

Goodfellow

Serving The Needs of Science and Industry Worldwide

Au service de la Science et de l'Industrie dans le monde entier

Weltweiter Lieferant für Wissenschaft und Industrie

Metals and Alloys
Métaux et Alliages
Metalle und Legierungen

Ceramics
Céramiques
Keramiken

Polymers
Polymères
Polymere

Composites
Composites
Verbundwerkstoffe



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Standard Price List for Copper/Beryllium (Cu98/Be 2)

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Introduction

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 Catalogue 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 Catalogue at www.goodfellow.com.

Materials

Metals and Alloys

Goodfellow supplies virtually all of the pure metals from Aluminium 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 Catalogue 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

See item



Chopped Fibre

Fibres cut into short lengths called cut, staple or chopped fibre.

Tolerances

Fibre 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%



Fibre

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

Fibre 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

Product Descriptions



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%



Lump

A solid piece of material with no defined shape.

Tolerances

Dimensions shown are nominal



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

Thickness:	woven:	± 10%
	electroformed:	± 20%
Wire diameter:	± 10%	
Size (linear dimension):	< 100mm	± 1mm
	≥ 100mm	+ 2% / -1%

Product Descriptions



Metallised Film

Film which is coated with a metal. The thickness of the metal is measured and described in terms of the material's specific electrical resistance in ohms per square.

Tolerances

Thickness: $\pm 10\%$
 Size (linear dimension): < 100mm $\pm 1\text{mm}$
 $\geq 100\text{mm}$ $+2\% / -1\%$



Microfoil

An extremely thin sheet of metal or alloy mounted on a permanent support. This support **cannot** be removed without destroying the Microfoil.

Tolerances

Thickness: $\pm 30\%$
 Size: $\pm 20\%$



Microleaf

An extremely thin sheet of metal mounted on a removable support. Microleaf is not available for metals which are too brittle to be free standing.

Tolerances

Thickness: $\pm 30\%$
 Size: $\pm 20\%$



Monofilament

A single strand of a non-metallic material.

Tolerances

Diameter: $\pm 20\%$
 Length: $+5\% / -1\%$



Non-Woven Fabric

Non-woven fabrics are made by methods other than weaving or knitting, the yarns and fibres 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. conventional textile fabrics. Due to the open and porous nature of this material, all other dimensions are nominal.

Tolerances

Size (linear dimension): < 100mm $\pm 5\text{mm}$
 $> 100\text{mm}$ $\pm 5\%$



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

See item



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

Product Descriptions



Rod

A straight length of circular section material.

Tolerances

Diameter:	≤ 10mm	± 10%
	Polymer	+ 20%/-10%
	Ceramic	+ 20%/-10%
> 10mm	± 5%	
	Ceramic	+ 20%/-10%
	Polymer	+ 20%/-10%
Length:	< 100mm	± 1mm
	≥ 100mm	+ 5% / -1%



Sheet

Flat material with a thickness > 0.5mm.

Tolerances

Thickness:		± 10%
	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 vapourisation 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
	Polymer	± 10%
	Ceramic	± 10%
≤ 5mm	± 0.1mm	
	Polymer	± 10%
	Ceramic	± 10%
> 5mm	± 5%	
	Polymer	± 10%
	Ceramic	± 10%
Wall thickness:	± 10%	
	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

See item

Product Descriptions



Wire

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

Tolerances

Wire diameter: $\pm 10\%$
Length: $+ 5\% / -1\%$

Hazards Information

HAZARDS

All materials listed in this catalogue, whatever the quantity supplied, are sold for research or development purposes. We make no warranty that the materials are fit for a particular purpose. In purchasing materials from this catalogue, customers should be aware that there may be hazards associated with their use and in the handling of them. Complete toxicological or hazard investigations are the responsibility of the customer. Ingestion or contact with the human body may be harmful. The responsibility for the safe use of our products rests with the customer. All materials should be handled by qualified personnel familiar with laboratory procedures and who are familiar with the nature of the material and any necessary precautions which should be taken in the handling, use and storage of the products. The customer shall be responsible for the control and use of the products offered in this catalogue whether alone or in combination with other articles or substances or in any other manner whatsoever.

HAZARD SYMBOLS



C

Corrosive

Chemicals which may destroy living tissue when in contact with them.



D

Dangerous when wet

Chemicals which, in contact with water or damp air, evolve highly flammable or toxic gases and vapours in dangerous quantities.



E

Explosive

Chemicals which may react exothermically without atmospheric oxygen, quickly evolving gases, and which under defined test conditions detonate, quickly deflagrate or upon heating explode when partially confined.



F+

Extremely Flammable

Chemicals which when finely divided (small particle size) are liable to ignite spontaneously.



Xn

Harmful

Chemicals which may cause death or acute or chronic damage to health when inhaled, ingested or absorbed via the skin.



F

Highly flammable

Chemicals which will ignite after contact with flame, or which will evolve highly flammable gases in contact with water.



Xi

Irritant

Non-corrosive chemicals which, through immediate, prolonged or repeated contact with the skin or mucous membrane may cause inflammation.



R

Radioactive

Chemicals which will emit ionising radiation without being subject to irradiation. General precautions for Toxic chemicals apply to those of low activity. For chemicals of medium or high activity special regulations apply.



T

Toxic

Chemicals which may cause death or acute or chronic damage to health when inhaled, ingested or absorbed via the skin.



T+

Very Toxic

Chemicals which in low quantities cause death or acute or chronic damage to health when inhaled, ingested or absorbed via the skin.

General Information

Analyses

Typical Analysis :

Where appropriate a typical analysis is given. All figures are parts per million (ppm) by weight unless otherwise stated. It must be emphasised that this data is "typical" and no guarantee is given that the material supplied will conform to these analyses. The compositions shown under alloy headings are generally weight percent. Exceptions are the glassy alloys and the rare earth magnets where the convention of using atomic ratio is followed.

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.

If you require an analysis please tell us whether you require analysis of metallic impurities only or metallic and gaseous. Where an analysis is required the shipment of your order may be delayed.

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.

Microfoil is mounted on a permanent 3.5µm polyester support. This support **cannot** be removed without destroying the Microfoil.

Microleaf is mounted on a specially treated support which allows separation of the metal film from the support. Full instructions on the method of removal are issued with each Microleaf supplied.

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.

Foils 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-cm³.s⁻¹.

Continuous Lengths

If you require material in continuous lengths please tell us when you place your order. Unless otherwise specified, we reserve the right to supply in more than one length.

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.). Please indicate precisely what is required and we shall do our best to meet your specification.

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.

Prices

All the prices listed are total (lot) prices for the sizes and quantities listed. Prices are subject to change without notice.

Prices shown include delivery except for those items marked as "special offer" or dangerous goods with transport restriction. They do not include value added tax, any import duties or local taxes.

Transport Restriction

Some of the materials supplied by Goodfellow are subject to special transport restrictions. Additional shipment charges may apply which are dependent on destination. Please check the individual item on our website or contact us for details of the charges.

If you intend to have the material transported or sent onwards please ensure that you are aware of the relevant transport restrictions.

Delivery

Split shipment

All orders are accepted for one shipment on one date to one address. A charge will be made for split shipments made at the customer's request.

Special Analysis, Supports or Tolerances

An extra charge is made for non-standard supports, alternative tolerances and certificates of analysis. The analysis is free of charge for items marked "High Purity".

Cancellations

A charge for cancellation of orders may be made. The amount will depend on the circumstances.

Express Service

An administration charge of £10 will be made for any order received for which same day shipment within the UK is requested.

Shipment

We aim to have all items listed in this catalogue in stock in the quantities and sizes listed. We can only undertake to despatch an order on a particular date. The date of delivery at the customer's address is subject to the normal variations of the delivery service used.

Despatch

Orders will normally be despatched within 48 hours of receipt.

Non delivery

If we have notified you of despatch of goods and you have not received delivery within 7 days, please contact us.

Insurance

All consignments will be insured by us against the usual risks unless we are instructed in writing to the contrary.

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.

Terms of payment

Our normal terms of payment are net 30 days from date of invoice. Any alternative terms of payment are to be agreed with us in writing at the time of placing an order. Customers may be asked to pay cash with order or cash against pro-forma invoice with their first order. In order to establish a credit account we will require details of your bankers, along with two trade references.

