300 mm</td>
</tr>
<tr>
<td>SI403300</td>
<td>5.5mm, 150x150 mm</td>
<td>Pultruded</td>
<td>300x300 mm</td>
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<tr>
<td>SI403310</td>
<td>3.0 mm</td>
<td>Machining</td>
<td>100 mm to 500 mm</td>
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<tr>
<td>PL403020</td>
<td>1.6mm, 145x145 mm</td>
<td>Pultruded</td>
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<tr>
<td>SU403100</td>
<td>6.35mm, 100x100 mm</td>
<td>Pultruded</td>
<td>300x300 mm</td>
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</tbody>
</table>

**Polyaramid/Vinylster Composite (Polyaramid fiber - Vinylester matrix)**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Diameter/Thickness</th>
<th>Reinforcement</th>
<th>Length/Size</th>
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</thead>
<tbody>
<tr>
<td>SU407920</td>
<td>6.35mm, 100 mm</td>
<td>Pultruded</td>
<td>100 mm to 1000 mm</td>
</tr>
<tr>
<td>SU407924</td>
<td>8.00mm, 100 mm</td>
<td>Pultruded</td>
<td>100 mm to 1000 mm</td>
</tr>
<tr>
<td>SU407950</td>
<td>25.0mm, 100 mm</td>
<td>Pultruded</td>
<td>100 mm to 1000 mm</td>
</tr>
</tbody>
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**Polyethylene/Polyethylene Composite (PE fibre - PE matrix)**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Thickness/Size</th>
<th>Length/Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET403020</td>
<td>2mm, 85x85 mm</td>
<td>85x175 mm</td>
</tr>
<tr>
<td>ET403060</td>
<td>6mm, 60x60 mm</td>
<td>125x125 mm</td>
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**Polypropylene-Polypropylene Composite (PP fiber - PP matrix)**

<table>
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<tr>
<th>Part Number</th>
<th>Thickness/Size</th>
<th>Length/Size</th>
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</thead>
<tbody>
<tr>
<td>PP403030</td>
<td>0.3mm, 150x150 mm</td>
<td>60x600 mm</td>
</tr>
<tr>
<td>PP403090</td>
<td>0.9mm, 150x150 mm</td>
<td>60x600 mm</td>
</tr>
<tr>
<td>PP403200</td>
<td>2.0mm, 150x150 mm</td>
<td>60x600 mm</td>
</tr>
<tr>
<td>PP403300</td>
<td>3.0mm, 150x150 mm</td>
<td>60x600 mm</td>
</tr>
</tbody>
</table>
## Glasses

### Borosilicate Glass

(SiO₂ 81% / B₂O₃ 13% / Na₂O 4%)

<table>
<thead>
<tr>
<th>Material</th>
<th>Diameter</th>
<th>Tolerance</th>
<th>Wall Thickness</th>
<th>Inside Diameter</th>
<th>Tube Ends</th>
<th>Condition</th>
<th>Length</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sheet</strong></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>SI813011</td>
<td>Diameter: 0.1mm, Rod Ends: As-cut, Length: 100 mm</td>
<td>±0.05mm</td>
<td>0.2mm</td>
<td>Inside Diameter: 0.128mm, Tube Ends: As-cut</td>
<td>Capillary Tube, Length: 100 mm</td>
<td>150 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SI817001</td>
<td>Diameter: 0.1mm, Rod Ends: As-cut, Length: 100 mm</td>
<td>±0.05mm</td>
<td>0.2mm</td>
<td>Inside Diameter: 0.128mm, Tube Ends: As-cut</td>
<td>Capillary Tube, Length: 100 mm</td>
<td>150 mm</td>
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<td></td>
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<tr>
<td>SI817002</td>
<td>Diameter: 0.2mm, Rod Ends: As-cut, Length: 100 mm</td>
<td>±0.05mm</td>
<td>0.2mm</td>
<td>Inside Diameter: 0.128mm, Tube Ends: As-cut</td>
<td>Capillary Tube, Length: 100 mm</td>
<td>150 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SI817003</td>
<td>Diameter: 0.3mm, Rod Ends: As-cut, Length: 100 mm</td>
<td>±0.05mm</td>
<td>0.2mm</td>
<td>Inside Diameter: 0.128mm, Tube Ends: As-cut</td>
<td>Capillary Tube, Length: 100 mm</td>
<td>150 mm</td>
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<tr>
<td>SI817004</td>
<td>Diameter: 0.4mm, Rod Ends: As-cut, Length: 100 mm</td>
<td>±0.05mm</td>
<td>0.2mm</td>
<td>Inside Diameter: 0.128mm, Tube Ends: As-cut</td>
<td>Capillary Tube, Length: 100 mm</td>
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<tr>
<td>SI817005</td>
<td>Diameter: 0.5mm, Rod Ends: As-cut, Length: 100 mm</td>
<td>±0.05mm</td>
<td>0.2mm</td>
<td>Inside Diameter: 0.128mm, Tube Ends: As-cut</td>
<td>Capillary Tube, Length: 100 mm</td>
<td>150 mm</td>
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<td></td>
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<tr>
<td>SI817006</td>
<td>Diameter: 0.6mm, Rod Ends: As-cut, Length: 100 mm</td>
<td>±0.05mm</td>
<td>0.2mm</td>
<td>Inside Diameter: 0.128mm, Tube Ends: As-cut</td>
<td>Capillary Tube, Length: 100 mm</td>
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</tr>
<tr>
<td>SI817007</td>
<td>Diameter: 0.7mm, Rod Ends: As-cut, Length: 100 mm</td>
<td>±0.05mm</td>
<td>0.2mm</td>
<td>Inside Diameter: 0.128mm, Tube Ends: As-cut</td>
<td>Capillary Tube, Length: 100 mm</td>
<td>150 mm</td>
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<tr>
<td>SI817008</td>
<td>Diameter: 0.8mm, Rod Ends: As-cut, Length: 100 mm</td>
<td>±0.05mm</td>
<td>0.2mm</td>
<td>Inside Diameter: 0.128mm, Tube Ends: As-cut</td>
<td>Capillary Tube, Length: 100 mm</td>
<td>150 mm</td>
<td></td>
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<tr>
<td>SI817009</td>
<td>Diameter: 0.9mm, Rod Ends: As-cut, Length: 100 mm</td>
<td>±0.05mm</td>
<td>0.2mm</td>
<td>Inside Diameter: 0.128mm, Tube Ends: As-cut</td>
<td>Capillary Tube, Length: 100 mm</td>
<td>150 mm</td>
<td></td>
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<tr>
<td>SI817010</td>
<td>Diameter: 1.0mm, Rod Ends: As-cut, Length: 100 mm</td>
<td>±0.05mm</td>
<td>0.2mm</td>
<td>Inside Diameter: 0.128mm, Tube Ends: As-cut</td>
<td>Capillary Tube, Length: 100 mm</td>
<td>150 mm</td>
<td></td>
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</tr>
<tr>
<td><strong>Tube</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SI817031</td>
<td>Diameter: 1.50mm, Rod Ends: As-cut, Length: 100 mm</td>
<td>±0.2mm</td>
<td>0.35mm</td>
<td>Inside Diameter: 1.411mm, Tube Ends: As-cut</td>
<td>Capillary Tube, Length: 100 mm</td>
<td>150 mm</td>
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<tr>
<td>SI817032</td>
<td>Diameter: 1.50mm, Rod Ends: As-cut, Length: 100 mm</td>
<td>±0.2mm</td>
<td>0.35mm</td>
<td>Inside Diameter: 1.411mm, Tube Ends: As-cut</td>
<td>Capillary Tube, Length: 100 mm</td>
<td>150 mm</td>
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<td></td>
</tr>
<tr>
<td>SI817033</td>
<td>Diameter: 2.0mm, Rod Ends: As-cut, Length: 100 mm</td>
<td>±0.3mm</td>
<td>0.50mm</td>
<td>Inside Diameter: 1.911mm, Tube Ends: As-cut</td>
<td>Capillary Tube, Length: 100 mm</td>
<td>150 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SI817034</td>
<td>Diameter: 2.0mm, Rod Ends: As-cut, Length: 100 mm</td>
<td>±0.3mm</td>
<td>0.50mm</td>
<td>Inside Diameter: 1.911mm, Tube Ends: As-cut</td>
<td>Capillary Tube, Length: 100 mm</td>
<td>150 mm</td>
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<tr>
<td>SI817035</td>
<td>Diameter: 2.0mm, Rod Ends: As-cut, Length: 100 mm</td>
<td>±0.3mm</td>
<td>0.50mm</td>
<td>Inside Diameter: 1.911mm, Tube Ends: As-cut</td>
<td>Capillary Tube, Length: 100 mm</td>
<td>150 mm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please visit [www.goodfellow.com](http://www.goodfellow.com) or [www.goodfellowusa.com](http://www.goodfellowusa.com) for latest prices.
### Glasses

<table>
<thead>
<tr>
<th>Shape/Condition</th>
<th>Quantity</th>
<th>Length</th>
<th>Width</th>
<th>Wall Thickness</th>
<th>Material Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rectangular, Length: 330mm, Width: 152mm, Height: 25mm</td>
<td>1 pcs</td>
<td>300mm</td>
<td>80mm</td>
<td>7mm</td>
<td>Metallic Glass</td>
</tr>
<tr>
<td>Foil, Condition: Metallic Glass, Length: 50mm</td>
<td>1 pcs</td>
<td>300mm</td>
<td>80mm</td>
<td>7mm</td>
<td>Metallic Glass</td>
</tr>
</tbody>
</table>

**Co820250** Thickness: 0.025mm, Coil width: 50mm, Condition: Metallic Glass, Length: 0.5 m to 20 m

**Co810250** Thickness: 0.025mm, Coil width: 25mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co810220** Thickness: 0.025mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 50 m

**Co830250** Thickness: 0.04mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co840300** Thickness: 0.023mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co830400** Thickness: 0.025mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co840230** Thickness: 0.023mm, Coil width: 20mm, Condition: Metallic Glass, Length: 1 m to 20 m

**Co840330** Thickness: 0.033mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co840250** Thickness: 0.025mm, Coil width: 50mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co810250** Thickness: 0.025mm, Coil width: 25mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co810220** Thickness: 0.025mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 50 m

**Co830250** Thickness: 0.04mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co840300** Thickness: 0.023mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co830400** Thickness: 0.025mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co840230** Thickness: 0.023mm, Coil width: 20mm, Condition: Metallic Glass, Length: 1 m to 20 m

**Co840330** Thickness: 0.033mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co840250** Thickness: 0.025mm, Coil width: 50mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

## Glasses — Cobalt/Boron/Silicon/Iron/Molybdenum/Nickel

<table>
<thead>
<tr>
<th>Shape/Condition</th>
<th>Quantity</th>
<th>Length</th>
<th>Width</th>
<th>Wall Thickness</th>
<th>Material Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rectangular, Length: 330mm, Width: 152mm, Height: 25mm</td>
<td>1 pcs</td>
<td>300mm</td>
<td>80mm</td>
<td>7mm</td>
<td>Metallic Glass</td>
</tr>
<tr>
<td>Foil, Condition: Metallic Glass, Length: 50mm</td>
<td>1 pcs</td>
<td>300mm</td>
<td>80mm</td>
<td>7mm</td>
<td>Metallic Glass</td>
</tr>
</tbody>
</table>

**Co820250** Thickness: 0.025mm, Coil width: 50mm, Condition: Metallic Glass, Length: 0.5 m to 20 m

**Co810250** Thickness: 0.025mm, Coil width: 25mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co810220** Thickness: 0.025mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 50 m

**Co830250** Thickness: 0.04mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co840300** Thickness: 0.023mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co830400** Thickness: 0.025mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co840230** Thickness: 0.023mm, Coil width: 20mm, Condition: Metallic Glass, Length: 1 m to 20 m

**Co840330** Thickness: 0.033mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co840250** Thickness: 0.025mm, Coil width: 50mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co810250** Thickness: 0.025mm, Coil width: 25mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co810220** Thickness: 0.025mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 50 m

**Co830250** Thickness: 0.04mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co840300** Thickness: 0.023mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co830400** Thickness: 0.025mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co840230** Thickness: 0.023mm, Coil width: 20mm, Condition: Metallic Glass, Length: 1 m to 20 m

**Co840330** Thickness: 0.033mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co840250** Thickness: 0.025mm, Coil width: 50mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co810250** Thickness: 0.025mm, Coil width: 25mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co810220** Thickness: 0.025mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 50 m

**Co830250** Thickness: 0.04mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co840300** Thickness: 0.023mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co830400** Thickness: 0.025mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co840230** Thickness: 0.023mm, Coil width: 20mm, Condition: Metallic Glass, Length: 1 m to 20 m

**Co840330** Thickness: 0.033mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co840250** Thickness: 0.025mm, Coil width: 50mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co810250** Thickness: 0.025mm, Coil width: 25mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co810220** Thickness: 0.025mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 50 m

**Co830250** Thickness: 0.04mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co840300** Thickness: 0.023mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co830400** Thickness: 0.025mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 10 m

**Co840230** Thickness: 0.023mm, Coil width: 20mm, Condition: Metallic Glass, Length: 1 m to 20 m

**Co840330** Thickness: 0.033mm, Coil width: 20mm, Condition: Metallic Glass, Length: 0.5 m to 10 m
## Glasses

<table>
<thead>
<tr>
<th>Description</th>
<th>Material Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Iron/Nickel/Boron</strong></td>
<td>(Fe40/Ni38/B 18/Mo 4) <strong>Foil</strong></td>
</tr>
<tr>
<td><strong>MACOR® Machinable Glass Ceramic</strong></td>
<td>(SiO$_2$ 46/Al$_2$O$_3$ 16/MgO 17/K$_2$O 10/ B$_2$O$_3$ 7)</td>
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<tr>
<td><strong>Sheet</strong></td>
<td>MA803005 Thickness: 0.5mm, Size: 100x100 mm</td>
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<tr>
<td></td>
<td>MA803010 Thickness: 1mm, Size: 10x10 mm to 50x50 mm</td>
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<tr>
<td></td>
<td>MA803011 Thickness: 1mm, Size: 100x100 mm</td>
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<tr>
<td></td>
<td>MA803020 Thickness: 2mm, Size: 25x25 mm to 50x50 mm</td>
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<td>MA803021 Thickness: 2mm, Size: 100x100 mm</td>
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<td>MA803030 Thickness: 3mm, Size: 25x25 mm to 25x50 mm</td>
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<td>MA803031 Thickness: 3mm, Size: 100x100 mm</td>
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<tr>
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<td>MA803060 Thickness: 6mm, Size: 25x25 mm to 50x50 mm</td>
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<td>MA803061 Thickness: 6mm, Size: 100x100 mm</td>
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<td>MA803110 Thickness: 10mm, Size: 100x100 mm</td>
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<td>MA803130 Thickness: 13mm, Size: 25x25 mm to 150x150 mm</td>
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<td>MA803164 Thickness: 64mm, Size: 355x355 mm</td>
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<tr>
<td><strong>Rod</strong></td>
<td>MA807902 Diameter: 1.6mm, Length: 100 mm to 300 mm</td>
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<tr>
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<td>MA807903 Diameter: 2.0mm, Length: 100 mm to 300 mm</td>
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<td></td>
<td>MA807904 Diameter: 3.2mm, Length: 100 mm to 300 mm</td>
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<td>MA807905 Diameter: 4.0mm, Length: 100 mm</td>
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<td>MA807906 Diameter: 4.8mm, Length: 100 mm to 300 mm</td>
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<td>MA807907 Diameter: 6.0mm, Length: 100 mm to 300 mm</td>
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<td>MA807908 Diameter: 8.0mm, Length: 100 mm to 300 mm</td>
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<td>MA807910 Diameter: 10.0mm, Length: 100 mm to 300 mm</td>
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<td>MA807912 Diameter: 12.0mm, Length: 300 mm</td>
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<td>MA807913 Diameter: 12.7mm, Length: 100 mm to 300 mm</td>
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<td>MA807915 Diameter: 15mm, Length: 100 mm to 300 mm</td>
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<td>MA807920 Diameter: 20mm, Length: 100 mm to 300 mm</td>
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<td>MA807925 Diameter: 25.4mm, Length: 100 mm to 300 mm</td>
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<td>MA807930 Diameter: 30mm, Length: 100 mm</td>
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<td>MA807940 Diameter: 40mm, Length: 100 mm to 300 mm</td>
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<td>MA807945 Diameter: 45mm, Length: 300 mm</td>
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<td>MA807950 Diameter: 50.8mm, Length: 300 mm</td>
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<td>MA807960 Diameter: 60mm, Length: 50 mm</td>
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<td>MA807976 Diameter: 76mm, Length: 152 mm to 305 mm</td>
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<tr>
<td><strong>Bar</strong></td>
<td>MA808110 Side Length: 10mm, Side Length (of longer side): 10mm, Length: 50 mm to 100 mm</td>
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<td>MA808115 Side Length: 15mm, Side Length (of longer side): 15mm, Length: 100 mm</td>
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<tr>
<td></td>
<td>MA808120 Side Length: 20mm, Side Length (of longer side): 20mm, Length: 100 mm</td>
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<tr>
<td><strong>MA808125</strong> Side Length: 25.4mm, Side Length (of longer side): 25.4mm, Length: 25 mm to 100 mm</td>
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<tr>
<td><strong>MA808250</strong> Side Length: 50.8mm, Side Length (of longer side): 50.8mm, Length: 25 mm to 50 mm</td>
<td></td>
</tr>
<tr>
<td><strong>Magnetic Copper (Cu99.96/Fe 0.04)</strong></td>
<td>Wire</td>
</tr>
<tr>
<td></td>
<td>CU805100 Diameter: 0.5mm, Filament diameter: 0.1 microns, Number of filaments: 16</td>
</tr>
<tr>
<td><strong>Moonstone (Multicolor) (NaK/AlSi$_3$O$_8$)</strong></td>
<td>Powder</td>
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<td></td>
<td>SI856010 Max. Particle size: 100micron, Condition: Gemstone powder</td>
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<tr>
<td><strong>Nickel/Boron/Silicon (Ni78/B 14/Si 8)</strong></td>
<td>Foil</td>
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<tr>
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<td>NI800250 Thickness: 0.025mm, Coil width: 25mm, Condition: Metallic Glass, Length: 0.5 m to 10 m</td>
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<tr>
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<td>NI800400 Thickness: 0.04mm, Coil width: 25mm, Condition: Metallic Glass, Length: 0.5 m to 10 m</td>
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<tr>
<td><strong>Nickel/Iron/Silicon/Boron</strong></td>
<td>(Ni40/Fe40/Si + B 19/Mo 1-2)</td>
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<tr>
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<td>NI810250 Thickness: 0.025mm, Coil width: 25mm, Condition: Metallic Glass, Length: 0.5 m to 10 m</td>
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<tr>
<td></td>
<td>NI810400 Thickness: 0.04mm, Coil width: 25mm, Condition: Metallic Glass, Length: 0.5 m to 10 m</td>
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<tr>
<td><strong>Opal (SiO$_2$/H$_2$O)</strong></td>
<td>Powder</td>
</tr>
<tr>
<td></td>
<td>SI866010 Max. Particle size: 100micron, Condition: Gemstone powder</td>
</tr>
<tr>
<td><strong>Soda Lime Glass</strong></td>
<td>(SiO$_2$ 70/Na$_2$O 15/CaO 10/MgO/B$_2$O$_3$/Al$_2$O$_3$)</td>
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<tr>
<td></td>
<td>Tube</td>
</tr>
<tr>
<td></td>
<td>SI807010 Outside Diameter: 0.5mm, Wall Thickness: 0.05mm, Inside Diameter: 0.40mm, Tube Ends: As-cut, Condition: Capillary Tube, Length: 100 mm</td>
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<td>SI807015 Outside Diameter: 0.55mm, Wall Thickness: 0.055mm, Inside Diameter: 0.44mm, Tube Ends: As-cut, Condition: Capillary Tube, Length: 100 mm</td>
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<tr>
<td></td>
<td>SI807020 Outside Diameter: 0.60mm, Wall Thickness: 0.06mm, Inside Diameter: 0.48mm, Tube Ends: As-cut, Condition: Capillary Tube, Length: 100 mm to 150 mm</td>
</tr>
<tr>
<td></td>
<td>SI807025 Outside Diameter: 0.70mm, Wall Thickness: 0.07mm, Inside Diameter: 0.56mm, Tube Ends: As-cut, Condition: Capillary Tube, Length: 100 mm</td>
</tr>
<tr>
<td></td>
<td>SI807030 Outside Diameter: 0.80mm, Wall Thickness: 0.08mm, Inside Diameter: 0.64mm, Tube Ends: As-cut, Condition: Capillary Tube, Length: 100 mm</td>
</tr>
</tbody>
</table>

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## Glasses

<table>
<thead>
<tr>
<th>SI807032</th>
<th>Outside Diameter: 0.90mm, Wall Thickness: 0.09mm, Inside Diameter: 0.72mm, Tube Ends: As-cut, Condition: Capillary Tube, Length: 100 mm</th>
</tr>
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<tbody>
<tr>
<td>SI807035</td>
<td>Outside Diameter: 1.00mm, Wall Thickness: 0.10mm, Inside Diameter: 0.80mm, Tube Ends: As-cut, Condition: Capillary Tube, Length: 100 mm to 200 mm</td>
</tr>
<tr>
<td>SI807040</td>
<td>Outside Diameter: 1.20mm, Wall Thickness: 0.12mm, Inside Diameter: 0.96mm, Tube Ends: As-cut, Condition: Capillary Tube, Length: 100 mm to 150 mm</td>
</tr>
<tr>
<td>SI807045</td>
<td>Outside Diameter: 1.25mm, Wall Thickness: 0.125mm, Inside Diameter: 1.00mm, Tube Ends: As-cut, Condition: Capillary Tube, Length: 100 mm</td>
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<tr>
<td>SI807050</td>
<td>Outside Diameter: 1.30mm, Wall Thickness: 0.13mm, Inside Diameter: 1.04mm, Tube Ends: As-cut, Condition: Capillary Tube, Length: 100 mm</td>
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<tr>
<td>SI807052</td>
<td>Outside Diameter: 1.35mm, Wall Thickness: 0.135mm, Inside Diameter: 1.08mm, Tube Ends: As-cut, Condition: Capillary Tube, Length: 100 mm</td>
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<tr>
<td>SI807055</td>
<td>Outside Diameter: 1.40mm, Wall Thickness: 0.14mm, Inside Diameter: 1.12mm, Tube Ends: As-cut, Condition: Capillary Tube, Length: 100 mm to 150 mm</td>
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<tr>
<td>SI807060</td>
<td>Outside Diameter: 1.50mm, Wall Thickness: 0.15mm, Inside Diameter: 1.20mm, Tube Ends: As-cut, Condition: Capillary Tube, Length: 100 mm</td>
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<tr>
<td>SI807065</td>
<td>Outside Diameter: 1.80mm, Wall Thickness: 0.18mm, Inside Diameter: 1.44mm, Tube Ends: As-cut, Condition: Capillary Tube, Length: 100 mm</td>
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<tr>
<td>SI807070</td>
<td>Outside Diameter: 2.00mm, Wall Thickness: 0.20mm, Inside Diameter: 1.60mm, Tube Ends: As-cut, Condition: Capillary Tube, Length: 100 mm to 150 mm</td>
</tr>
</tbody>
</table>

### Sphere

| SI806805 | Diameter: 0.03mm, Tolerance: ±0.02mm, Surface finish: Polished, Warning: May contain internal bubbles and/or surface marks |
| SI806809 | Diameter: 0.09mm, Tolerance: ±0.02mm, Surface finish: Polished, Warning: May contain internal bubbles and/or surface marks |
| SI806815 | Diameter: 0.15mm, Tolerance: ±0.05mm, Surface finish: Polished, Warning: May contain internal bubbles and/or surface marks |
| SI806820 | Diameter: 0.20mm, Tolerance: ±0.05mm, Surface finish: Polished, Warning: May contain internal bubbles and/or surface marks |
| SI806825 | Diameter: 0.25mm, Tolerance: ±0.05mm, Surface finish: Polished, Warning: May contain internal bubbles and/or surface marks |
| SI806827 | Diameter: 0.27mm, Tolerance: ±0.17mm, Surface finish: Polished, Warning: May contain internal bubbles and/or surface marks |
| SI806838 | Diameter: 0.38mm, Tolerance: ±0.06mm, Surface finish: Polished, Warning: May contain internal bubbles and/or surface marks |

### SI806850
- Diameter: 0.50mm, Tolerance: ±0.07mm, Surface finish: Polished, Warning: May contain internal bubbles and/or surface marks
  - May contain internal bubbles and/or surface marks

### SI806864
- Diameter: 0.64mm, Tolerance: ±0.07mm, Surface finish: Polished, Warning: May contain internal bubbles and/or surface marks
  - May contain internal bubbles and/or surface marks

### SI806870
- Diameter: 0.70mm, Tolerance: ±0.10mm, Surface finish: Polished, Warning: May contain internal bubbles and/or surface marks
  - May contain internal bubbles and/or surface marks

### SI806890
- Diameter: 0.90mm, Tolerance: ±0.10mm, Surface finish: Polished, Warning: May contain internal bubbles and/or surface marks
  - May contain internal bubbles and/or surface marks

### SI806895
- Diameter: 1.15mm, Tolerance: ±0.15mm, Surface finish: Polished, Warning: May contain internal bubbles and/or surface marks
  - May contain internal bubbles and/or surface marks

### SI806901
- Diameter: 1.50mm, Tolerance: ±0.10mm, Surface finish: Polished, Warning: May contain internal bubbles and/or surface marks
  - May contain internal bubbles and/or surface marks

### SI806902
- Diameter: 2.50mm, Tolerance: ±0.10mm, Surface finish: Polished, Warning: May contain internal bubbles and/or surface marks
  - May contain internal bubbles and/or surface marks

### SI806903
- Diameter: 3.50mm, Tolerance: ±0.15mm, Surface finish: Polished, Warning: May contain internal bubbles and/or surface marks
  - May contain internal bubbles and/or surface marks

### SI806904
- Diameter: 4.00mm, Tolerance: ±0.15mm, Surface finish: Polished, Warning: May contain internal bubbles and/or surface marks
  - May contain internal bubbles and/or surface marks

### SI806905
- Diameter: 5.00mm, Tolerance: ±0.15mm, Surface finish: Polished, Warning: May contain internal bubbles and/or surface marks
  - May contain internal bubbles and/or surface marks

### SI806906
- Diameter: 6.00mm, Tolerance: ±0.20mm, Surface finish: Polished, Warning: May contain internal bubbles and/or surface marks
  - May contain internal bubbles and/or surface marks

### SI806907
- Diameter: 7.00mm, Tolerance: ±0.20mm, Surface finish: Polished, Warning: May contain internal bubbles and/or surface marks
  - May contain internal bubbles and/or surface marks

### SI806908
- Diameter: 8.00mm, Tolerance: ±0.20mm, Surface finish: Polished, Warning: May contain internal bubbles and/or surface marks
  - May contain internal bubbles and/or surface marks

### SI806909
- Diameter: 9.00mm, Tolerance: ±0.30mm, Surface finish: Polished, Warning: May contain internal bubbles and/or surface marks
  - May contain internal bubbles and/or surface marks

### SI806910
- Diameter: 10.00mm, Tolerance: ±0.30mm, Surface finish: Polished, Warning: May contain internal bubbles and/or surface marks
  - May contain internal bubbles and/or surface marks