Order information

Credit account

We endeavour to keep our costs down and customers are requested to pay our invoices on time. We reserve the right to delay delivery if there are overdue invoices on the account. Accounts which remain unpaid beyond the due date may incur an interest charge at a rate of 2% per month.

Credit card payments

We also accept payment using the following credit and charge cards:

Mastercard, VISA, American Express, DELTA and Switch.

VAT

VAT number: GB 212 8527 79

UK

VAT will be added to the invoice at the rate ruling at the date of invoice. Where a customer is exempt, VAT will be charged unless we receive a copy of the exemption form at the time the order is placed.

EU

Customers registered for VAT who provide their local registration number will not be charged UK VAT.

Customers who are exempt from VAT will not be charged UK VAT provided we are given a copy of their exemption form at the time the goods are ordered.

Customers not registered for VAT or who fail to give us their registration number will be charged UK VAT at the current rate.

Export

All exports to countries outside the EU are zero-rated for UK VAT unless the invoice is being paid from within the EU.

Return of goods

We will only accept return of goods provided we are contacted BEFORE the goods are returned. When we agree to the return we will issue a Goods Return Number and give instructions for the method of return of the goods. Goods will not be accepted for return without a valid Goods Return Number. Due to the nature of some of our materials, it is imperative that you check any possible transport restrictions with your proposed freight company.

Claims

Great care is taken during manufacture and packing and all items are carefully inspected before shipment. Any claim in respect of short delivery, incorrect material or defective quality must be notified to us in writing within three days of delivery. Please retain ALL packaging for our inspection. Our liability for any such claim shall not exceed the cost of replacement of the goods free of charge, or crediting the customer with the invoice value thereof.

Goods ordered in error

We do not accept responsibility for customers' errors in ordering. The amount of credit for returned goods will be at our discretion. Where we accept returned goods a restocking charge will be made.

Conditions of sale

All orders, contracts and quotations are subject to our standard terms and conditions of sale.

Information and statements provided are indicative only and do not form part of any offer or contract.

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 colour 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

Order information

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.

Company Details

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 GmbH

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

Goodfellow SARL

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

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Goodfellow (Shanghai) Trading Co., Ltd

Room 803, Centro Build, No. 568 Hengfeng Road
SHANGHAI
200070
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Conditions of Sale

1 GENERAL

1.1 In these Conditions:

1.1.1 the following expressions shall have the following meanings:-

- "Buyer" the individual firm company or other party from whom an order to supply Goods and/or Services is received by the Seller;
- "Conditions" the standard terms and conditions of sale of the Seller as set out herein and includes any additional terms and conditions of sale agreed in writing by the Seller;
- "Contract" a contract for the Supply of Goods and/or Services by the Seller to the Buyer;
- "Date of Delivery" the date on which delivery of the Goods or Services takes place pursuant to Condition 7;
- "Goods" the goods which the Seller is to supply (or, in relation to Condition 11, the goods in respect of which the Seller is to provide Services) under the Contract and includes any of them or any part of them and where the context so admits includes raw materials, processed materials and/or manufactured products whether processed or manufactured by the Seller or not;
- "Prepayment" a payment to be made by the Buyer pursuant to Condition 6.2 to be used at the Seller's discretion for the purchase of materials and/or towards the costs of labour and other costs relating to the supply of Goods;
- "Recommendations for Use" the recommendations (if any) relating to the storage, handling, application and/or use of the Goods contained in the published literature of the Seller (or, if relevant, a Supplier) or any recommendations made in Writing by an authorised representative of the Seller (or, if relevant, a Supplier);
- "Seller" Goodfellow Cambridge Limited and any subsidiary or holding company or associate (as such terms are defined in the Companies Act 1985 (as amended)) of the said company;
- "Services" the work or services or any of them to be provided by the Seller under the Contract;
- "Supplier" any person, firm or company who or which supplies materials to the Seller which make up the Goods which are to be supplied to the Buyer;

1.1.2 words importing the singular number shall include the plural and vice versa, words importing one gender shall include all genders, and words importing persons shall include bodies corporate, unincorporated associations and partnerships

- 1.2 If satisfactory references and information on the Buyer are not provided within seven days of a request therefore by the Seller, or if, following the provision of such information, the Seller is unable to obtain satisfactory trade indemnity or similar cover in respect of its dealings with the Buyer, the Seller may terminate the Contract and the rights and liabilities of the parties shall be the same as if the Contract had been cancelled in accordance with the provisions of Condition 10.2
- 1.3 The seller reserves the right to assign, sub-contract the Contract or any part thereof. The Buyer shall not be entitled to assign the benefit or burden of the Contract without the consent in writing of the Seller
- 1.4 In relation to all obligations of the Buyer under these Conditions, the time of performance is of the essence
- 1.5 The legal construction of these Conditions shall not be effected by their headings which are for convenience of reference only

2 ORDERS

- 2.1 Notwithstanding that the Seller may have given a detailed quotation or estimate either verbally or in writing no order shall be binding on the Seller unless and until it has been acknowledged in writing by the Seller or the Goods are delivered or the Services are provided by the Seller to the Buyer pursuant to the order
- 2.2 In order to avoid duplication of orders the Buyer shall be responsible for ensuring that any confirmation of an order previously placed is prominently marked as being a confirmation and not a new order. The Buyer acknowledges that any order or confirmation of order which is not so marked may be treated and accepted by the Seller as a new order to create a Contract in addition to any Contract arising out of the previously placed order
- 2.3 These Conditions are incorporated in the Contract and together with any matter set out in the Seller's quotation or acceptance/acknowledgement of order contain the entire obligations between the Seller and the Buyer. In the case of any inconsistency between any letter or quotation incorporating or referring to these Conditions and any order, letter or form of contract sent by the Buyer to the Seller, whatever may be their respective dates, the provisions of these Conditions shall prevail. In the event of the Seller entering into the Contract without the Seller having submitted a written quotation or other letter or document incorporating or referring to these Conditions but in circumstances where the Buyer has had prior notice of these Conditions then all Goods or Services supplied shall be subject to these Conditions
- 2.4 No variation of the Contract by the Buyer shall be binding upon the Seller unless made in Writing and signed on behalf of the Seller. In the event of such variation the Buyer shall indemnify and keep indemnified the Seller in full against all loss, which term shall include (but without prejudice to the generality thereof) loss of profit, costs (including the cost of labour and materials), damages, charges and expenses incurred (directly or indirectly) by the Seller as a result of such variation

- 2.5 Any representations (except fraudulent misrepresentations) or warranties made by or on behalf of the Seller prior to the Contract (whether verbally or in writing) are hereby expressly excluded and shall be of no effect

3 DESCRIPTION

- 3.1 Any figures, statements, descriptions, illustrations, photographs, drawings, weights or any other matters contained in the Seller's catalogues, pamphlets, price lists or advertising literature are not guaranteed to be accurate and are intended merely to represent a general picture of the Seller's products and shall not form part of the Contract nor be regarded as a warranty or representation relating to the Goods or Services
- 3.2 The Seller reserves the right to amend the specification of its products and services from time to time so that the descriptions thereof as set out in its catalogues, pamphlets, price lists or advertising literature may not be identical with those set out in the Seller's quotation and the Buyer is advised to check the specification set out in the Seller's quotation before placing an order

4 SPECIFICATIONS AND INTELLECTUAL PROPERTY

- 4.1 Where goods are supplied to the Buyer's own specification, or where standard goods of the Seller are altered in accordance with the Buyer's instructions the Buyer warrants and undertakes full responsibility for the suitability and fitness of the specification, pattern or design but also that such specification, pattern or design does not infringe any patent, trade mark, registered design, copyright or any other proprietary right of any third party and the Buyer shall indemnify and keep the Seller indemnified in full against any loss, damage or expense whatsoever (including costs) which the Seller may incur in or arising from the performance of the Contract by reason of any infringement of any such patent, trade mark, registered design, copyright or any other proprietary right
- 4.2 The Seller reserves the right to change the Buyer's specification as required to ensure that the Goods comply with any health, safety or other statutory requirement or provision and no such change by the Seller will constitute a breach of contract or impose upon the Seller any liability whatsoever
- 4.3 Unless otherwise agreed in writing, the Seller will be the sole owner of all inventions, formulations, tools, patterns, designs or other similar items and the copyright in all documents and drawings made or produced by it in preparing a quotation for the Buyer or in the course of work on any Contract with the Buyer