### SI806911
- Diameter: 11.00mm, Tolerance: ±0.30mm, Surface finish: Polished, Warning: May contain internal bubbles and/or surface marks
  - May contain internal bubbles and/or surface marks

### SI806912
- Diameter: 12.00mm, Tolerance: ±0.30mm, Surface finish: Polished, Warning: May contain internal bubbles and/or surface marks
  - May contain internal bubbles and/or surface marks

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February 2017

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| SI806914 | Diameter: 14.00mm, Tolerance: ±0.40mm, Surface finish: Polished, Warning: May contain internal bubbles and/or surface marks |
| SI806916 | Diameter: 16.00mm, Tolerance: ±0.50mm, Surface finish: Polished, Warning: May contain internal bubbles and/or surface marks |
| SI806917 | Diameter: 16.00mm, Tolerance: ±0.60mm, Surface finish: Matt, Warning: May contain internal bubbles and/or surface marks |
| SI806922 | Diameter: 22.00mm, Tolerance: ±1.00mm, Surface finish: Matt, Warning: May contain internal bubbles and/or surface marks |
| SI806925 | Diameter: 25.00mm, Tolerance: ±1.00mm, Surface finish: Matt, Warning: May contain internal bubbles and/or surface marks |
| SI806935 | Diameter: 35.00mm, Tolerance: ±2.00mm, Surface finish: Polished, Warning: May contain internal bubbles and/or surface marks |
| SI806980 | Diameter: 100mm, Tolerance: ±2mm, Surface finish: Polished |
| SI806990 | Diameter: 130mm, Tolerance: ±4mm, Surface finish: Polished |

**Topaz (Yellow Imperial)**

$\text{Al}_2\text{SiO}_4(\text{F,OH})_2$

_powder_

**Turquoise**

_powder_

---

**Glasses — Topaz (Yellow Imperial)**
<table>
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<tr>
<th></th>
<th>Ag</th>
<th>Al</th>
<th>As</th>
<th>Au</th>
<th>B</th>
<th>Ba</th>
<th>Be</th>
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<td>33</td>
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<td>Atomic radius</td>
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<td>0.143</td>
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<td>Crystal structure</td>
<td>Face Centered Cubic</td>
<td>Face Centered Cubic</td>
<td>Rhombohedral</td>
<td>Face Centered Cubic</td>
<td>Tetragonal</td>
<td>Body Centered Cubic</td>
<td>Hexagonal close packed</td>
</tr>
<tr>
<td>Electronic structure</td>
<td>Kr 4d^{10} 5s^{1}</td>
<td>Ne 3s^{2} 3p^{1}</td>
<td>Ar 3d^{10} 4s^{2} 4p^{6}</td>
<td>Xe 4f^{14} 5d^{1} 6s^{2}</td>
<td>He 2s^{2} 2p^{1}</td>
<td>Xe 6s^{2}</td>
<td>He 2s^{2}</td>
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<td>Photo-electric work function</td>
<td>eV</td>
<td>4.7</td>
<td>4.2</td>
<td>5.1</td>
<td>4.8</td>
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<td>Thermal neutron absorption cross-section</td>
<td>Barns</td>
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<td>Thermal neutron scattering cross-section</td>
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<tr>
<td>Valences shown</td>
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<td>3</td>
<td>-3, 0, 3, 5</td>
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<td>3</td>
<td>2</td>
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<td>Natural isotope distribution</td>
<td>Mass No./%</td>
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<td>75 - 100</td>
<td>197 - 100</td>
<td>10 - 19.8</td>
<td>130 - 0.1</td>
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<td>Ionization potential</td>
<td>No./eV</td>
<td>1 - 7.58</td>
<td>1 - 5.99</td>
<td>1 - 9.81</td>
<td>1 - 9.22</td>
<td>1 - 8.30</td>
<td>1 - 5.21</td>
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<td>Physical Properties</td>
<td>Boiling point</td>
<td>C</td>
<td>2212</td>
<td>2467</td>
<td>616</td>
<td>3080</td>
<td>3700</td>
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<tr>
<td>Density</td>
<td>g cm^{-3}</td>
<td>10.5 @20C</td>
<td>2.70 @20C</td>
<td>5.73 @20C</td>
<td>19.30 @20C</td>
<td>2.34-2.37 @20C</td>
<td>3.5 @20C</td>
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<tr>
<td>Melting point</td>
<td>C</td>
<td>961.9</td>
<td>660.4</td>
<td>Sublimes &gt;300</td>
<td>1064.4</td>
<td>2180</td>
<td>725</td>
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<tr>
<td>Electrical Properties</td>
<td>Electrical resistivity</td>
<td>μOhmcm</td>
<td>1.63 @20C</td>
<td>2.67 @20C</td>
<td>33.3 @20C</td>
<td>2.20 @20C</td>
<td>1.8x10^{12} @70C</td>
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<td>Temperature coefficient</td>
<td>K^{-1}</td>
<td>0.0041</td>
<td>0.0045</td>
<td>0.0040</td>
<td>0.0040</td>
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<td>Superconductivity critical temperature</td>
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<td>Thermal emf against Pt (cold 0C - hot 100C)</td>
<td>mV</td>
<td>+0.74</td>
<td>+0.42</td>
<td>-</td>
<td>+0.74</td>
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<tr>
<td>Cold junction @0C, Hot junction @100C</td>
<td>mV</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
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<tr>
<td>Thermal Properties</td>
<td>Coefficient of thermal expansion</td>
<td>x10^{-6} K^{-1}</td>
<td>19.1 @0-100C</td>
<td>25.5 @0-100C</td>
<td>5.6 @0-100C</td>
<td>14.1 @0-100C</td>
<td>8.3 @0-100C</td>
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<tr>
<td>Latent heat of evaporation</td>
<td>J g^{-1}</td>
<td>2390</td>
<td>10800</td>
<td>-</td>
<td>1738</td>
<td>35000</td>
<td>1100</td>
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<td>Latent heat of fusion</td>
<td>J g^{-1}</td>
<td>103</td>
<td>388</td>
<td>370</td>
<td>64.9</td>
<td>2090</td>
<td>55.8</td>
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<tr>
<td>Specific heat</td>
<td>J Kg^{-1}</td>
<td>237 @25C</td>
<td>900 @25C</td>
<td>328 @25C</td>
<td>129 @25C</td>
<td>1030 @25C</td>
<td>192 @25C</td>
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<tr>
<td>Thermal conductivity</td>
<td>W m^{-1} K^{-1}</td>
<td>429 @0-100C</td>
<td>237 @0-100C</td>
<td>50.2 @0-100C</td>
<td>318 @0-100C</td>
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</tbody>
</table>
## Atomic Properties

<table>
<thead>
<tr>
<th>Element</th>
<th>Atomic Number</th>
<th>Atomic Radius (Goldschmidt)</th>
<th>Atomic Weight</th>
<th>Crystal Structure</th>
<th>Electronic Structure</th>
<th>Photo-electric Work Function</th>
<th>Thermal Neutron Absorption Cross-section</th>
<th>Thermal Neutron Scattering Cross-section</th>
<th>Valences Shown</th>
<th>Natural Isotope Distribution</th>
<th>Ionization Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bi</td>
<td>83</td>
<td>0.182</td>
<td>208.980</td>
<td>Rhombohedral</td>
<td>Xe 4f⁹ 5d¹⁰ 6s² 6p³</td>
<td>4.4</td>
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<td>-</td>
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<tr>
<td>C</td>
<td>6</td>
<td>0.077</td>
<td>12.011</td>
<td>Hexagonal/Diamond</td>
<td>He 2s² 2p²</td>
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<tr>
<td>Ca</td>
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<td>0.197</td>
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<td>Ar 4s²</td>
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<td>Cd</td>
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<tr>
<td>Ce</td>
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<td>Face Centred Cubic</td>
<td>Xe 4f⁹ 6s²</td>
<td>2.9</td>
<td>0.73</td>
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<td>Co</td>
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<td>Ar 3d⁸ 4s²</td>
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<td>Cr</td>
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<td>-</td>
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## Physical Properties

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<th>Ca</th>
<th>Cd</th>
<th>Ce</th>
<th>Co</th>
<th>Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling point (°C)</td>
<td>1560</td>
<td>5000</td>
<td>1484</td>
<td>765</td>
<td>3426</td>
<td>2870</td>
<td>2672</td>
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<tr>
<td>Density (g cm⁻³)</td>
<td>7.980 @20°C</td>
<td>2.25 @20°C</td>
<td>1.55 @20°C</td>
<td>6.84 @20°C</td>
<td>6.75 @20°C</td>
<td>8.9 @20°C</td>
<td>7.1 @20°C</td>
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<tr>
<td>Melting point (°C)</td>
<td>271.3</td>
<td>3650</td>
<td>839</td>
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<td>799</td>
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## Electrical Properties

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<th>Cd</th>
<th>Ce</th>
<th>Co</th>
<th>Cr</th>
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<tbody>
<tr>
<td>Electrical resistivity (μΩcm)</td>
<td>117 @20°C</td>
<td>1375 @0°C</td>
<td>3.7 @20°C</td>
<td>7.3 @20°C</td>
<td>85.4 @20°C</td>
<td>6.34 @20°C</td>
<td>13.2 @20°C</td>
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<tr>
<td>Temperature coefficient (K⁻¹)</td>
<td>0.0046 @0-100°C</td>
<td>-</td>
<td>0.00457 @0-100°C</td>
<td>0.0043 @0-100°C</td>
<td>0.0087 @0-100°C</td>
<td>0.0066 @0-100°C</td>
<td>0.00214 @0-100°C</td>
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<td>Superconductivity critical temperature (K)</td>
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<td>-</td>
<td>-</td>
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<tr>
<td>Thermal emf against Pt (cold 0°C - hot 100°C) (mV)</td>
<td>-7.34</td>
<td>+0.70</td>
<td>-0.51</td>
<td>+0.91</td>
<td>+1.14</td>
<td>-1.33</td>
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<td>Cold junction @0°C, Hot junction @100°C (mV)</td>
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## Thermal Properties

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<th>Ca</th>
<th>Cd</th>
<th>Ce</th>
<th>Co</th>
<th>Cr</th>
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</thead>
<tbody>
<tr>
<td>Coefficient of thermal expansion (10⁴ K⁻¹)</td>
<td>13.4 @0-100°C</td>
<td>0.5-4.3 @0-100°C</td>
<td>22.0 @0-100°C</td>
<td>31.0 @0-100°C</td>
<td>8.0 @0-100°C</td>
<td>12.5 @0-100°C</td>
<td>6.5 @0-100°C</td>
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<td>Latent heat of vaporization (J g⁻¹)</td>
<td>857</td>
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<td>3760</td>
<td>886</td>
<td>2680</td>
<td>6490</td>
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<td>Latent heat of fusion (J g⁻¹)</td>
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<td>209</td>
<td>57</td>
<td>37.3</td>
<td>263</td>
<td>260</td>
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<td>Specific heat (J K⁻¹ kg⁻¹)</td>
<td>124 @25°C</td>
<td>712 @25°C</td>
<td>653 @25°C</td>
<td>232 @25°C</td>
<td>205 @25°C</td>
<td>456 @25°C</td>
<td>518 @25°C</td>
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<tr>
<td>Thermal conductivity (W m⁻¹ K⁻¹)</td>
<td>7.9 @0-100°C</td>
<td>80-240 @0-100°C</td>
<td>125 @0-100°C</td>
<td>96.9 @0-100°C</td>
<td>11.3 @0-100°C</td>
<td>100 @0-100°C</td>
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### Atomic Properties

<table>
<thead>
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<th>Er</th>
<th>Eu</th>
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<td>0.175</td>
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</table>

### Crystal Structure

- Cs: Body Centered Cubic
- Cu: Face Centered Cubic
- Dy: Hexagonal closed packed
- Er: Body Centered Cubic
- Eu: Body Centered Cubic
- Fe: Body Centered Cubic
- Ga: Orthorhombic

### Electronic Structure

- Cs: Xe 6s<sup>1</sup> Ar 3d<sup>10</sup> 4s<sup>1</sup>
- Cu: Xe 4f<sup>12</sup> 6s<sup>2</sup>
- Dy: Xe 4f<sup>10</sup> 6s<sup>2</sup>
- Er: Xe 6s<sup>2</sup>
- Eu: Ar 3d<sup>10</sup> 4s<sup>2</sup> 4p<sup>1</sup>
- Fe: Ar 3d<sup>10</sup> 4s<sup>2</sup> 4p<sup>2</sup>
- Ga: Ar 3d<sup>10</sup> 4s<sup>2</sup> 4p<sup>6</sup>

### Photo-electric work function (eV)

- Cs: 2.14
- Cu: 4.5
- Dy: -
- Er: -
- Eu: 2.5
- Fe: 4.4
- Ga: 4.2

### Thermal neutron absorption cross-section (Barns)

- Cs: 29
- Cu: 3.8
- Dy: 930
- Er: 160
- Eu: 4100
- Fe: 2.56
- Ga: 3.1

### Thermal neutron scattering cross-section (Barns)

- Cs: -
- Cu: -
- Dy: -
- Er: -
- Eu: -
- Fe: -
- Ga: -

### Valences shown

- Cs: 1
- Cu: 1, 2
- Dy: 3
- Er: 3
- Eu: 2, 3
- Fe: 2, 3, 4, 6
- Ga: 2, 3

### Natural isotope distribution

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<td>160</td>
<td>91.8</td>
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<tr>
<td>161</td>
<td>71</td>
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</table>

### Ionization potential (eV)

- Cs: 1 - 3.89
- Cu: 1 - 7.73
- Dy: 1 - 5.93
- Er: 1 - 6.10
- Eu: 1 - 5.67
- Fe: 1 - 7.87
- Ga: 1 - 5.99

### Physical Properties

#### Boiling point (°C)

- Cs: 705
- Cu: 2567
- Dy: 2562
- Er: 2863
- Eu: 1597
- Fe: 2750
- Ga: 2205

#### Density (g cm<sup>-3</sup>)

- Cs: 1.90 @20°C
- Cu: 8.96 @20°C
- Dy: 8.536 @20°C
- Er: 5.243 @20°C
- Eu: 7.87 @20°C
- Fe: 5.904 @20°C
- Ga: 5.904 @20°C

#### Melting point (°C)

- Cs: 28.5
- Cu: 1083
- Dy: 1412
- Er: 1529
- Eu: 822
- Fe: 1535
- Ga: 29.8

### Electrical Properties

#### Electrical resistivity (µOhm cm)

- Cs: 20 @20°C
- Cu: 1.69 @20°C
- Dy: 91 @20°C
- Er: 86 @20°C
- Eu: 90.0 @25°C
- Fe: 10.1 @20°C
- Ga: 15.5 @20°C

#### Temperature coefficient (K<sup>-1</sup>)

- Cs: 0.0044 @0-100°C
- Cu: 0.0043 @0-100°C
- Dy: 0.0012 @0-100°C
- Er: 0.00201 @0-100°C
- Eu: 0.0048 @0-100°C
- Fe: 0.0065 @0-100°C
- Ga: 0.004 @0-100°C

#### Superconductivity critical temperature (K)

- Cs: -
- Cu: -
- Dy: -
- Er: -
- Eu: -
- Fe: -
- Ga: -

#### Thermal emf against Pt (cold 0°C - hot 100°C) (mV)

- Cs: -
- Cu: +0.76
- Dy: -
- Er: -
- Eu: +1.98
- Fe: -
- Ga: -

#### Cold junction @0°C, Hot junction @100°C (mV)

- Cs: -
- Cu: -
- Dy: -
- Er: -
- Eu: -
- Fe: -
- Ga: -

### Thermal Properties

#### Coefficient of thermal expansion (x10<sup>-6</sup> K<sup>-1</sup>)

- Cs: 97 @1-26°C
- Cu: 17.0 @0-100°C
- Dy: 8.6 @0-100°C
- Er: 9.2 @0-100°C
- Eu: 32.0 @0-100°C
- Fe: 12.1 @0-100°C
- Ga: 18.3 @0-100°C

#### Latent heat of evaporation (J g<sup>-1</sup>)

- Cs: 611
- Cu: 4796
- Dy: 1725
- Er: 1680
- Eu: 1155
- Fe: 6095
- Ga: 3984

#### Latent heat of fusion (J g<sup>-1</sup>)

- Cs: 15.78
- Cu: 205
- Dy: 105
- Er: 103
- Eu: 63.4
- Fe: 272
- Ga: 80.1

#### Specific heat (J g<sup>-1</sup> K<sup>-1</sup>)

- Cs: 230 @25°C
- Cu: 385 @25°C
- Dy: 173 @25°C
- Er: 168 @25°C
- Eu: 176 @25°C
- Fe: 444 @25°C
- Ga: 330 @25°C

#### Thermal conductivity (W m<sup>-1</sup> K<sup>-1</sup>)

- Cs: 401 @0-100°C
- Cu: 10.7 @0-100°C
- Dy: 14.5 @0-100°C
- Er: 13.9 @0-100°C
- Eu: 80.4 @0-100°C
- Fe: 33-41 @0-100°C
- Ga: -
### METAL DATA TABLE - PHYSICAL PROPERTIES

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<thead>
<tr>
<th>Atomic Properties</th>
<th>Gd</th>
<th>Ge</th>
<th>Hf</th>
<th>Ho</th>
<th>In</th>
<th>Ir</th>
<th>K</th>
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<td>Crystal structure</td>
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<td>Diamond</td>
<td>Hexagonal close packed</td>
<td>Hexagonal close packed</td>
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<td>Face Centered Cubic</td>
<td>Body Centered Cubic</td>
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<td>Ar 3d&lt;sup&gt;10&lt;/sup&gt; 4s&lt;sup&gt;2&lt;/sup&gt; 4p&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Xe 4f&lt;sup&gt;14&lt;/sup&gt; 5d&lt;sup&gt;2&lt;/sup&gt; 6s&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Xe 4f&lt;sup&gt;14&lt;/sup&gt; 5d&lt;sup&gt;2&lt;/sup&gt; 6s&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Kr 4d&lt;sup&gt;10&lt;/sup&gt; 5s&lt;sup&gt;2&lt;/sup&gt; 5p&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>8.803 @20C</td>
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<td>22.4 @20C</td>
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<td>937.4</td>
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<td>µOhm cm&lt;sup&gt;-1&lt;/sup&gt;</td>
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<td>48x10&lt;sup&gt;6&lt;/sup&gt; @22C</td>
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<td>-</td>
<td>+0.69</td>
<td>+0.65</td>
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<tr>
<td>Cold junction @0°C, Hot junction @100°C</td>
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<td>-</td>
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<td>Thermal Properties</td>
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<td>x10&lt;sup&gt;6&lt;/sup&gt; K&lt;sup&gt;-1&lt;/sup&gt;</td>
<td>6.4 @0-100C</td>
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<td>Specific heat</td>
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<td>322 @25C</td>
<td>146 @25C</td>
<td>165 @25C</td>
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### Atomic Properties

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### Crystal structure
- Hexagonal close packed/ Face Centered Cubic
- Hexagonal close packed

### Electronic structure
- Xe 5d
- He 2s

### Photo-electric work function
- eV

### Thermal neutron absorption cross-section
- Barns

### Valences shown
- 3, 1, 3, 2

### Natural isotope distribution

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### Physical Properties

#### Boiling point
- C

#### Density
- g cm\(^{-3}\)

#### Melting point
- C

### Electrical Properties

#### Electrical resistivity
- \(\mu\)Ohmcm

#### Temperature coefficient
- K\(^{-1}\)

#### Superconductivity critical temperature
- K

#### Thermal emf against Pt (cold 0°C - hot 100°C)
- mV

#### Cold junction @0°C, Hot junction @100°C
- mV

### Thermal Properties

#### Coefficient of thermal expansion
- x10\(^{-6}\) K\(^{-1}\)

#### Latent heat of evaporation
- J g\(^{-1}\)

#### Latent heat of fusion
- J g\(^{-1}\)

#### Specific heat
- J K\(^{-1}\) kg\(^{-1}\)

#### Thermal conductivity
- W m\(^{-1}\) K\(^{-1}\)
## METAL DATA TABLE - PHYSICAL PROPERTIES

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<th>Nb</th>
<th>Nd</th>
<th>Ni</th>
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<th>P</th>
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<tr>
<th>Crystal structure</th>
<th>Electronic structure</th>
<th>Photo-electric work function</th>
<th>Thermal neutron absorption cross-section</th>
<th>Thermal neutron scattering cross-section</th>
<th>Valences shown</th>
<th>Natural isotope distribution</th>
<th>Physical Properties</th>
<th>Electrical Properties</th>
<th>Thermal Properties</th>
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<tbody>
<tr>
<td>身体中心立方</td>
<td>Kr 4d⁴ 5s¹</td>
<td>eV</td>
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### Physical Properties

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<td>Superconductivity critical temperature</td>
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<td>Thermal emf against Pt (cold 0°C - hot 100°C)</td>
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### Thermal Properties

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<td>x10⁶ K⁻¹</td>
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<td>Latent heat of fusion</td>
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<td>J K⁻¹ kg⁻¹</td>
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### Atomic Properties

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### Crystal Structure

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<th>Xe $4f^{14} 5d^3 6s^1$</th>
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### Electrical Properties

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### Thermal Properties

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**Goodfellow Cambridge Limited**
**Goodfellow Corporation**
**Atomic Properties**

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**Chemical Properties**

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### Thermal Properties

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#### Mechanical Properties

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#### Chemical Resistance

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### Physical Properties

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<th>Property</th>
<th>Polyamide Nylon 6,6 PA 5.6</th>
<th>Polyamide - Nylon 6, 6 - 30% Carbon Fiber Reinforced</th>
<th>Polyamide Nylon 6.6 PA 6.6 30% GFR</th>
<th>Polyamide - Nylon 6,10 PA 11</th>
<th>Polyamide - Nylon 12 PA 12</th>
<th>Polyamide - Nylon 12 - 30% Glass Fiber Reinforced</th>
<th>Polyamide/Imide PAI</th>
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### Electrical Properties

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<th>Polyamide Nylon 6.6 PA 6.6 30% GFR</th>
<th>Polyamide - Nylon 6,10 PA 11</th>
<th>Polyamide - Nylon 12 PA 12</th>
<th>Polyamide - Nylon 12 - 30% Glass Fiber Reinforced</th>
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<td>10⁻¹³</td>
<td>10⁻¹⁴</td>
<td>10⁻¹³</td>
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### Thermal Properties

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### Mechanical Properties

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### Chemical Resistance

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<th>Polyamide - Nylon 12 PA 12</th>
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### POLYMER DATA TABLE

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<th>Nomex&lt;sup&gt;2&lt;/sup&gt;</th>
<th>PBT&lt;sup&gt;3&lt;/sup&gt;</th>
<th>Polybenzimidazole&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Polybutylene terephthalate&lt;sup&gt;50% Glass Fiber&lt;/sup&gt; PBT 35% GFR</th>
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<th>Polycarbonate - 30% Carbon Fiber Reinforced</th>
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### Physical Properties

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<th>PBT&lt;sup&gt;3&lt;/sup&gt;</th>
<th>Polybenzimidazole&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Polybutylene terephthalate&lt;sup&gt;50% Glass Fiber&lt;/sup&gt; PBT 35% GFR</th>
<th>Polycarbonate&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Polycarbonate - 30% Carbon Fiber Reinforced</th>
<th>Polycarbonate - 30% Glass Fiber Filled</th>
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<tr>
<td>Abbe number</td>
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<tr>
<td>Density</td>
<td>g cm&lt;sup&gt;-3&lt;/sup&gt;</td>
<td>1.44</td>
<td>1.38</td>
<td>1.3</td>
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<td>1.63</td>
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<td>Flammability</td>
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<tr>
<td>Limiting oxygen index</td>
<td>%</td>
<td>29</td>
<td>58</td>
<td>25</td>
<td>23</td>
<td>25-27</td>
<td>25-27</td>
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<tr>
<td>Optical transmission</td>
<td>%</td>
<td></td>
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<td>Radiation resistance</td>
<td>-</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>-</td>
<td>Fair</td>
<td>-</td>
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<td>Refractive index</td>
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<td>Resistance to Ultra-violet</td>
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<tr>
<td>Water absorption</td>
<td>%</td>
<td>3.5</td>
<td>9</td>
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<td>0.35</td>
<td>0.28</td>
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<td>Water absorption - over 24 hours</td>
<td>%</td>
<td>0.08</td>
<td>0.4</td>
<td>0.1</td>
<td>0.15-0.35</td>
<td>0.1</td>
<td>&lt;0.2</td>
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### Electrical Properties

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<th>Kevlar&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Nomex&lt;sup&gt;2&lt;/sup&gt;</th>
<th>PBT&lt;sup&gt;3&lt;/sup&gt;</th>
<th>Polybenzimidazole&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Polybutylene terephthalate&lt;sup&gt;50% Glass Fiber&lt;/sup&gt; PBT 35% GFR</th>
<th>Polycarbonate&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Polycarbonate - 30% Carbon Fiber Reinforced</th>
<th>Polycarbonate - 30% Glass Fiber Filled</th>
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<tr>
<td>Dielectric constant @1kHz</td>
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<td>2.3</td>
<td>-</td>
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<td>Dielectric constant @1MHz</td>
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<td>kV mm&lt;sup&gt;-1&lt;/sup&gt;</td>
<td>32</td>
<td>21</td>
<td>20</td>
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<td>Dissipation factor @1kHz</td>
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<td>Dissipation factor @1MHz</td>
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<td>-</td>
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<td>0.01</td>
<td>0.009</td>
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<td>Surface resistivity</td>
<td>Ohm/μm</td>
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<tr>
<td>Volume resistivity</td>
<td>Ohm cm&lt;sup&gt;2&lt;/sup&gt;</td>
<td>6x10&lt;sup&gt;10&lt;/sup&gt;</td>
<td>8x10&lt;sup&gt;14&lt;/sup&gt;</td>
<td>10&lt;sup&gt;10&lt;/sup&gt;</td>
<td>2x10&lt;sup&gt;12&lt;/sup&gt;</td>
<td>10&lt;sup&gt;12&lt;/sup&gt;</td>
<td>10&lt;sup&gt;12&lt;/sup&gt;</td>
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### Thermal Properties

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<th>Kevlar&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Nomex&lt;sup&gt;2&lt;/sup&gt;</th>
<th>PBT&lt;sup&gt;3&lt;/sup&gt;</th>
<th>Polybenzimidazole&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Polybutylene terephthalate&lt;sup&gt;50% Glass Fiber&lt;/sup&gt; PBT 35% GFR</th>
<th>Polycarbonate&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Polycarbonate - 30% Carbon Fiber Reinforced</th>
<th>Polycarbonate - 30% Glass Fiber Filled</th>
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<tbody>
<tr>
<td>Coefficient of thermal expansion</td>
<td>x10&lt;sup&gt;-5&lt;/sup&gt; K&lt;sup&gt;-1&lt;/sup&gt;</td>
<td>-</td>
<td>2.3</td>
<td>-</td>
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<tr>
<td>Heat-deflection temperature - 0.4MPa</td>
<td>C</td>
<td>-</td>
<td>436</td>
<td>150</td>
<td>220</td>
<td>140</td>
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<td>Heat-deflection temperature - 1.8MPa</td>
<td>C</td>
<td>149</td>
<td>-</td>
<td>60</td>
<td>200</td>
<td>128-138</td>
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<tr>
<td>Lower working temperature</td>
<td>C</td>
<td>-200</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>135</td>
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<tr>
<td>Specific heat</td>
<td>J K&lt;sup&gt;-1&lt;/sup&gt; kg&lt;sup&gt;-1&lt;/sup&gt;</td>
<td>1400</td>
<td>1200</td>
<td>1200-2300</td>
<td>-</td>
<td>approx. 1200</td>
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<tr>
<td>Thermal conductivity</td>
<td>W m&lt;sup&gt;-3&lt;/sup&gt; K&lt;sup&gt;-1&lt;/sup&gt;</td>
<td>0.04 @23°C</td>
<td>0.13 @23°C</td>
<td>0.41 @23°C</td>
<td>0.24 @23°C</td>
<td>0.19-0.22</td>
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<tr>
<td>Upper working temperature</td>
<td>C</td>
<td>180-245</td>
<td>200 - 300</td>
<td>260-400</td>
<td>120-7</td>
<td>120-200</td>
<td>115-130</td>
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### Mechanical Properties