5 QUOTATIONS

- 5.1 The Seller's quotations are provisional in so far as they are subject to alteration by reference to any changes in the price of raw materials, any item to be acquired by the Seller from a third party, rates of wages, other costs of production and any other circumstances beyond the Seller's control taking place between the date of the quotation and the Buyer's placing of an order in respect thereof

6 PRICE

- 6.1 The Seller shall be entitled to adjust the Contract price of the Goods or Services whether before or after the making of the Contract in the event of any variation in the cost to the Seller of supplying the same or any part thereof caused by:-
- 6.1.1 any increase in the cost of materials required by the Seller for the completion of the Contract; or
- 6.1.2 any increase in wages or production and manufacturing costs or other overheads; or
- 6.1.3 any other reason whatsoever beyond the control of the Seller including (but without prejudice to the generality of the foregoing) fluctuations in exchange rates between monetary currencies the action of any government or any other authority or any labour problems
- 6.2 In the Seller's absolute discretion, a Prepayment in respect of the Contract may be required to be paid by the Buyer to the Seller on the terms set out in this Condition. The Prepayment shall be applied as follows:-
- 6.2.1 in the event that the Contract is performed in full by both parties the Prepayment shall be retained by the Seller in reduction of the total price payable by the Buyer under the Contract;
- 6.2.2 in the event that the Buyer is either in default of any of its obligations under the Contract or cancels or suspends the Contract in accordance with Condition 10 the Prepayment shall be set off by the Seller against its proper costs losses or damages arising in connection with the default and/or cancellation or suspension
- 6.3 Unless otherwise stated, the price set out in the Seller's quotation includes the cost of packaging, carriage, and (save as provided in Condition 6.4) insurance. In respect of supplies of Goods in the United States of America, Canada and Japan the price also includes import duties and sales taxes (if any). In respect of supplies of Goods in other countries the price does not include import duties or VAT or sales taxes which will be extra charges based on prevailing rates
- 6.4 Where the Buyer requests a particular means of delivery, the price set out in the Seller's quotation does not include insurance, which is to be arranged at the responsibility of the Buyer.

7 DELIVERY

- 7.1 Delivery of Goods shall be deemed to be effected by the Seller at the following times:-
- 7.1.1 where Goods are collected by or on behalf of the Buyer by its servants or agents, or where Goods are collected in

Conditions of Sale

- accordance with a means of delivery specifically requested by the Buyer, when the same are collected;
- 7.1.2 where delivery of the Goods is to be the responsibility of the Seller, when they arrive prior to unloading at the Buyer's premises;
- 7.1.3 where Goods are sold FOB or CIF, when they pass the ship's rail or are loaded onto the aircraft
- 7.2 Delivery of Services shall be deemed to be effected by the Seller at the time of completion by the Seller of the Services
- 7.3 Whilst the Seller will make every reasonable effort to complete the Contract by the date or dates therein specified for delivery of Goods or provision of Services such date or dates shall only constitute the times by which the Seller expects to effect such delivery and if no time is agreed delivery will be within a reasonable time but the performance of the Contract by the Seller shall not be the essence of the Contract, the Seller's failure to so deliver by the due date or dates shall not constitute a breach of Contract and the Seller shall not in any circumstances be responsible for any direct or consequential loss or damage of any kind whatsoever resulting therefrom. The Seller may wholly or partly suspend deliveries of Goods or provision of Services and the Buyer shall accept late delivery of such Goods or Services unless the Buyer has cancelled the Contract in accordance with the provisions of Condition 10.3
- 8 QUANTITIES INSTALMENTS AND STORAGE**
- 8.1 Where Goods are delivered or Services are by instalment each instalment shall be deemed to be sold under a separate Contract and the party in default in respect of any instalment shall be liable accordingly, but no default in respect of any one instalment shall effect due performance of the Contract as regards other instalments
- 8.2 The Seller will endeavour to deliver the quantity of Goods ordered and every delivery shall be deemed to comply with the order. If there is a surplus or shortage of Goods which is no more than 10% of the quantity specified in the order the Buyer shall be deemed to have accepted the Goods and shall pay for the actual quantity delivered
- 8.3 If Goods or Services are to be delivered by instalments, the Seller shall be entitled to invoice each instalment as and when delivery is made and payment for all delivered instalments shall be due notwithstanding the non-delivery of other instalments or other default by the Seller. Failure by the Buyer to make payment by the due date for any one instalment for whatever reason shall entitle the Seller to suspend deliveries of Goods or provision of Services under the Contract but without prejudice to any other right the Seller may have under any of the other provisions of these Conditions
- 8.4 Notwithstanding that risk shall have passed to the Buyer pursuant to Condition 15 the Seller may in its absolute discretion arrange for storage of the Goods either at the request of the Buyer or as a result of the failure by the Buyer to take delivery of the Goods under Condition 7. The Seller may insure the goods whilst in storage and the Buyer shall indemnify and keep indemnified the Seller in full against all costs, losses, damages and expenses whatsoever arising in connection with the storage provided for hereunder and such costs, losses, damages and expenses will be added to and form part of the price of the Goods
- 8.5 Unless otherwise agreed between the Buyer and the Seller, the Seller shall be entitled in its absolute discretion and without giving prior notice to the Buyer at the expiration of 3 months to sell or otherwise dispose of Goods kept in storage as provided in Condition 8.4
- 9 TERMS OF PAYMENT**
- 9.1 Unless otherwise agreed the price shall be due and payable at the Seller's offices 30 days after the date of the Seller's invoice
- 9.2 If the Buyer does not pay the whole or any part of the price on the required day then the Buyer shall pay to the Seller on request interest on the amount outstanding from the required day until the actual date of payment at the rate of 2% p.a. over the base rate of Barclays Bank plc from time to time in force which shall accrue on a daily basis
- 9.3 Condition 12 shall apply in the event of any alleged defect or failure in or of the Goods or Services and the Buyer shall not delay or refuse to make payment in any such event
- 9.4 The Buyer shall not be entitled to withhold payment of any amount due to the Seller by reason of any disputed claim by the Buyer in connection with the Contract nor shall the Buyer be entitled to set off against any amount payable under the Contract to the Seller any amount which is not then due and payable by the Seller or for which the Seller disputes liability
- 9.5 All payments payable to the Seller under the Contract shall become due immediately upon termination of the Contract despite any other provision.
- 10 SUSPENSION AND CANCELLATION**
- 10.1 If the Buyer shall commit any breach of the Contract and fail to remedy the same within 7 days of receiving the Seller's request in writing so to do or any distress or execution is levied upon any goods or property of the Buyer or the Buyer makes any voluntary arrangement with its creditors or becomes subject to an administration order or (being an individual or firm) becomes bankrupt or (being an incorporated company) passes a resolution for winding up (otherwise than for the purpose of amalgamation or reconstruction), or a Court makes an order to that effect, or an encumbrancer takes possession, or an administrative receiver or receiver is appointed, of any of the property or assets of the Buyer, or the Buyer ceases, or threatens to cease, to carry on business or is unable to pay its debts within the meaning of section 123 Insolvency Act, 1986, or the Seller reasonably apprehends that any of the events mentioned above is about to occur in relation to the Buyer and notifies the Buyer accordingly, the Seller may:-
- 10.1.1 stop any Goods in transit and suspend any further deliveries;