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<th>Kevlar&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Nomex&lt;sup&gt;2&lt;/sup&gt;</th>
<th>PBT&lt;sup&gt;3&lt;/sup&gt;</th>
<th>Polybenzimidazole&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Polybutylene terephthalate&lt;sup&gt;50% Glass Fiber&lt;/sup&gt; PBT 35% GFR</th>
<th>Polycarbonate&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Polycarbonate - 30% Carbon Fiber Reinforced</th>
<th>Polycarbonate - 30% Glass Fiber Filled</th>
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<tbody>
<tr>
<td>Abrasive resistance - ASTM D1044</td>
<td>mg/1000 cycles</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Coefficient of friction</td>
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<td></td>
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<tr>
<td>Compression set after 24 hr at 175C</td>
<td>%</td>
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<td>0.19-0.27</td>
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<td>Compressive modulus</td>
<td>GPa</td>
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<td>6.2</td>
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<td>Compressive strength</td>
<td>GPa</td>
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<td>-</td>
<td>&gt; 80</td>
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<tr>
<td>Elongation at break</td>
<td>%</td>
<td>&lt;9</td>
<td>3</td>
<td>250</td>
<td>2</td>
<td>100-150</td>
<td>2</td>
<td>3</td>
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<td>Hardness - Rockwell</td>
<td>-</td>
<td>K115</td>
<td>M70</td>
<td>M93</td>
<td>M70</td>
<td>-</td>
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<tr>
<td>Impact strength</td>
<td>J m&lt;sup&gt;-2&lt;/sup&gt;</td>
<td>533</td>
<td>600</td>
<td>60</td>
<td>70</td>
<td>600-850</td>
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<td>Poisson’s ratio</td>
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<td>0.37</td>
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<tr>
<td>Tear strength</td>
<td>N mm&lt;sup&gt;-1&lt;/sup&gt;</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
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<tr>
<td>Tensile modulus</td>
<td>GPa</td>
<td>59-124</td>
<td>9.2</td>
<td>2</td>
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<td>2.3-2.4</td>
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<td>5.8</td>
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<td>Tensile strength</td>
<td>GPa</td>
<td>2760</td>
<td>1800-3900</td>
<td>160</td>
<td>185</td>
<td>55-75</td>
<td>170</td>
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### Chemical Resistance

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<tr>
<th>Property</th>
<th>Kevlar&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Nomex&lt;sup&gt;2&lt;/sup&gt;</th>
<th>PBT&lt;sup&gt;3&lt;/sup&gt;</th>
<th>Polybenzimidazole&lt;sup&gt;1&lt;/sup&gt;</th>
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<th>Polycarbonate&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Polycarbonate - 30% Carbon Fiber Reinforced</th>
<th>Polycarbonate - 30% Glass Fiber Filled</th>
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</thead>
<tbody>
<tr>
<td>Acids - concentrated</td>
<td>Poor</td>
<td>Poor</td>
<td>Poor</td>
<td>Good-Poor</td>
<td>Good-Poor</td>
<td>Good</td>
<td>Fair</td>
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<tr>
<td>Acids - dilute</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
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<tr>
<td>Alcohol</td>
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<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
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<tr>
<td>Alkaline</td>
<td>Good-Poor</td>
<td>Good-Poor</td>
<td>Good-Poor</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
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<tr>
<td>Aromatic hydrocarbons</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Poor</td>
<td>Poor</td>
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<td>Grasess and Oils</td>
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<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Poor</td>
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<tr>
<td>Halogenated Hydrocarbons</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Poor</td>
<td>Poor</td>
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<tr>
<td>Ketones</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Poor</td>
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<tr>
<th>Polychlorotrifluoroethylene</th>
<th>Polyetheretherketone PEEK</th>
<th>Polyetherimide PEI</th>
<th>Polyetheretherketone</th>
<th>Polyetherketoneketone</th>
<th>Polyethylene Carbon filled</th>
<th>Polyethylene High density HDPE</th>
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**Physical Properties**

<table>
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<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Density (g cm⁻³)</td>
<td>2.10 - 2.14</td>
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<td>Limiting oxygen index (%)</td>
<td>35</td>
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<tr>
<td>Optical transmission (%)</td>
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<tr>
<td>Radiation resistance (%)</td>
<td>Good</td>
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<tr>
<td>Refractive index</td>
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<tr>
<td>Resistance to Ultra-violet</td>
<td>V-0</td>
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<tr>
<td>Water absorption (%)</td>
<td>0.1 - 0.3</td>
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<td>Water absorption - equilibrium (%)</td>
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**Electrical Properties**

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<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Dielectric constant (ε) @1kHz</td>
<td>3.2 - 3.3 @ 50Hz/10kHz</td>
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<tr>
<td>Dissipation factor (%)</td>
<td>0.023 - 0.027</td>
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<tr>
<td>Surface resistivity (Ωm/m)</td>
<td>10⁴</td>
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<td>Volume resistivity (Ωm/m)</td>
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**Thermal Properties**

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<tr>
<th>Property</th>
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<tr>
<td>Coefficient of thermal expansion (x10⁵ K⁻¹)</td>
<td>70</td>
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<tr>
<td>Heat-deflection temperature @ 0.4MPa (°C)</td>
<td>150 - 250</td>
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<tr>
<td>Heat-deflection temperature @ 1.8MPa (°C)</td>
<td>75</td>
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<tr>
<td>Lower working temperature (°C)</td>
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<tr>
<td>Specific heat (J K⁻¹ kg⁻¹)</td>
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<tr>
<td>Thermal conductivity (W m⁻¹ K⁻¹)</td>
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<td>Upper working temperature (°C)</td>
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**Mechanical Properties**

<table>
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<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Abrasive resistance - ASTM D1044 (mg/1000 cycles)</td>
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<tr>
<td>Coefficient of friction (%)</td>
<td>0.26</td>
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<td>Compressive modulus (GPa)</td>
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<td>Compressive strength (MPa)</td>
<td>14</td>
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<tr>
<td>Elongation at break (%)</td>
<td>80 - 250</td>
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<td>Hardness - Rockwell</td>
<td>R75-112</td>
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<tr>
<td>Izod impact strength (J m⁻¹)</td>
<td>267</td>
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<td>Poisoner's ratio (%)</td>
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<td>Tear strength (N mm⁻¹)</td>
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<tr>
<td>Tensile modulus (GPa)</td>
<td>1.3-1.8</td>
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**Chemical Resistance**

<table>
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<td>Acids - concentrated (%)</td>
<td>Good</td>
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<tr>
<td>Acids - dilute (%)</td>
<td>Good</td>
</tr>
<tr>
<td>Alcohols (%)</td>
<td>Good</td>
</tr>
<tr>
<td>Alkalies (%)</td>
<td>Good</td>
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<tr>
<td>Aromatic hydrocarbons (%)</td>
<td>Good</td>
</tr>
<tr>
<td>Greases and Oils (%)</td>
<td>Good</td>
</tr>
<tr>
<td>Halogenated Hydrocarbons</td>
<td>Good</td>
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<tr>
<td>Ketones (%)</td>
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### Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Polyethylene Low Density LDPE</th>
<th>Polyethylene - Medium Density</th>
<th>Poly-ethylene UHMW</th>
<th>Poly-ethylene naphthionate PEN</th>
<th>Polyethylene terephthalate PET, PETP</th>
<th>Polyhydroxybutyrate Biopolymer</th>
<th>Polyhydroxybutyrate/Polyhydroxyvalerate 8% Biopolymer</th>
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<tbody>
<tr>
<td>Abbe number</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Density (g/cm³)</td>
<td>0.92</td>
<td>0.935</td>
<td>0.94</td>
<td>1.36</td>
<td>1.3-1.4</td>
<td>1.23</td>
<td>1.25</td>
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<td>Flammability</td>
<td>HB</td>
<td>HB</td>
<td>HB</td>
<td>VTM-2, UL94, 0.076mm</td>
<td>HB</td>
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<tr>
<td>Optical transmission</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
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<td>-</td>
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<td>Radiation resistance</td>
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<td>Fair</td>
<td>Fair</td>
<td>Good</td>
<td>Good</td>
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<tr>
<td>Refractive index</td>
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<td>1.58-1.64</td>
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<td>-</td>
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<tr>
<td>Resistance to Ultra-violet</td>
<td>Poor</td>
<td>Poor</td>
<td>Poor</td>
<td>Fair</td>
<td>Fa?</td>
<td>Fa?</td>
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<tr>
<td>Water absorption</td>
<td>%</td>
<td>-</td>
<td>&lt;0.01</td>
<td>0.4</td>
<td>&lt;0.4</td>
<td>Fa?</td>
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<td>Water absorption - equilibrium</td>
<td>%</td>
<td>%</td>
<td>&lt;0.01</td>
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<td>&lt;0.7</td>
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<td>Water absorption - over 24 hours</td>
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<td>%</td>
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**Electrical Properties**

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<tr>
<th>Property</th>
<th>Polyethylene Low Density LDPE</th>
<th>Polyethylene - Medium Density</th>
<th>Poly-ethylene UHMW</th>
<th>Poly-ethylene naphthionate PEN</th>
<th>Polyethylene terephthalate PET, PETP</th>
<th>Polyhydroxybutyrate Biopolymer</th>
<th>Polyhydroxybutyrate/Polyhydroxyvalerate 8% Biopolymer</th>
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<tbody>
<tr>
<td>Dielectric constant (εr@1kHz)</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Dielectric constant (εr@1MHz)</td>
<td>2.2-2.35</td>
<td>2.3-2.4</td>
<td>2.3</td>
<td>3.2 @ 1kHz</td>
<td>3.6</td>
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<tr>
<td>Dissipation factor (δ@1kHz)</td>
<td>0.005</td>
<td>0.002</td>
<td>0.001</td>
<td>0.0048 @ 1kHz</td>
<td>0.004</td>
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<tr>
<td>Dissipation factor (δ@1MHz)</td>
<td>1.10 x 10⁻⁶</td>
<td>1.10 x 10⁻⁶</td>
<td>1.10 x 10⁻⁶</td>
<td>1.10 x 10⁻⁶</td>
<td>1.10 x 10⁻⁶</td>
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<tr>
<td>Surface resistivity (Ohm/m²)</td>
<td>10¹⁵</td>
<td>10¹⁵</td>
<td>10¹⁵</td>
<td>10¹⁵</td>
<td>10¹⁵</td>
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<tr>
<td>Volume resistivity (Ohm/m²)</td>
<td>10⁻¹⁶-10⁻¹⁸</td>
<td>10⁻¹⁶-10⁻¹⁸</td>
<td>10⁻¹⁶-10⁻¹⁸</td>
<td>10⁻¹⁶-10⁻¹⁸</td>
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**Thermal Properties**

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<th>Polyhydroxybutyrate/Polyhydroxyvalerate 8% Biopolymer</th>
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<tr>
<td>Coefficient of thermal expansion</td>
<td>x10⁶ K⁻¹</td>
<td>100-200</td>
<td>100-200</td>
<td>130-200</td>
<td>20-21 @ max film</td>
<td>20-40</td>
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<tr>
<td>Heat-deflection temperature - 0.45MPa</td>
<td>C</td>
<td>50</td>
<td>62</td>
<td>69</td>
<td>115</td>
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<tr>
<td>Heat-deflection temperature - 1.8MPa</td>
<td>C</td>
<td>35</td>
<td>43</td>
<td>42</td>
<td>80</td>
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<tr>
<td>Lower working temperature</td>
<td>60</td>
<td>-118</td>
<td>-</td>
<td>40 to 70</td>
<td>-</td>
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<tr>
<td>Specific heat</td>
<td>J K⁻¹ kg⁻¹</td>
<td>1900-2300</td>
<td>1900</td>
<td>1900</td>
<td>1300-1500</td>
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<td>1400</td>
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<tr>
<td>Thermal conductivity (W m⁻¹ K⁻¹)</td>
<td>0.33 @23C</td>
<td>0.45-0.52</td>
<td>0.42-0.51 @25C</td>
<td>0.15 @23C</td>
<td>0.15-0.4 @25C</td>
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<td>0.15 @23C</td>
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<td>Upper working temperature</td>
<td>50-90</td>
<td>-55-95</td>
<td>155</td>
<td>115-170</td>
<td>95</td>
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**Mechanical Properties**