and/or

- 10.1.2 suspend work on the Contract; and/or
- 10.1.3 determine the Contract forthwith and if the Goods or Services, or any part of them have been delivered but not paid for, the price shall become immediately due and payable notwithstanding any previous agreement to the contrary but without prejudice to the Seller's right to any unpaid price for Goods or Services delivered under the Contract and to damages for loss (both direct and consequential) suffered in consequence of such determination
- 10.2 If the Buyer requires cancellation of the Contract this will only be accepted at the sole discretion of the Seller and unless otherwise agreed in writing only upon condition that any costs, charges or expenses (both direct and consequential) incurred by the Seller up to the date of cancellation and the value of all loss or damage (both direct and consequential) incurred by the Seller by reason of such cancellation will be reimbursed by the Buyer to the Seller forthwith. Acceptance by the Seller of any cancellation by the Buyer will only be binding upon the Seller if it is made in writing
- 10.3 In the event of the Seller other than in any of the circumstances set out in Condition 10.1 being prevented or hindered from completing the Contract either wholly or in part in accordance with the terms thereof for any reason whatsoever beyond its reasonable control which, for the avoidance of doubt and without prejudice to the generality of the foregoing, shall include governmental action, war, riot, civil commotion, fire, flood, epidemic, labour disputes (including labour disputes involving the work force or any part thereof of the Seller or Supplier), restraints or delays affecting shipping or carriers, licensing, exporting or importing restrictions, currency restrictions and Acts of God then further performance of the Contract shall be suspended for the period during which the Seller is so prevented provided that in the event of the Contract being suspended for a continuous period of more than 3 months then either party may give the other notice in writing to terminate the Contract forthwith and in such circumstances the Buyer shall pay for all Goods or Services supplied to the date of such termination such payment to be made on or before the last day following the month during which termination was effected. The Seller shall be under no liability whatsoever to the Buyer for any direct or consequential loss or damage suffered by the Buyer as a result of the Seller's inability to perform its obligations under the Contract in these circumstances
- 10.4 The Seller's rights contained in Condition 17 (but not the Buyer's rights) shall continue beyond the discharge of the parties' primary obligations under the Contract consequent upon its termination
- 10.5 The termination of the Contract for whatever reason will be without prejudice to the rights and duties of either party accrued prior to termination
- 11 INSPECTION AND CLAIMS FOR DEFECTS**
- 11.1 The Goods are of a highly specialised nature and must be treated with the utmost care. It is essential that the Buyer checks that they correspond in all respects with the Buyer's requirements. Any discrepancies should be notified to the Seller immediately. The Buyer undertakes to ensure that all Goods are unpacked and handled only by persons qualified to deal with such specialised products, to safeguard against injury to the Goods or to the Buyer's personnel
- 11.2 The Buyer shall inspect the Goods and carry out tests to ensure the Goods conform with the description of the Goods or Services in the Buyer's orders within 7 days of Delivery and whether or not the Buyer carries out such obligation to inspect and test no claims for non-delivery, shortages in quantity of units delivered, defective Goods or Services, non-conformity to description or partial loss or damage to Goods will be accepted by the Seller unless:-
- 11.2.1 they are notified in writing by the Buyer to the Seller within 10 days after the Date of Delivery (in the case of partial loss, damage, non-conforming or defective Goods or Services) or 14 days after the date of the invoice (in the case of non-delivery);
- 11.2.2 the Goods in respect of which a claim is made together with all the relevant packing are preserved intact as received for a period of 35 days from notification of any such claim and the Buyer permits the Seller or its servants or agents full and free right of access to inspect the Goods and investigate the claim; and
- 11.2.3 if the Buyer fails to give the appropriate notice as specified in Condition 11.2.1, the Buyer's claim will be deemed to have been waived and will be absolutely barred
- 11.3 It is in all cases the responsibility of the Buyer to ensure by testing or otherwise that the Goods are fit and suitable for the purposes for which the Buyer requires them in the conditions in which they will be used. The Buyer acknowledges that the Seller shall be under no liability of any description to the Buyer if the Goods prove to be unsuitable for whatever reason for application or use notwithstanding that the Seller may, at the request of the Buyer, have given in good faith technical or other advice in relation to the proposed application or use of the Goods and the Buyer shall indemnify and keep indemnified the Seller in full against any and all liability of any kind arising out of or connected with the application or use of the Goods
- 11.4 Section 3 Sale and Supply of Goods Act 1994 shall not apply
- 11.5 The Seller will not accept the return of Goods in any circumstances unless it has first issued a Goods return number and such number is quoted with the returned Goods
- 12 WARRANTY**
- 12.1 In substitution for all and any other rights which the Buyer might or would have had but for these Conditions and subject to Condition 11,

Conditions of Sale

the Seller shall make good by replacement any failure in the Goods or Services which results from defects in the Seller's materials or workmanship and which appear not later than 2 months after the Date of Delivery and shall replace any Goods or Services which do not conform with the description in the Buyer's order

- 12.2 Notwithstanding the provisions of Condition 12.1, in the case of a claim falling within Condition 12.1, the Seller reserves the right at its sole discretion to credit the Buyer in full the price paid by the Buyer to the Seller
- 12.3 The Seller's liability under this Condition shall automatically cease if:
- 12.3.1 the Buyer has not paid for all Goods or Services supplied under any Contract by the due date or is otherwise in breach of this or any other Contract made with the Seller; or
- 12.3.2 the Seller or its servants or agents are denied full and free right of access to the allegedly defective Goods; or
- 12.3.3 the Buyer has not properly maintained the Goods or has not complied with any Recommendations for Use; or
- 12.3.4 the defect or failure is caused by a breach by the Buyer of its undertakings and warranties contained in Condition 17; or
- 12.3.5 the Buyer has failed to notify the Seller in writing of any defect or suspected defect within 14 days of the same coming to the knowledge of the Buyer
- 12.4 The warranty set out in Condition 12.1 shall be in lieu of any warranties conditions or undertakings whether express or implied by statute, common law or otherwise howsoever which warranties, conditions and undertakings are hereby expressly excluded, except that such exclusions will not apply to any implied condition that the Seller has or will have the right to sell the Goods when the property is to pass
- 12.5 Nothing in these Conditions excludes or limits the liability of the Seller for death or personal injury caused by the Seller's negligence or fraudulent misrepresentation
- 12.6 SUBJECT TO CONDITIONS 12.4 AND 12.5
- 12.6.1 the seller's total liability in contract, tort (including negligence or breach of statutory duty), misrepresentation or otherwise, arising in connection with the performance or contemplated performance of the contract shall be limited to the price paid for the goods or services under the contract; and
- 12.6.2 the seller shall not be liable to the buyer for any indirect or consequential loss or damage (whether for loss of profit, loss of business, depletion of goodwill or otherwise), costs, expenses or other claims for consequential compensation whatsoever (however caused) which arise out of or in connection with the contract

13 CONSUMER SALES

- 13.1 Where the Goods are sold under a consumer sale (as defined by the Sale of Goods Act 1979) the statutory rights of the Buyer are not affected by these conditions

14 TITLE TO GOODS

- 14.1 Full legal and beneficial ownership of the Goods shall be retained by the Seller notwithstanding that the risk in the same shall pass to the Buyer at the time of delivery until the Seller has received payment in full in respect of
- 14.1.1 The Goods; and
- 14.1.2 All other sums which become due and owing by the Buyer to the Seller on any account whatsoever
- 14.2 Until ownership of the Goods has passed to the Buyer the Buyer shall hold the Goods in a fiduciary capacity and as bailee of the Seller and shall at all times take proper care of the same and will not obliterate or obscure any identifying mark or their packaging and will keep the Goods separate from any other goods and in such manner that they may be clearly identified as belonging to the Seller and the Buyer hereby grants to the Seller the right to enter on the Buyer's premises at any time during the continuation of the Contract to check that the Buyer is complying with the obligation contained in this Condition. The Buyer will return the Goods to the Seller if it receives a request whether verbally or in Writing so to do prior to payment in full as aforesaid having been made and the Seller will then repay any part of the purchase price it has already received in respect of the Goods less a reasonable amount in respect of its costs and expenses in connection with the Contract
- 14.3 For the purposes of Condition 14.1, the expression "the Buyer" includes any subsidiary or holding company or associate of the Buyer (as such terms are defined in the Companies Act 1985 (as amended))
- 14.4 The Seller will have the right to maintain an action against the Buyer for the price of the Goods notwithstanding that property in the Goods has not been passed

15 RISK AND INSURANCE

- 15.1 The risk in the Goods shall pass to the Buyer at the time of delivery as provided for in Condition 7
- 15.2 Notwithstanding the reservation of title contained in Condition 14, the Buyer shall insure the Goods and/or any products made wholly or partly therefrom for the full amount of the price payable under the Contract with an insurance office of repute from the time of delivery of the Goods until the date title in the Goods passes to the Buyer pursuant to Condition 14.1