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<thead>
<tr>
<th>Property</th>
<th>Polyethylene Low Density LDPE</th>
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<th>Polyethylene terephthalate PET, PETP</th>
<th>Polyhydroxybutyrate Biopolymer</th>
<th>Polyhydroxybutyrate/Polyhydroxyvalerate 8% Biopolymer</th>
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<tbody>
<tr>
<td>Abrasive resistance - ASTM D1044</td>
<td>mg/1000 cycles</td>
<td>-</td>
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<td>-</td>
<td>-</td>
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<tr>
<td>Coefficient of friction</td>
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<td>-</td>
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<td>-</td>
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<tr>
<td>Compression set after 24 hr at 175°C</td>
<td>%</td>
<td>0.1-0.2</td>
<td>0.27 @ max film</td>
<td>0.2-0.4</td>
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<td>Compressive modulus (MPa)</td>
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<td>-</td>
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<td>-</td>
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<td>-</td>
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<tr>
<td>Compressive strength (MPa)</td>
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<td>-</td>
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<td>Elongation at break (%)</td>
<td>400</td>
<td>100-150</td>
<td>500</td>
<td>60-100</td>
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<td>6</td>
<td>15</td>
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<tr>
<td>Hardness - Rockwell</td>
<td>30-40</td>
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<td>50-70</td>
<td>100</td>
<td>100</td>
<td>100</td>
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<td>Izod impact strength (J/m²)</td>
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<td>&gt;1000</td>
<td>&gt;1000</td>
<td>&gt;1000</td>
<td>13.5</td>
<td>35-60</td>
<td>100</td>
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<td>Poisson's ratio</td>
<td>0.46</td>
<td>0.46</td>
<td>0.46</td>
<td>0.46</td>
<td>0.46 (oriented)</td>
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<tr>
<td>Tear strength (N/mm²)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>Tensile modulus (MPa)</td>
<td>0.1-1.3</td>
<td>0.2-1.2</td>
<td>5-5.5 @ max film</td>
<td>2.4</td>
<td>3.5</td>
<td>0.9</td>
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<tr>
<td>Tensile strength (MPa)</td>
<td>5-25</td>
<td>12-19</td>
<td>20-40</td>
<td>200-500</td>
<td>80 for max film</td>
<td>30</td>
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**Chemical Resistance**

<table>
<thead>
<tr>
<th>Property</th>
<th>Polyethylene Low Density LDPE</th>
<th>Polyethylene - Medium Density</th>
<th>Poly-ethylene UHMW</th>
<th>Poly-ethylene naphthionate PEN</th>
<th>Polyethylene terephthalate PET, PETP</th>
<th>Polyhydroxybutyrate Biopolymer</th>
<th>Polyhydroxybutyrate/Polyhydroxyvalerate 8% Biopolymer</th>
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</thead>
<tbody>
<tr>
<td>Acids - concentrated</td>
<td>Good-Fair</td>
<td>Good-Fair</td>
<td>Good-Fair</td>
<td>Good-Poor</td>
<td>Good-Poor</td>
<td>Good-Poor</td>
<td>-</td>
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<tr>
<td>Acids - dilute</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
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<td>Alcohols</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
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<tr>
<td>Aromatic hydrocarbons</td>
<td>Fair-Poor</td>
<td>Fair</td>
<td>Fair</td>
<td>Fair</td>
<td>Fair</td>
<td>Fair</td>
<td>Fair</td>
</tr>
<tr>
<td>Greases and Oils</td>
<td>Good-Fair</td>
<td>Good-Fair</td>
<td>Good-Fair</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
</tr>
<tr>
<td>Halogenated Hydrocarbons</td>
<td>Fair-Poor</td>
<td>Fair-Poor</td>
<td>Fair-Poor</td>
<td>Fair-Poor</td>
<td>Fair-Poor</td>
<td>Fair-Poor</td>
<td>-</td>
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<tr>
<td>Halogens</td>
<td>Fair-Poor</td>
<td>Fair-Poor</td>
<td>Fair-Poor</td>
<td>Fair-Poor</td>
<td>Fair-Poor</td>
<td>Fair-Poor</td>
<td>-</td>
</tr>
<tr>
<td>Ketones</td>
<td>Good-Fair</td>
<td>Good-Fair</td>
<td>Good-Fair</td>
<td>Good-Fair</td>
<td>Good</td>
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# POLYMERE DATA TABLE

**Physical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Poly(hydroxy- butyrate / Poly(hydroxy- valerate 12% - Biopolymer</th>
<th>Poly(hydroxy- valerate 12% - Biopolymer</th>
<th>Polyesters</th>
<th>Poly(styryl- methyl- acrylates POMC</th>
<th>Poly(styryl- methyl- acrylates POMC</th>
<th>Poly(styryl- methyl- acrylates POMC</th>
<th>Poly(styryl- methyl- acrylates POMC</th>
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<tbody>
<tr>
<td>Abbe number</td>
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<td>Density</td>
<td>g cm⁻³</td>
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<td>1.24</td>
<td>1.24</td>
<td>1.19</td>
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<td>Flammability</td>
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<td>V0</td>
<td>HB</td>
<td>-</td>
<td>HB</td>
<td>HB</td>
<td>HB</td>
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<td>Limiting oxygen index</td>
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<td>-</td>
<td>-</td>
<td>-</td>
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<td>17</td>
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<td>Optical transmission</td>
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<td>Radiation resistance</td>
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<td>-</td>
<td>Fair</td>
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<td>1.49</td>
<td>1.463</td>
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<td>Resistance to Ultra-violet</td>
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<td>Poor</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Good</td>
</tr>
<tr>
<td>Water absorption</td>
<td>%</td>
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<td>-</td>
<td>0.8-0.9</td>
<td>-</td>
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<tr>
<td>Water absorption - equilibrium</td>
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<td>-</td>
<td>-</td>
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<td>0.8-0.8</td>
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**Electrical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Poly(hydroxy- butyrate / Poly(hydroxy- valerate 12% - Biopolymer</th>
<th>Poly(hydroxy- valerate 12% - Biopolymer</th>
<th>Polyesters</th>
<th>Poly(styryl- methyl- acrylates POMC</th>
<th>Poly(styryl- methyl- acrylates POMC</th>
<th>Poly(styryl- methyl- acrylates POMC</th>
<th>Poly(styryl- methyl- acrylates POMC</th>
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</thead>
<tbody>
<tr>
<td>Dielectric constant @1kHz</td>
<td>kW mm⁻¹</td>
<td>3.0</td>
<td>3.4</td>
<td>-</td>
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<tr>
<td>Specific heat</td>
<td>J kg⁻¹</td>
<td>1400</td>
<td>1090</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Thermal conductivity</td>
<td>W m⁻³</td>
<td>0.15 @23°C</td>
<td>0.10-0.35  @23°C</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Upper working temperature</td>
<td>°C</td>
<td>250-320</td>
<td>-</td>
<td>50 to 90</td>
<td>75-115</td>
<td>80-120</td>
<td>80-120</td>
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**Tensile Properties**

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<th>Poly(hydroxy- valerate 12% - Biopolymer</th>
<th>Polyesters</th>
<th>Poly(styryl- methyl- acrylates POMC</th>
<th>Poly(styryl- methyl- acrylates POMC</th>
<th>Poly(styryl- methyl- acrylates POMC</th>
<th>Poly(styryl- methyl- acrylates POMC</th>
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<tbody>
<tr>
<td>Abrasive resistance - ASTM D1044</td>
<td>mg/1000 cycles</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Coefficient of friction</td>
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<td>Compressive modulus</td>
<td>GPa</td>
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<td>-</td>
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<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Compressive strength</td>
<td>MPa</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Elongation at break</td>
<td>%</td>
<td>35</td>
<td>8.70</td>
<td>&gt;300</td>
<td>6</td>
<td>2.5-4</td>
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<tr>
<td>Hardness - Rockwell</td>
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<td>E52-99</td>
<td>-</td>
<td>88-100</td>
<td>865</td>
<td>M60</td>
<td>M94</td>
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<tr>
<td>Izod impact strength</td>
<td>J m⁻¹</td>
<td>200</td>
<td>80</td>
<td>16</td>
<td>16-32</td>
<td>49</td>
<td>70-80</td>
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<td>Poisson’s ratio</td>
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<td>0.4</td>
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<td>Tear strength</td>
<td>N mm⁻¹</td>
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<td>Tensile modulus</td>
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**Chemical Resistance**

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<th>Property</th>
<th>Poly(hydroxy- butyrate / Poly(hydroxy- valerate 12% - Biopolymer</th>
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<th>Poly(styryl- methyl- acrylates POMC</th>
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<tbody>
<tr>
<td>Acids - concentrated</td>
<td>%</td>
<td>-</td>
<td>-</td>
<td>Good</td>
<td>Poor</td>
<td>Good</td>
<td>Poor</td>
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<tr>
<td>Acids - dilute</td>
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<td>Good</td>
<td>Good</td>
<td>Poor</td>
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<tr>
<td>Alkaloids</td>
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<td>Good</td>
<td>Good</td>
<td>Poor</td>
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<tr>
<td>Aromatic hydrocarbons</td>
<td>%</td>
<td>-</td>
<td>-</td>
<td>Poor</td>
<td>Fan-Poor</td>
<td>Good</td>
<td>Poor</td>
</tr>
<tr>
<td>Greases and Oils</td>
<td>%</td>
<td>-</td>
<td>-</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Poor</td>
</tr>
<tr>
<td>Halogenated Hydrocarbons</td>
<td>%</td>
<td>-</td>
<td>-</td>
<td>Poor</td>
<td>Fan-Poor</td>
<td>Poor</td>
<td>Good</td>
</tr>
<tr>
<td>Ketones</td>
<td>%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Good</td>
<td>Good</td>
<td>Poor</td>
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February 2017
### Physical Properties

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<tr>
<th>Property</th>
<th>Polyoxymethylene Homopolymer 20% PTFE Fiber Filled</th>
<th>Polyoxymethylene Homopolymer 25% Glass Fiber Filled</th>
<th>Polyoxymethylene/Acetal Copolymer 10% Carbon Fiber Reinforced</th>
<th>Polyphenylene-oxide modified PPE</th>
<th>Polyphenylene-oxide 20% Carbon Fiber Reinforced</th>
<th>Polyphenylene-oxide 40% Glass Fiber Reinforced</th>
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</thead>
<tbody>
<tr>
<td>Abbe number</td>
<td>-</td>
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<td>-</td>
<td>-</td>
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<td>-</td>
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<tr>
<td>Density g cm⁻³</td>
<td>1.53 1.60 1.43 1.08 1.29 1.35 1.41</td>
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<td>Flammability</td>
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<td>HB</td>
<td>HB V0</td>
<td>V-0</td>
<td>V0</td>
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<td>%</td>
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<td>%</td>
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<tr>
<td>Radiation resistance</td>
<td>Poor</td>
<td>Poor</td>
<td>Good</td>
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<td>Refractive index</td>
<td>-</td>
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<tr>
<td>Resistance to Ultra-violet</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Water absorption</td>
<td>%</td>
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<tr>
<td>Water absorption - equilibrium</td>
<td>%</td>
<td>0.2</td>
<td>0.17</td>
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<tr>
<td>Water absorption - over 24 hours</td>
<td>%</td>
<td>1.0</td>
<td>1.3</td>
<td>&lt;0.1</td>
<td>0.1-0.5</td>
<td>0.06-0.33</td>
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<td>%</td>
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### Electrical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Polyoxymethylene Homopolymer 20% PTFE Fiber Filled</th>
<th>Polyoxymethylene Homopolymer 25% Glass Fiber Filled</th>
<th>Polyoxymethylene/Acetal Copolymer 10% Carbon Fiber Reinforced</th>
<th>Polyphenylene-oxide modified PPE</th>
<th>Polyphenylene-oxide 20% Carbon Fiber Reinforced</th>
<th>Polyphenylene-oxide 40% Glass Fiber Reinforced</th>
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<tbody>
<tr>
<td>Dielectric constant @1kHz</td>
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<td>15</td>
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<td>Dissipation factor @1kHz</td>
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<td>Surface resistivity Ohm/m²</td>
<td>10⁻⁴</td>
<td>10⁻³</td>
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<td>1x10⁻⁴</td>
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<td>Volume resistivity Ohm/m</td>
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<td>10¹⁰</td>
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### Thermal Properties

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<thead>
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<th>Polyoxymethylene Homopolymer 20% PTFE Fiber Filled</th>
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<th>Polyphenylene-oxide 20% Carbon Fiber Reinforced</th>
<th>Polyphenylene-oxide 40% Glass Fiber Reinforced</th>
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<tbody>
<tr>
<td>Coefficient of thermal expansion x10⁻⁶ K⁻¹</td>
<td>100-110</td>
<td>35-100</td>
<td>60</td>
<td>40</td>
<td>15</td>
<td>22-35</td>
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<tr>
<td>Heat-deflection temperature - 0.45MPa</td>
<td>C 160</td>
<td>176</td>
<td>137</td>
<td>166</td>
<td>-</td>
<td>&gt;260</td>
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<tr>
<td>Heat-deflection temperature - 1.0MPa</td>
<td>C 92</td>
<td>172</td>
<td>125</td>
<td>135</td>
<td>104</td>
<td>260</td>
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<tr>
<td>Lower working temperature</td>
<td>C -</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Specific heat J K⁻¹ kg⁻¹</td>
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<td>-</td>
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<tr>
<td>Thermal conductivity W m⁻¹ K⁻¹</td>
<td>-</td>
<td>0.4</td>
<td>0.23 (≤3°C)</td>
<td>0.28 (≥3°C)</td>
<td>0.47</td>
<td>0.29-0.45</td>
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<tr>
<td>Upper working temperature</td>
<td>C -</td>
<td>-</td>
<td>100</td>
<td>80-120</td>
<td>90-160</td>
<td>170</td>
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### Mechanical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Polyoxymethylene Homopolymer 20% PTFE Fiber Filled</th>
<th>Polyoxymethylene Homopolymer 25% Glass Fiber Filled</th>
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<th>Polyphenylene-oxide 20% Carbon Fiber Reinforced</th>
<th>Polyphenylene-oxide 40% Glass Fiber Reinforced</th>
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<tr>
<td>Abbrasive resistance - ASTM D1644 mg/1000 cycles</td>
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<tr>
<td>Coefficient of friction</td>
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<td>-</td>
<td>0.35</td>
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<td>Compression set after 24 hr at 175°C %</td>
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<td>-</td>
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<td>Compressive modulus GPA</td>
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<td>Compressive strength MPa</td>
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<td>-</td>
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<td>2.5</td>
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<tr>
<td>Elongation at break %</td>
<td>10</td>
<td>3.0</td>
<td>1.2</td>
<td>50</td>
<td>2-3</td>
<td>2</td>
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<tr>
<td>Hardness - Rockwell</td>
<td>M78/R115</td>
<td>-</td>
<td>1.26</td>
<td>L108</td>
<td>-</td>
<td>R123</td>
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<td>Izod impact strength J m⁻¹</td>
<td>3000</td>
<td>8000</td>
<td>59</td>
<td>200</td>
<td>80</td>
<td>53</td>
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<td>Poisson’s ratio</td>
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<td>Tear strength N mm⁻¹</td>
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<td>Tenacity modulus GPA</td>
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<td>9.5</td>
<td>8</td>
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<td>9-9</td>
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<td>Tensile strength MPa</td>
<td>50</td>
<td>145</td>
<td>70</td>
<td>55-65</td>
<td>100-120</td>
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### Chemical Resistance