16 EXPORT TERMS

- 16.1 In these Conditions "Incoterms" means the international rules for the interpretation of trade terms of the International Chamber of Commerce

as in force at the date when the Contract is made. Unless the context otherwise requires, any term or expression which is defined in or given a particular meaning by the provisions of Incoterms has the same meaning in the Contract

- 16.2 Where the Goods are supplied for export from the United Kingdom then unless otherwise agreed in writing between the Buyer and the Seller
- 16.2.1 the provisions of Incoterms shall (subject to any special terms agreed in writing between the Buyer and the Seller) apply but if there is any conflict between the provisions of Incoterms and these Conditions, the latter shall prevail.
- 16.2.2 the Buyer shall be responsible for complying with any legislation or regulations governing the importation of the Goods into the country of destination and (save in respect of the United States of America, Canada and Japan) for the payment of any duties and taxes thereon unless payment for these is included in the Contract
- 16.2.3 the Buyer shall be deemed to have satisfied itself that such Goods comply with the safety regulations of any country or state in which the Goods are to be used outside the United Kingdom and the Buyer shall indemnify and keep indemnified the Seller in full for any loss or damage whatsoever which the Seller may incur if such Goods do not comply with such safety regulations
- 16.3 The Goods shall not be used in any country other than that for which the Seller was aware they were originally ordered without the Seller's consent in writing
- 16.4 The Buyer undertakes not to offer the Goods for resale in any country notified by the Seller at or before the time the Buyer's order is placed, or to sell the Goods to any person if the Buyer knows or has reason to believe that person intends to resell the Goods in any such country

17 BUYER'S WARRANTIES

- 17.1 The Buyer warrants to the Seller that:
- 17.1.1 the Buyer will install, operate or otherwise use or store the Goods strictly in accordance with the Recommendations for Use and with all relevant or applicable statutory or other regulations governing the installation, operation, use or storage of the Goods; and
- 17.1.2 any collection vehicle, container, ship or other means of transport provided by the Buyer or any agent of the Buyer will comply with all relevant legislation and regulations relating to health and safety requirements; and
- 17.1.3 the storage and transport facilities and all parts thereof and all equipment used in connection therewith is suitable for storage (both short term and long term) and transport of the Goods and complies with any statute, regulation, bye law or other rule having the force of law and relating to the storage of goods of the nature of the Goods; and
- 17.1.4 the Buyer will ensure that the Goods are stored in conditions appropriate to goods of that nature and will comply with any recommendations as to the storage of Goods notified to it by the Seller from time to time; and
- 17.2 The Buyer shall indemnify and keep indemnified the Seller in full against any claim, loss or damage (including, without limitation, damage to the reputation of the Seller) arising directly or indirectly from any breach of the warranty contained in Condition 17.1

18 SEVERANCE

- 18.1 If at any time any one or more of the provisions or part thereof of these Conditions becomes or is invalid, illegal or unenforceable in any respect under any law or is held by a court to be invalid, illegal or unenforceable, the validity and enforceability of the remaining provisions hereof and the remainder of such provision shall not in any way be affected or impaired thereby

19 JURISDICTION

- 19.1 These Conditions and each and every Contract made pursuant to them shall be governed by and construed in all respects in accordance with the laws of England and the Seller and the Buyer hereby agree to submit to the non-exclusive jurisdiction of the English Courts

20 NOTICES

- 20.1 Any notice required or permitted to be given by either party to the other under these Conditions shall be in writing addressed to that other party at its registered office or principal place of business or such other address as may at the relevant time have been notified pursuant to this provision to the party giving notice
- 20.2 Any notice given pursuant to clause 20.1 shall be deemed to have been served:
- 20.2.1 if delivered by hand, on the first Business Day following delivery;
- 20.2.2 if sent by post, on the third Business Day after posting if the address of the recipient is in the country of despatch, otherwise on the seventh Business Day after posting;
- 20.2.3 if sent by facsimile transmission, on the first Business Day following successful transmission
- 20.3 In proving service it shall be sufficient proof in the case of a notice sent by post, that the envelope containing the same was properly stamped, addressed and placed in the post and, in the case of facsimile transmission, that it was properly addressed and successfully transmitted
- 20.4 In this Condition 20, "Business Day" shall mean any day other than Saturday, Sunday or any other day which is a public holiday in the place at which the notice is left or to which such notice is despatched

21 WAIVER

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21.1 No waiver by the Seller of any breach of any provision of the Contract by the Buyer shall be considered as a waiver of any subsequent breach

of the same or any other provision and the Seller shall not be prejudiced by any forbearance or indulgence granted by it to the Buyer

Copper/Beryllium

Cu98/Be 2

Common Brand Names : Brush 190[®], Mallory[®], Berylco[®]

Best mechanical properties of any Copper alloy which improve at sub-zero temperatures as low as -200C. Hardened by heat treatment this alloy machines best in the quarter hard cold work condition. Uses include springs of all kinds where high strength and corrosion resistance are important, resistance welding electrodes, dies and high strength, corrosion resistant tubing.

Physical Properties

Density 8.25 g cm⁻³
 Melting point 860-1000 C

Thermal Properties

Coefficient of thermal expansion @25-300C 17.0 x10⁻⁶ K⁻¹
 Thermal conductivity @23C 60-120 W m⁻¹ K⁻¹

Electrical Properties

Electrical resistivity 5.4-11.5 μOhmcm
 Temperature coefficient 0.0010-0.0018 K⁻¹

Mechanical Properties

Elongation at break < 50 %
 Hardness - Brinell 100-360
 Modulus of elasticity 120-160 GPa
 Tensile strength 500-1300 MPa



Foil

To precipitation harden: heat to 315C for 2 hours or 350C for 15-30 minutes and air-cool.

CU070200 Thickness 0.004mm

Temper As rolled

Size Web Code	Quantity	Quantity				
		1pc	2pcs	3pcs	5pcs	10pcs
123-844-022	25 x 25 mm	YEN 39200	YEN 46200	YEN 51500	YEN 60500	YEN 76500
480-501-531	50 x 50 mm	YEN 55500	YEN 69000	YEN 80000	YEN 97000	YEN 128000
062-699-351	100 x 100 mm	YEN 88000	YEN 115000	YEN 136000	YEN 170000	YEN 305000

Typical Analysis : Not applicable

CU070225 Thickness 0.005mm

Temper As rolled

Size Web Code	Quantity	Quantity		
		1pc	2pcs	5pcs
108-117-640	25 x 25 mm	YEN 37600	YEN 47200	YEN 66000
514-710-868	50 x 50 mm	YEN 52000	YEN 67500	YEN 98500
338-855-247	100 x 100 mm	YEN 81500	YEN 109000	

Coil

Web Code
 356-903-281
 612-909-076
 613-625-692

Width 100mm

Length	Quantity
0.2 m	YEN 106000
0.5 m	YEN 154000
1 m	YEN 223000

Discs

Web Code
 901-432-769
 679-095-515
 886-943-199
 867-889-405
 486-177-580
 772-188-250
 523-526-707

Diameter	Quantity		
	10 discs	20 discs	50 discs
4 mm	YEN 70500	YEN 95000	YEN 165000
6 mm	YEN 75000	YEN 101000	YEN 175000
8 mm	YEN 79500	YEN 108000	YEN 185000
10 mm	YEN 84000	YEN 114000	YEN 194000
15 mm	YEN 95000	YEN 129000	YEN 219000
25 mm	YEN 117000	YEN 161000	YEN 269000
50 mm	YEN 172000	YEN 239000	

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

CU070230 Thickness 0.0065mm

Temper As rolled

NLT Sizes Web Code	Quantity	Quantity				
		1pc	2pcs	5pcs	10pcs	20pcs
956-582-167	90 x 150 mm	YEN 60500	YEN 79000			

Sizes LT

Web Code
 500-095-650
 866-595-104
 026-212-259
 676-849-777

Width 90mm

Size	Quantity				
	1pc	2pcs	5pcs	10pcs	20pcs
25 x 25 mm	YEN 28200	YEN 33600	YEN 46000	YEN 63000	YEN 81500
50 x 50 mm	YEN 37000	YEN 46000	YEN 66000	YEN 91000	
90 x 100 mm	YEN 53000	YEN 68500	YEN 101000		
90 x 150 mm	YEN 63500	YEN 83000			

Coil

Web Code
 352-067-471
 008-428-573
 053-571-564

Length	Quantity
0.2 m	YEN 68500
0.5 m	YEN 96000
1 m	YEN 148000

Discs

Web Code
 055-866-446
 983-309-139
 913-643-953
 205-495-834
 686-976-243
 872-028-963
 003-620-239

Diameter	Quantity		
	10 discs	20 discs	50 discs
4 mm	YEN 57500	YEN 68000	YEN 97500
6 mm	YEN 60000	YEN 72000	YEN 103000
8 mm	YEN 63000	YEN 75500	YEN 110000
10 mm	YEN 65500	YEN 79500	YEN 116000
15 mm	YEN 72500	YEN 89000	YEN 131000
25 mm	YEN 86000	YEN 108000	YEN 161000
50 mm	YEN 119000		

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

Copper/Beryllium

Cu98/Be 2



Foil

CU070250

Thickness **0.0076mm**

Temper **As rolled**

Size

Web Code
 452-533-359
 566-663-796
 832-974-255

Size	Quantity				
	1pc	2pcs	5pcs	10pcs	20pcs
25 x 25 mm	YEN 27800	YEN 32000	YEN 40600	YEN 50500	YEN 65500
50 x 50 mm	YEN 37200	YEN 45400	YEN 62000	YEN 80500	
89 x 100 mm	YEN 54000	YEN 69500	YEN 99500		

Discs

Web Code
 121-776-934
 222-115-471
 764-436-225
 554-534-173
 316-766-323
 595-792-962
 474-117-261

Diameter	Quantity		
	10 discs	20 discs	50 discs
4 mm	YEN 39800	YEN 45200	YEN 57500
6 mm	YEN 42800	YEN 49400	YEN 64000
8 mm	YEN 45600	YEN 53500	YEN 70500
10 mm	YEN 48600	YEN 57500	YEN 77000
15 mm	YEN 56000	YEN 67500	YEN 93000
25 mm	YEN 70000	YEN 88000	YEN 126000
50 mm	YEN 106000	YEN 140000	

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

CU070260

Thickness **0.01mm**

Temper **As rolled**

Size

Web Code
 335-327-250
 313-159-355
 330-360-491
 409-646-762

Size	Quantity				
	1pc	2pcs	5pcs	10pcs	20pcs
25 x 25 mm	YEN 23000	YEN 25600	YEN 31000	YEN 37400	YEN 47200
50 x 50 mm	YEN 28600	YEN 33600	YEN 43400	YEN 55000	YEN 72000
88 x 100 mm	YEN 38400	YEN 47400	YEN 65500	YEN 86000	
150 x 176 mm	YEN 53500	YEN 69000	YEN 99500		

Coil

Web Code
 479-953-742
 994-213-537
 276-697-742

Length	Quantity
	1 Reel
0.2 m	YEN 63500
0.5 m	YEN 87500
1 m	YEN 115000

Discs

Web Code
 401-904-207
 238-037-036
 754-635-110
 329-390-623
 173-825-737
 728-215-053
 026-876-436

Diameter	Quantity		
	10 discs	20 discs	50 discs
4 mm	YEN 35800	YEN 40200	YEN 50500
6 mm	YEN 37400	YEN 42600	YEN 54500
8 mm	YEN 39200	YEN 45000	YEN 58000
10 mm	YEN 40800	YEN 47400	YEN 62000
15 mm	YEN 45000	YEN 53500	YEN 71500
25 mm	YEN 53500	YEN 65500	YEN 90500
50 mm	YEN 74500	YEN 95500	

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

CU070276

Thickness **0.02mm**

Temper **Half hard**

Size

Web Code
 601-379-178
 596-628-620
 983-758-225
 026-249-705

Size	Quantity				
	1pc	2pcs	5pcs	10pcs	20pcs
25 x 25 mm	YEN 17200	YEN 18700	YEN 22000	YEN 26200	YEN 32600
50 x 50 mm	YEN 20200	YEN 23000	YEN 29000	YEN 36000	YEN 46600
100 x 100 mm	YEN 26400	YEN 31800	YEN 42800	YEN 55500	YEN 74500
200 x 200 mm	YEN 38800	YEN 49400	YEN 70500	YEN 95000	

Coil

Web Code
 622-037-776
 202-198-791
 189-293-464

Length	Quantity
	1 Reel
0.5 m	YEN 57500
1 m	YEN 73500
2 m	YEN 96500

Discs

Web Code
 551-291-035
 590-789-641
 665-170-503
 141-841-987
 166-438-861
 947-209-678
 909-163-865

Diameter	Quantity		
	10 discs	20 discs	50 discs
4 mm	YEN 28800	YEN 32400	YEN 41600
6 mm	YEN 29600	YEN 33800	YEN 43600
8 mm	YEN 30600	YEN 35200	YEN 45800
10 mm	YEN 31600	YEN 36400	YEN 48000
15 mm	YEN 33800	YEN 39800	YEN 53000
25 mm	YEN 38600	YEN 46400	YEN 63500
50 mm	YEN 50500	YEN 63000	YEN 90000

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

Alloy – Copper/Beryllium

Copper/Beryllium

Cu98/Be 2



Foil

CU070275

Thickness 0.02mm

Temper As rolled

Size

Web Code

158-506-382
 813-296-873
 662-102-186
 762-767-942
 345-992-462

Size

25 x 25 mm
 50 x 50 mm
 100 x 100 mm
 150 x 150 mm
 200 x 300 mm

Quantity

1pc	2pcs	5pcs	10pcs	20pcs
YEN 17200	YEN 18700	YEN 22000	YEN 26200	YEN 32600
YEN 20200	YEN 23000	YEN 29000	YEN 36000	YEN 46600
YEN 26400	YEN 31800	YEN 42800	YEN 55500	YEN 74500
YEN 32600	YEN 40600	YEN 56500	YEN 75000	
YEN 44400	YEN 57500	YEN 83000		

Coil

Web Code

131-323-473
 415-430-185
 928-767-327

Width 200mm

Length

1 Reel
0.5 m YEN 57500
1 m YEN 73500
2 m YEN 96500

Quantity

Discs

Web Code

989-562-212
 695-284-265
 910-535-472
 816-933-116
 116-647-163
 580-888-741
 611-099-730

Diameter

4 mm
 6 mm
 8 mm
 10 mm
 15 mm
 25 mm
 50 mm

Quantity

10 discs	20 discs	50 discs
YEN 28800	YEN 32400	YEN 41600
YEN 29600	YEN 33800	YEN 43600
YEN 30600	YEN 35200	YEN 45800
YEN 31600	YEN 36400	YEN 48000
YEN 33800	YEN 39800	YEN 53000
YEN 38600	YEN 46400	YEN 63500
YEN 50500	YEN 63000	YEN 90000

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

CU070280

Thickness 0.025mm

Temper As rolled

Condition Surface oxide

Size

Web Code

387-470-767
 433-849-452
 231-175-215
 896-909-458

Size

25 x 25 mm
 50 x 50 mm
 100 x 100 mm
 150 x 150 mm

Quantity

1pc	2pcs	5pcs	10pcs	20pcs
YEN 15000	YEN 16300	YEN 19200	YEN 22800	YEN 28600
YEN 17600	YEN 19900	YEN 25000	YEN 31000	YEN 40200
YEN 22800	YEN 27200	YEN 36400	YEN 47200	YEN 63000
YEN 27800	YEN 34400	YEN 47800	YEN 63500	

Coil

Web Code

113-685-931
 210-743-969
 342-999-732
 874-971-847

Width 150mm

Length

1 Reel
0.2 m YEN 34200
0.5 m YEN 44600
1 m YEN 56000
2 m YEN 73000

Quantity

Discs

Web Code

435-648-664
 456-078-441
 009-809-399
 226-171-769
 271-463-149
 932-890-455
 611-302-816

Diameter

4 mm
 6 mm
 8 mm
 10 mm
 15 mm
 25 mm
 50 mm

Quantity

10 discs	20 discs	50 discs
YEN 26400	YEN 30000	YEN 38800
YEN 27200	YEN 31200	YEN 40600
YEN 28000	YEN 32200	YEN 42400
YEN 28800	YEN 33400	YEN 44200
YEN 30800	YEN 36200	YEN 48400
YEN 34600	YEN 41600	YEN 57000
YEN 44400	YEN 55500	YEN 79000