<table>
<thead>
<tr>
<th>Property</th>
<th>Polyoxymethylene Homopolymer 20% PTFE Fiber Filled</th>
<th>Polyoxymethylene Homopolymer 25% Glass Fiber Filled</th>
<th>Polyoxymethylene/Acetal Copolymer 10% Carbon Fiber Reinforced</th>
<th>Polyphenylene-oxide modified PPE</th>
<th>Polyphenylene-oxide 20% Carbon Fiber Reinforced</th>
<th>Polyphenylene-oxide 40% Glass Fiber Reinforced</th>
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</thead>
<tbody>
<tr>
<td>Acids - concentrated</td>
<td>Poor</td>
<td>Poor</td>
<td>Poor</td>
<td>Good-Fair</td>
<td>Good-Fair</td>
<td>Good-Fair</td>
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<tr>
<td>Acids - dilute</td>
<td>Poor-Fair</td>
<td>Poor-Fair</td>
<td>Poor</td>
<td>Good-Fair</td>
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<td>Alcoholans</td>
<td>Good-Fair</td>
<td>Good-Fair</td>
<td>Good</td>
<td>Good</td>
<td>Good-Fair</td>
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<td>Alkalis</td>
<td>Poor</td>
<td>Poor</td>
<td>Fair-Good</td>
<td>Good</td>
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<td>Good</td>
<td>Poor</td>
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<td>Good</td>
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<td>Grease oils</td>
<td>Good</td>
<td>Good</td>
<td>Good-Poor</td>
<td>Good</td>
<td>Good-Poor</td>
<td>Good</td>
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<tr>
<td>Halogenated hydrocarbons</td>
<td>Good-Poor</td>
<td>Good-Poor</td>
<td>Fair-Poor</td>
<td>Fair-Poor</td>
<td>-</td>
<td>Good-Poor</td>
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<tr>
<td>Ketones</td>
<td>Good</td>
<td>Good</td>
<td>Good-Poor</td>
<td>Poor</td>
<td>-</td>
<td>Good</td>
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## Physical Properties

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<tr>
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<th>Polyphthalamide 35% glass fiber filled</th>
<th>Polyphthalamide 50% glass fiber filled</th>
<th>Polypropylene PP</th>
<th>Polystyrene PS</th>
<th>Polystyrene Conducive High Impact Conducive Polystyrene</th>
<th>Polyethylene Cross-linked</th>
<th>Polyethylene</th>
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<tbody>
<tr>
<td>Density (g cm⁻³)</td>
<td>1.29</td>
<td>1.47</td>
<td>1.59</td>
<td>0.9</td>
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<td>1.05</td>
<td>1.24</td>
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<td>HB</td>
<td>HB</td>
<td>HB</td>
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<td>Limiting oxygen index (%)</td>
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<td>27</td>
<td>18</td>
<td>19</td>
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<td>Optical transmission (%)</td>
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<tr>
<td>Radiation resistance</td>
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<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
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<td>1.50-1.60</td>
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<td>Resistance to Ultra-violet</td>
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<td>Poor</td>
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<tr>
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<td>1.2</td>
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<td>0.85</td>
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<tr>
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<td>&lt; 0.4</td>
<td>0.02-0.03</td>
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## Electrical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dielectric constant @1kHz</td>
<td>3.45</td>
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<tr>
<td>Dielectric constant @1MHz</td>
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<tr>
<td>Dielectric strength (kV mm⁻¹)</td>
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<td>Dissipation factor @ 1kHz</td>
<td>0.0009</td>
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<tr>
<td>Dissipation factor @ 1MHz</td>
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<td>Surface resistivity (Ohm/m²)</td>
<td>&gt; 10¹³</td>
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<tr>
<td>Volume resistivity (Ohm/m³)</td>
<td>&gt; 10¹³</td>
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## Thermal Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Coefficient of thermal expansion (x 10⁻⁵ K⁻¹)</td>
<td>55</td>
</tr>
<tr>
<td>Heat-deflection temperature - 0.45MPa</td>
<td>C 210</td>
</tr>
<tr>
<td>Heat-deflection temperature - 1.8MPa</td>
<td>C 200</td>
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<tr>
<td>Lower working temperature</td>
<td>C</td>
</tr>
<tr>
<td>Specific heat (J kg⁻¹ °C⁻¹)</td>
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<tr>
<td>Thermal conductivity (W m⁻¹ K⁻¹)</td>
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<td>Upper working temperature</td>
<td>C 180-210</td>
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## Mechanical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Abrasive resistance - ASTM D1044</td>
<td>mg/1000 cycles</td>
</tr>
<tr>
<td>Coefficient of friction</td>
<td>0.1-0.3</td>
</tr>
<tr>
<td>Compressive modulus (GPa)</td>
<td>1.7</td>
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<tr>
<td>Compressive strength (MPa)</td>
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<td>Elongation at break (%)</td>
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<tr>
<td>Hardness - Rockwell</td>
<td>M60/R1122</td>
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<tr>
<td>Izod impact strength (J m⁻¹)</td>
<td>700</td>
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<td>Poisson's ratio</td>
<td>0.25</td>
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<td>Tear strength (N mm⁻¹)</td>
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<tr>
<td>Tensile modulus (GPa)</td>
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<td>Tensile strength (MPa)</td>
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## Chemical Resistance

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Acids - concentrated</td>
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</tr>
<tr>
<td>Acids - dilute</td>
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<tr>
<td>Alcohols</td>
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<td>Alkalis</td>
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<tr>
<td>Aromatic hydrocarbons</td>
<td>-</td>
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<tr>
<td>Greases and Oils</td>
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<tr>
<td>Halogenated Hydrocarbons</td>
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<tr>
<td>Halogens</td>
<td>-</td>
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<tr>
<td>Ketones</td>
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</table>

**Polymer Data Table**

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125 Hookstown Grade Road, Coraopolis, PA 15108-9302, USA
Tel 1-800-821-2870
Fax 1-800-283-2020

February 2017
## Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Abbe number</td>
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<td>Density (g/cm³)</td>
<td>2.2, 2.08, 2.25, 1.2, 1.4, 1.37-1.39, 1.63, 1.78</td>
</tr>
<tr>
<td>Flammability (V0)</td>
<td>-</td>
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<tr>
<td>Limiting oxygen index (%)</td>
<td>95, 95, 42, 35, 60, 44</td>
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<tr>
<td>Optical transmission (%)</td>
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</tr>
<tr>
<td>Radiation resistance</td>
<td>Poor - Fair - Fair</td>
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<tr>
<td>Reflective index (V0)</td>
<td>1.38</td>
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<td>Resistance to Ultra-violet (O)</td>
<td>Excellent - Good - Good - Excellent - Poor - Excellent</td>
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<tr>
<td>Water absorption (%)</td>
<td>0.01 - 0.15 - 0.03-0.4 - 0.05 - 0.1 - 0.04</td>
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<tr>
<td>Water absorption - equilibrium</td>
<td>-</td>
</tr>
<tr>
<td>Water absorption - over 24 hours</td>
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## Electrical Properties

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<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dielectric constant @1kHz</td>
<td>-</td>
</tr>
<tr>
<td>Dielectric constant @1MHz</td>
<td>2.0-2.1 - 2.2-2.35 - 2.7-3.1 - 3.0-6.0 - 8.4</td>
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<td>Dielectric strength (kV/mm)</td>
<td>50-170 - 40 - 7.6 - 14 - 20 - T3</td>
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<tr>
<td>Dissipation factor @1kHz</td>
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<tr>
<td>Dissipation factor @1MHz</td>
<td>0.0003 - 0.0007 - 0.003 - 0.025 - 0.04 - 0.05</td>
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<td>Surface resistivity (Ω/m²)</td>
<td>Ohm-Ωm²</td>
</tr>
<tr>
<td>Volume resistivity (Ω/m³)</td>
<td>10³-10²</td>
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## Thermal Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficient of thermal expansion (x10⁸ K⁻¹)</td>
<td>100-160 - 75-100 - 75-100 - 50-97 - 190 - 80-140</td>
</tr>
<tr>
<td>Heat-deflection temperature - 0.4MPa</td>
<td>C 120 - 70 - 120 - 120-150</td>
</tr>
<tr>
<td>Heat-deflection temperature - 1.0MPa</td>
<td>C 54 - 67 - 80 - 80-115</td>
</tr>
<tr>
<td>Lower working temperature</td>
<td>C -30 - 50 - -40 -</td>
</tr>
<tr>
<td>Specific heat (kJ /Kg)</td>
<td>1000 - 1000-1800 - - -</td>
</tr>
<tr>
<td>Thermal conductivity (W/m² K⁻¹)</td>
<td>0.25 @25°C - 0.33-0.42 @23°C - 0.12-0.25 @23°C - 0.13 @23°C - 0.1-0.25 @23°C</td>
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<tr>
<td>Upper working temperature</td>
<td>C 180-260 - 150 - 150-200</td>
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</table>

## Mechanical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Abrasive resistance - ASTM D1044</td>
<td>mg/1000 cycles - - - - - - - - -</td>
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## Chemical Resistance

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<td>Aromatic hydrocarbons</td>
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<td>Greases and Oils</td>
<td>Good Good Good Good Good Good Good Good</td>
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<td>Heterocyclic Hydrocarbons</td>
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<td>Halogenated Hydrocarbons</td>
<td>Good Good Good Poor Fair - Good-Fair Good</td>
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<tr>
<td>Ketones</td>
<td>Good Fair Good Fair Poor - Good-Poor</td>
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**February 2017**
# POLYMER DATA TABLE

## Physical Properties

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## Electrical Properties

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## Thermal Properties

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## Mechanical Properties

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## Chemical Resistance

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###_vectra_a_25%_ptfe_fiber_filled

#### POLYMER DATA TABLE

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<td>Optical transmission</td>
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<td>Radiation resistance</td>
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<td>Resistance to Ultra-violet</td>
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<td>Water absorption</td>
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<td>Water absorption - over 24 hours</td>
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#### Electrical Properties

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#### Thermal Properties

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<td>Thermal conductivity</td>
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#### Mechanical Properties

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<td>Compression after 24 hr at 175°C</td>
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<td>Compressive modulus</td>
<td>GPa</td>
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#### Chemical Resistance

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<td>Acids - dilute</td>
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<td>Aromatic hydrocarbons</td>
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<td>Greases and Oils</td>
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<td>Halogens</td>
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### Physical Properties

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<td>3.1</td>
<td>3.05</td>
<td>2.7</td>
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<td>3.33</td>
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<td>-</td>
<td>1.62</td>
<td>1.57</td>
<td>1.54</td>
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<tr>
<td>Transmission - Ultra-violet</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Transmission - Visible light</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Useful optical transmission range</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>500-3000nm</td>
</tr>
<tr>
<td>Water absorption - saturation %</td>
<td>0</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>0</td>
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### Electrical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dielectric constant</td>
<td>9.0-10.1</td>
</tr>
<tr>
<td>Dielectric strength $\text{kV mm}^{-1}$</td>
<td>10-35</td>
</tr>
<tr>
<td>Volume resistivity $\text{Ohm cm}$</td>
<td>$&gt;10^{14}$ @25C</td>
</tr>
</tbody>
</table>

### Thermal Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficient of thermal expansion $\times 10^{-6}$ $\text{K}^{-1}$</td>
<td>8.0 @20-1000C, 8.3 @20-1000C</td>
</tr>
<tr>
<td>Melting point $\text{C}$</td>
<td>2100</td>
</tr>
<tr>
<td>Specific heat $\text{J K}^{-1} \text{kg}^{-1}$</td>
<td>850-900 @25C, 850 @25C</td>
</tr>
<tr>
<td>Sublimation point $\text{C}$</td>
<td>1800</td>
</tr>
<tr>
<td>Thermal conductivity $\text{W m}^{-1} \text{K}^{-1}$</td>
<td>26-35 @20C, 26.0 @20C</td>
</tr>
<tr>
<td>Upper continuous use temperature $\text{C}$</td>
<td>1700</td>
</tr>
</tbody>
</table>

### Mechanical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive strength $\text{MPa}$</td>
<td>2200-2600, 300-3000</td>
</tr>
<tr>
<td>Fracture toughness $\text{MPam(0.5)}$</td>
<td>-</td>
</tr>
<tr>
<td>Hardness - Knoop $\text{kgf mm}^{-2}$</td>
<td>2100</td>
</tr>
<tr>
<td>Hardness - Vickers $\text{kgf mm}^{-2}$</td>
<td>1500-1650</td>
</tr>
<tr>
<td>Poisson’s ratio</td>
<td>-</td>
</tr>
<tr>
<td>Shear strength $\text{MPa}$</td>
<td>330</td>
</tr>
<tr>
<td>Tensile modulus $\text{GPa}$</td>
<td>300-400</td>
</tr>
<tr>
<td>Tensile strength $\text{MPa}$</td>
<td>-</td>
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### Chemical Resistance

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acids - concentrated</td>
<td>Good</td>
</tr>
<tr>
<td>Acids - dilute</td>
<td>Good</td>
</tr>
<tr>
<td>Alkalis</td>
<td>Good</td>
</tr>
<tr>
<td>Halogens</td>
<td>Good</td>
</tr>
<tr>
<td>Metals</td>
<td>Good</td>
</tr>
</tbody>
</table>
### Aluminum Nitride - Shapal-M (BNP-2)

<table>
<thead>
<tr>
<th>Physical Properties</th>
<th>Aluminum Nitride</th>
<th>Aluminum Nitride - Machinable (BNP-2)</th>
<th>Beryllia BeO 99.5%</th>
<th>Boron Carbide B₄C</th>
<th>Boron Nitride Hot-pressed BN</th>
<th>Leachable Ceramic SiO₂ 50 / ZrSiO₂ 40 / Al₂O₃ 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apparent porosity</td>
<td>%</td>
<td>0</td>
<td>0</td>
<td>-</td>
<td>&lt;3</td>
<td>2-15</td>
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<tr>
<td>Density</td>
<td>g cm⁻³</td>
<td>2.95</td>
<td>2.90</td>
<td>2.86</td>
<td>2.52</td>
<td>2.45-2.52</td>
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<tr>
<td>Refractive index</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Transmission - Ultra-violet</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Transmission - Visible light</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Useful optical transmission range</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Water absorption - saturation</td>
<td>%</td>
<td>-</td>
<td>-</td>
<td>0.07</td>
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### Electrical Properties

<table>
<thead>
<tr>
<th>Dielectric constant</th>
<th>7.3</th>
<th>7.1</th>
<th>6.5-7.5</th>
<th>-</th>
<th>-</th>
<th>4.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dielectric strength</td>
<td>kV mm⁻¹</td>
<td>40</td>
<td>-</td>
<td>10-14</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Volume resistivity</td>
<td>Ohm cm</td>
<td>1.8 x 10¹³ @25°C</td>
<td>-</td>
<td>&gt;10¹⁴ @25°C</td>
<td>-</td>
<td>0.1-10 @25°C</td>
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### Thermal Properties

<table>
<thead>
<tr>
<th>Coefficient of thermal expansion</th>
<th>x10⁻⁶ K⁻¹</th>
<th>5.2 @20-1000°C</th>
<th>0.57 parallel</th>
<th>8.4-9.0 @20-1000°C</th>
<th>-</th>
<th>5.6 @20-1000°C</th>
<th>1.0-36 @20-1000°C</th>
<th>1.98 @20-1000°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point</td>
<td>C</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2450</td>
<td>2450</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Specific heat</td>
<td>J K⁻¹ kg⁻¹</td>
<td>-</td>
<td>-</td>
<td>1020-1120 @25°C</td>
<td>-</td>
<td>950 @25°C</td>
<td>800-2000 @25°C</td>
<td>-</td>
</tr>
<tr>
<td>Sublimation point</td>
<td>C</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2600-2800</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Thermal conductivity</td>
<td>W m⁻¹ K⁻¹</td>
<td>100 @20°C</td>
<td>92.6</td>
<td>260-300 @20°C</td>
<td>-</td>
<td>30-90 @20°C</td>
<td>15-50 @20°C</td>
<td>-</td>
</tr>
<tr>
<td>Upper continuous use temperature</td>
<td>C</td>
<td>1000-1900 (1020 (oxidising))</td>
<td>1800-1900</td>
<td>600-800</td>
<td>600-800</td>
<td>950-2500</td>
<td>1050</td>
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### Mechanical Properties

<table>
<thead>
<tr>
<th>Compressive strength</th>
<th>MPA</th>
<th>1000</th>
<th>&lt;1070</th>
<th>1550-1850</th>
<th>200-300</th>
<th>1400-3400</th>
<th>30-120</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fracture toughness</td>
<td>MPam(0.5)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Hardness - Knoop</td>
<td>kgf mm⁻²</td>
<td>-</td>
<td>3.42</td>
<td>4.91</td>
<td>-</td>
<td>2800-3500</td>
<td>-</td>
</tr>
<tr>
<td>Hardness - Vickers</td>
<td>kgf mm⁻²</td>
<td>560</td>
<td>-</td>
<td>1100-1300</td>
<td>-</td>
<td>3200</td>
<td>-</td>
</tr>
<tr>
<td>Poisson’s ratio</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Shear strength</td>
<td>MPA</td>
<td>-</td>
<td>180-250</td>
<td>-</td>
<td>-</td>
<td>12-25</td>
<td>-</td>
</tr>
<tr>
<td>Tensile modulus</td>
<td>GPa</td>
<td>160</td>
<td>34.1 (parallel)</td>
<td>340-400</td>
<td>-</td>
<td>440-470</td>
<td>20-35</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>MPA</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### Chemical Resistance

| Acids - concentrated | - | - | Poor | Fair | Fair | Fair |
| Acids - dilute       | Fair | - | Fair | Good | Fair | Fair |
| Alkalis              | Poor | - | Fair | - | Fair | Poor |
| Halogens             | - | - | Fair | Fair | Poor | Fair |
| Metals               | - | - | Good | Fair | Good | Good |
### Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apparent porosity [%]</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Density [g/cm³]</td>
<td>3.40</td>
</tr>
<tr>
<td>Refractive index</td>
<td>1.5-1.6</td>
</tr>
<tr>
<td>Transmission - Ultra-violet</td>
<td>-</td>
</tr>
<tr>
<td>Transmission - Visible light</td>
<td>-</td>
</tr>
<tr>
<td>Useful optical transmission range</td>
<td>450-700nm - 180-2500nm</td>
</tr>
<tr>
<td>Water absorption - saturation [%]</td>
<td>Very Low</td>
</tr>
</tbody>
</table>

### Electrical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Dielectric constant [kV/mm]</td>
<td>6.0-6.6</td>
</tr>
<tr>
<td>Dielectric strength [kV/mm²]</td>
<td>40-200</td>
</tr>
<tr>
<td>Volume resistivity [Ohm-cm]</td>
<td>10¹²</td>
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### Thermal Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Coefficient of thermal expansion [x10⁻⁶ K⁻¹]</td>
<td>9-36 @20-100°C</td>
</tr>
<tr>
<td>Melting point [°C]</td>
<td>1715</td>
</tr>
<tr>
<td>Specific heat [J K⁻¹ kg⁻¹]</td>
<td>50 @25°C</td>
</tr>
<tr>
<td>Sublimation point [°C]</td>
<td>-</td>
</tr>
<tr>
<td>Thermal conductivity [W m⁻¹ K⁻¹]</td>
<td>0.5-7 @20°C</td>
</tr>
<tr>
<td>Upper continuous use temperature [°C]</td>
<td>2200</td>
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### Mechanical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive strength [MPa]</td>
<td>190-280</td>
</tr>
<tr>
<td>Fracture toughness [MPa(0.5)]</td>
<td>-</td>
</tr>
<tr>
<td>Hardness - Knoop [kgf mm⁻²]</td>
<td>820</td>
</tr>
<tr>
<td>Hardness - Vickers [kgf mm⁻²]</td>
<td>1000</td>
</tr>
<tr>
<td>Poisson’s ratio</td>
<td>-</td>
</tr>
<tr>
<td>Shear strength [MPa]</td>
<td>215-265</td>
</tr>
<tr>
<td>Tensile modulus [GPa]</td>
<td>72-74</td>
</tr>
<tr>
<td>Tensile strength [GPa]</td>
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### Chemical Resistance

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acids - concentrated</td>
<td>Fair</td>
</tr>
<tr>
<td>Acids - dilute</td>
<td>Good</td>
</tr>
<tr>
<td>Alkalis</td>
<td>Good</td>
</tr>
<tr>
<td>Halogens</td>
<td>Good-Poor</td>
</tr>
<tr>
<td>Metals</td>
<td>Fair</td>
</tr>
</tbody>
</table>

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**CERAMIC DATA TABLE**

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February 2017
### Silicon Carbide Reaction Bonded SiC

<table>
<thead>
<tr>
<th></th>
<th>Silicon Carbide Reaction Bonded SiC</th>
<th>Silicon Nitride Si3N4</th>
<th>Silicon Nitride - Gas Pressure Sintered</th>
<th>Silicon Nitride Hot-pressed Si3N4</th>
<th>Silicon Nitride Reaction Bonded Si3N4</th>
<th>Silicon Nitride/Aluminum Nitride/ Oxide Sialon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Super-wool</td>
<td></td>
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#### Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>SiC</th>
<th>Si3N4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apparent porosity</td>
<td>%</td>
<td>0 - 0.01</td>
</tr>
<tr>
<td>Density</td>
<td>g cm⁻³</td>
<td>3.10 3.44 3.24 3.11 2.4 3.24 0.21</td>
</tr>
<tr>
<td>Refractive index</td>
<td></td>
<td>- - - - - -</td>
</tr>
<tr>
<td>Transmission - Ultra-violet</td>
<td></td>
<td>- - - - - -</td>
</tr>
<tr>
<td>Transmission - Visible light</td>
<td></td>
<td>- - - - - -</td>
</tr>
<tr>
<td>Useful optical transmission range</td>
<td></td>
<td>- - - - - -</td>
</tr>
<tr>
<td>Water absorption - saturation</td>
<td>%</td>
<td>- - - - - -</td>
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#### Electrical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>SiC</th>
<th>Si3N4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dielectric constant</td>
<td>kV mm⁻¹</td>
<td>- - 10 10 - -</td>
</tr>
<tr>
<td>Dielectric strength</td>
<td></td>
<td>- - - - - -</td>
</tr>
<tr>
<td>Volume resistivity</td>
<td>Ohmcm</td>
<td>10²-10³ @25C - - 10⁷-10¹⁶ @25C &gt; 10⁷ @25C 10¹³-10¹⁷ @25C -</td>
</tr>
</tbody>
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#### Thermal Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>SiC</th>
<th>Si3N4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficient of thermal expansion</td>
<td>x10⁶ K⁻¹</td>
<td>4.3-4.6 @20-1000C - RT-1000 3.3 @20-1000C 3.3 @20-1000C 3.3-3.7 @20-1000C</td>
</tr>
<tr>
<td>Melting point</td>
<td>C</td>
<td>- - - - - -</td>
</tr>
<tr>
<td>Specific heat</td>
<td>J K⁻¹ kg⁻¹</td>
<td>1100 @25C - - 680-800 @25C 690 @25C 620-710 @25C</td>
</tr>
<tr>
<td>Sublimation point</td>
<td>C</td>
<td>- - 1900 - 1900 - -</td>
</tr>
<tr>
<td>Thermal conductivity</td>
<td>W m⁻¹ K⁻¹</td>
<td>150-200 @20C - 25 15-43 @20C 10-16 @20C 20 @20C -</td>
</tr>
<tr>
<td>Upper continuous use temperature</td>
<td>C</td>
<td>1350 - - 1100-1650 1200-1500 1000 -</td>
</tr>
</tbody>
</table>

#### Mechanical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>SiC</th>
<th>Si3N4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive strength</td>
<td>MPa</td>
<td>2000-3500 - - 2000-3500 550-650 &gt; 3500 -</td>
</tr>
<tr>
<td>Fracture toughness</td>
<td>MPa m⁰.⁵</td>
<td>- - 7.0 - - - -</td>
</tr>
<tr>
<td>Hardness - Knoop</td>
<td>kgf mm⁻²</td>
<td>- - - - - -</td>
</tr>
<tr>
<td>Hardness - Vickers</td>
<td>kgf mm⁻²</td>
<td>2500-3500 - 1450 1700-2200 800-1000 1650-1800 -</td>
</tr>
<tr>
<td>Poisson’s ratio</td>
<td></td>
<td>- - - - - -</td>
</tr>
<tr>
<td>Shear strength</td>
<td>MPa</td>
<td>- - - 480-960 190-240 - -</td>
</tr>
<tr>
<td>Tensile modulus</td>
<td>GPa</td>
<td>410 - - 280-310 170-220 280-300 -</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>MPa</td>
<td>- - - - - -</td>
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</tbody>
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#### Chemical Resistance

<table>
<thead>
<tr>
<th>Acid</th>
<th>SiC</th>
<th>Si3N4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acids - concentrated</td>
<td></td>
<td>Good - - Fair Fair Good -</td>
</tr>
<tr>
<td>Acids - dilute</td>
<td></td>
<td>Good - - Good Good Good -</td>
</tr>
<tr>
<td>Alkalis</td>
<td></td>
<td>Fair - - Good-Poor Fair Fair</td>
</tr>
<tr>
<td>Halogens</td>
<td></td>
<td>Fair - - Good Good -</td>
</tr>
<tr>
<td>Metals</td>
<td></td>
<td>Fair - - Fair Fair -</td>
</tr>
</tbody>
</table>
## Physical Properties

<table>
<thead>
<tr>
<th></th>
<th>Titanium Diboride TiB₂</th>
<th>Titanium Dioxide TiO₂ 99.6%</th>
<th>Tungsten Carbide/ Cobalt WC 94/ Co 6</th>
<th>Silica SiO₂ 96%</th>
<th>Yttrium Oxide Y₂O₃</th>
<th>Zirconia stabilized with Magnesia ZrO₂ / MgO</th>
<th>Zirconia stabilized with Yttria ZrO₂ / Y₂O₃</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apparent porosity</td>
<td>%</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Density</td>
<td>g cm⁻³</td>
<td>4.5</td>
<td>4.05</td>
<td>14.95</td>
<td>2.18</td>
<td>5.03</td>
<td>5.74</td>
</tr>
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<td>Refractive index</td>
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## Electrical Properties

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## Thermal Properties

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<td>2.5-5.0 @20°C</td>
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## Mechanical Properties

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## Chemical Resistance

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### Physical Properties

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<td>Useless optical transmission range</td>
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### Electrical Properties

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### Thermal Properties

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### Chemical Resistance

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125 Hookstown Grade Road, Coraopolis, PA 15108-9302. USA
Tel 1-800-821-2870
Fax 1-800-283-2020

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