CU070281

Thickness 0.025mm

Temper As rolled

Size

Web Code

360-589-891
 058-331-005
 808-792-041
 158-703-261

Size

25 x 25 mm
 50 x 50 mm
 100 x 100 mm
 200 x 200 mm

Quantity

1pc	2pcs	5pcs	10pcs	20pcs
YEN 15000	YEN 16300	YEN 19200	YEN 22800	YEN 28600
YEN 17600	YEN 19900	YEN 25000	YEN 31000	YEN 40200
YEN 22800	YEN 27200	YEN 36400	YEN 47200	YEN 63000
YEN 33000	YEN 41800	YEN 59500	YEN 79500	

Coil

Web Code

129-351-902
 808-808-807
 836-070-718
 561-531-018

Width 200mm

Length

1 Reel
0.2 m YEN 37000
0.5 m YEN 49000
1 m YEN 62500
2 m YEN 81500

Quantity

Discs

Web Code

009-144-975
 240-154-626
 388-294-267
 665-669-754
 729-910-420
 476-070-606
 264-768-367

Diameter

4 mm
 6 mm
 8 mm
 10 mm
 15 mm
 25 mm
 50 mm

Quantity

10 discs	20 discs	50 discs
YEN 26400	YEN 30000	YEN 38800
YEN 27200	YEN 31200	YEN 40600
YEN 28000	YEN 32200	YEN 42400
YEN 28800	YEN 33400	YEN 44200
YEN 30800	YEN 36200	YEN 48400
YEN 34600	YEN 41600	YEN 57000
YEN 44400	YEN 55500	YEN 79000

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

Copper/Beryllium

Cu98/Be 2



Foil

CU070301

Thickness 0.05mm

Temper Quarter hard

Size

Web Code

715-917-113
 456-247-539
 946-655-943

Size	Quantity				
	1pc	2pcs	5pcs	10pcs	20pcs
60 x 60 mm	YEN 15700	YEN 17600	YEN 21800	YEN 26800	YEN 34600
95 x 100 mm	YEN 18200	YEN 21200	YEN 27400	YEN 34800	YEN 46000
190 x 200 mm	YEN 24800	YEN 30600	YEN 42200	YEN 64000	

Coil

Web Code

215-470-433
 340-284-346
 767-220-371

Width 190mm

Quantity

Length	1 Reel
	0.5 m
1 m	YEN 45200
2 m	YEN 66000

Discs

Web Code

621-330-617
 489-973-661
 698-953-557
 682-054-381
 720-689-021
 646-294-674
 930-599-945

Diameter	Quantity		
	10 discs	20 discs	50 discs
4 mm	YEN 23400	YEN 26200	YEN 33200
6 mm	YEN 23800	YEN 26800	YEN 34200
8 mm	YEN 24200	YEN 27400	YEN 35200
10 mm	YEN 24600	YEN 28000	YEN 36200
15 mm	YEN 25800	YEN 29600	YEN 38600
25 mm	YEN 27800	YEN 32600	YEN 43400
50 mm	YEN 33400	YEN 40400	YEN 55500

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

CU070300

Thickness 0.05mm

Temper Half hard

Size

Web Code

412-862-364
 607-796-387
 974-544-703
 818-095-890

Size	Quantity				
	1pc	2pcs	5pcs	10pcs	20pcs
25 x 25 mm	YEN 13300	YEN 14200	YEN 16400	YEN 19200	YEN 24000
50 x 50 mm	YEN 15000	YEN 16600	YEN 20200	YEN 24600	YEN 31600
100 x 100 mm	YEN 18400	YEN 21400	YEN 27800	YEN 35400	
150 x 150 mm	YEN 21800	YEN 26200	YEN 35400	YEN 46200	

Coil

Web Code

261-978-140
 747-264-773

Width 292mm

Quantity

Length	1 Reel
	0.5 m
1 m	YEN 54000

Discs

Web Code

715-733-404
 466-680-330
 335-043-975
 880-498-308
 062-288-065
 786-004-839
 250-600-925

Diameter	Quantity		
	10 discs	20 discs	50 discs
4 mm	YEN 23400	YEN 26200	YEN 33200
6 mm	YEN 23800	YEN 26800	YEN 34200
8 mm	YEN 24200	YEN 27400	YEN 35200
10 mm	YEN 24600	YEN 28000	YEN 36200
15 mm	YEN 25800	YEN 29600	YEN 38600
25 mm	YEN 27800	YEN 32600	YEN 43400
50 mm	YEN 33400	YEN 40400	YEN 55500

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

CU070330

Thickness 0.075mm

Temper Half hard

Size

Web Code

325-113-054
 639-127-428
 890-927-057
 365-886-172

Size	Quantity				
	1pc	2pcs	5pcs	10pcs	20pcs
25 x 25 mm	YEN 12500	YEN 13200	YEN 14700	YEN 16800	YEN 20600
50 x 50 mm	YEN 13500	YEN 14500	YEN 16800	YEN 19800	YEN 24800
100 x 100 mm	YEN 15400	YEN 17200	YEN 21000	YEN 25800	YEN 33400
150 x 150 mm	YEN 17300	YEN 19900	YEN 25400	YEN 31800	YEN 41800

Coil

Web Code

735-770-987
 971-371-536
 421-441-842
 680-232-891

Width 150mm

Quantity

Length	1 Reel
	1 m
2 m	YEN 36600
5 m	YEN 49000
10 m	YEN 80500

Discs

Web Code

637-522-054
 690-253-165
 281-646-961
 205-866-635
 733-333-793
 666-717-365
 339-666-361

Diameter	Quantity		
	10 discs	20 discs	50 discs
4 mm	YEN 23000	YEN 25600	YEN 32400
6 mm	YEN 23200	YEN 26000	YEN 32800
8 mm	YEN 23400	YEN 26400	YEN 33400
10 mm	YEN 23800	YEN 26600	YEN 34000
15 mm	YEN 24400	YEN 27600	YEN 35400
25 mm	YEN 25600	YEN 29200	YEN 38000
50 mm	YEN 28600	YEN 33600	YEN 44800

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

Copper/Beryllium

Cu98/Be 2



Foil

CU070342

Thickness **0.1mm**
 Temper **Half hard**

Coil width **10mm**

Coil

Web Code

744-095-651
 572-788-967
 190-918-422
 767-835-284
 599-462-611

Width 10mm

Length

1 Reel
 0.5 m YEN 17900
 1 m YEN 18800
 2 m YEN 20200
 5 m YEN 23200
 10 m YEN 26600

Quantity

CU070340

Thickness **0.1mm**

Temper **Half hard**

Size

Web Code

458-290-756
 286-345-089
 793-136-214
 142-032-915
 872-429-798

Size

25 x 25 mm
 50 x 50 mm
 100 x 100 mm
 150 x 150 mm
 300 x 300 mm

		Quantity				
		1pc	2pcs	5pcs	10pcs	20pcs
YEN 12400	YEN 13000	YEN 14400	YEN 16400	YEN 19900		
YEN 13200	YEN 14100	YEN 16200	YEN 18900	YEN 23600		
YEN 14800	YEN 16400	YEN 19800	YEN 24000	YEN 30800		
YEN 16400	YEN 18700	YEN 23400	YEN 29200	YEN 38000		
YEN 21200	YEN 25400	YEN 34200				

Coil

Web Code

433-294-274
 754-120-432
 265-062-341

Width 305mm

Length

1 Reel
 0.5 m YEN 28200
 1 m YEN 33400
 2 m YEN 41800

Quantity

Discs

Web Code

721-540-980
 192-620-118
 077-516-958
 689-613-032
 201-627-759
 203-463-428
 432-926-392

Diameter

4 mm
 6 mm
 8 mm
 10 mm
 15 mm
 25 mm
 50 mm

		Quantity		
		10 discs	20 discs	50 discs
YEN 23000	YEN 25600	YEN 32200	YEN 32200	YEN 32200
YEN 23200	YEN 25800	YEN 32600	YEN 32600	YEN 32600
YEN 23400	YEN 26200	YEN 33200	YEN 33200	YEN 33200
YEN 23600	YEN 26400	YEN 33600	YEN 33600	YEN 33600
YEN 24000	YEN 27200	YEN 34800	YEN 34800	YEN 34800
YEN 25000	YEN 28600	YEN 37000	YEN 37000	YEN 37000
YEN 27600	YEN 32200	YEN 42800	YEN 42800	YEN 42800

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

CU070350

Thickness **0.125mm**

Temper **Half hard**

Size

Web Code

115-795-538
 474-449-809
 306-227-003
 278-381-430
 773-531-842

Size

25 x 25 mm
 50 x 50 mm
 100 x 100 mm
 150 x 150 mm
 300 x 300 mm

		Quantity				
		1pc	2pcs	5pcs	10pcs	20pcs
YEN 12600	YEN 13300	YEN 14900	YEN 17100	YEN 21000		
YEN 13700	YEN 14800	YEN 17300	YEN 20400	YEN 25600		
YEN 15800	YEN 17800	YEN 22000	YEN 27000	YEN 35000		
YEN 17900	YEN 20800	YEN 26600	YEN 33600			
YEN 24200	YEN 29600	YEN 40600				

Coil

Web Code

661-945-892
 797-679-279
 709-901-289

Width 305mm

Length

1 Reel
 0.5 m YEN 32000
 1 m YEN 38800
 2 m YEN 48400

Quantity

Discs

Web Code

875-446-048
 430-762-021
 845-250-153
 656-268-585
 033-564-899
 195-600-237
 450-030-910

Diameter

4 mm
 6 mm
 8 mm
 10 mm
 15 mm
 25 mm
 50 mm

		Quantity		
		10 discs	20 discs	50 discs
YEN 23000	YEN 25800	YEN 32400	YEN 32400	YEN 32400
YEN 23200	YEN 26200	YEN 33000	YEN 33000	YEN 33000
YEN 23600	YEN 26400	YEN 33600	YEN 33600	YEN 33600
YEN 23800	YEN 26800	YEN 34200	YEN 34200	YEN 34200
YEN 24400	YEN 27800	YEN 35800	YEN 35800	YEN 35800
YEN 25800	YEN 29600	YEN 38800	YEN 38800	YEN 38800
YEN 29200	YEN 34400	YEN 46200	YEN 46200	YEN 46200

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

CU070361

Thickness **0.15mm**

Coil width **.3mm**

Coil

Web Code

038-461-244
 089-189-946
 950-355-291
 235-403-967
 799-142-683

Width 0.3mm

Length

1 Reel
 0.5 m YEN 17400
 1 m YEN 20000
 2 m YEN 23600
 5 m YEN 31000
 10 m YEN 49600

Quantity

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

Copper/Beryllium

Cu98/Be 2



Foil

CU070360

Thickness 0.15mm

Temper Half hard

Size

Web Code

253-873-537
 734-194-535
 774-318-664
 789-825-322
 214-238-666

Size
 25 x 25 mm
 50 x 50 mm
 100 x 100 mm
 150 x 150 mm
 300 x 300 mm

		Quantity				
	1pc	2pcs	5pcs	10pcs	20pcs	
YEN 12500	YEN 13100	YEN 14600	YEN 16700	YEN 20400		
YEN 13400	YEN 14400	YEN 16700	YEN 19600	YEN 24400		
YEN 15200	YEN 17000	YEN 20800	YEN 25400	YEN 32600		
YEN 17100	YEN 19600	YEN 24800	YEN 31200			
YEN 22600	YEN 27400	YEN 37200				

Coil

Web Code

867-286-304
 728-168-136
 021-020-274

Width 305mm

Length
 0.5 m
 1 m
 2 m

Quantity

1 Reel	
YEN 29800	YEN 35800
YEN 49200	

Discs

Web Code

255-331-986
 916-495-370
 561-916-641
 239-580-290
 947-530-648
 441-329-146
 166-148-516

Diameter
 4 mm
 6 mm
 8 mm
 10 mm
 15 mm
 25 mm
 50 mm

Quantity

	10 discs	20 discs	50 discs
YEN 23000	YEN 25600	YEN 32400	
YEN 23200	YEN 26000	YEN 32800	
YEN 23400	YEN 26200	YEN 33400	
YEN 23600	YEN 26600	YEN 33800	
YEN 24200	YEN 27400	YEN 35200	
YEN 25400	YEN 29000	YEN 37800	
YEN 28200	YEN 33200	YEN 44200	

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

CU070380

Thickness 0.2mm

Temper Annealed

Size

Web Code

768-565-415
 070-680-456
 835-061-369
 382-666-452

Size
 25 x 25 mm
 50 x 50 mm
 100 x 100 mm
 150 x 150 mm

		Quantity				
	1pc	2pcs	5pcs	10pcs	20pcs	
YEN 12500	YEN 13100	YEN 14600	YEN 16700	YEN 20400		
YEN 13400	YEN 14400	YEN 16700	YEN 19700	YEN 24600		
YEN 15300	YEN 17100	YEN 20800	YEN 25400	YEN 32800		
YEN 17100	YEN 19700	YEN 25000	YEN 31400	YEN 43600		

Coil

Web Code

972-240-157
 833-302-878
 162-859-459
 357-427-534

Width 216mm

Length
 0.5 m
 1 m
 2 m
 5 m

Quantity

1 Reel	
YEN 27600	YEN 32800
YEN 42000	YEN 81500

Discs

Web Code

805-538-095
 692-260-168
 532-522-871
 565-356-669
 669-583-076
 697-875-247
 234-412-171

Diameter
 4 mm
 6 mm
 8 mm
 10 mm
 15 mm
 25 mm
 50 mm

Quantity

	10 discs	20 discs	50 discs
YEN 23000	YEN 25600	YEN 32400	
YEN 23200	YEN 26000	YEN 32800	
YEN 23400	YEN 26400	YEN 33400	
YEN 23600	YEN 26600	YEN 34000	
YEN 24200	YEN 27400	YEN 35200	
YEN 25400	YEN 29200	YEN 37800	
YEN 28400	YEN 33200	YEN 44400	

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

CU070381

Thickness 0.2mm

Temper Half hard

Size

Web Code

791-181-749
 956-528-724
 170-256-127
 657-802-753
 574-844-576

Size
 25 x 25 mm
 50 x 50 mm
 100 x 100 mm
 150 x 150 mm
 300 x 300 mm

		Quantity				
	1pc	2pcs	5pcs	10pcs	20pcs	
YEN 12500	YEN 13100	YEN 14600	YEN 16700	YEN 20400		
YEN 13400	YEN 14400	YEN 16700	YEN 19700	YEN 24600		
YEN 15300	YEN 17100	YEN 20800	YEN 25400	YEN 32800		
YEN 17100	YEN 19700	YEN 25000	YEN 31400			
YEN 22600	YEN 27400	YEN 40000				

Coil

Web Code

195-752-436
 723-724-506
 207-618-595

Width 305mm

Length
 0.5 m
 1 m
 2 m

Quantity

1 Reel	
YEN 30000	YEN 36000
YEN 53000	

Discs

Web Code

740-166-265
 325-141-955
 203-231-125
 622-722-894
 899-927-040
 735-644-765
 230-997-883

Diameter
 4 mm
 6 mm
 8 mm
 10 mm
 15 mm
 25 mm
 50 mm

Quantity

	10 discs	20 discs	50 discs
YEN 23000	YEN 25600	YEN 32400	
YEN 23200	YEN 26000	YEN 32800	
YEN 23400	YEN 26400	YEN 33400	
YEN 23600	YEN 26600	YEN 34000	
YEN 24200	YEN 27400	YEN 35200	
YEN 25400	YEN 29200	YEN 37800	
YEN 28400	YEN 33200	YEN 44400	

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

Copper/Beryllium

Cu98/Be 2



Foil

CU070450

Thickness 0.25mm

Temper Annealed

Size

Web Code

301-520-676
 690-083-628
 260-457-486
 557-185-560

Size
 25 x 25 mm
 50 x 50 mm
 100 x 100 mm
 150 x 150 mm

		Quantity				
	1pc	2pcs	5pcs	10pcs	20pcs	
YEN 12600	YEN 13200	YEN 14800	YEN 16900	YEN 20600	YEN 20600	
YEN 13500	YEN 14600	YEN 16900	YEN 20000	YEN 25000	YEN 25000	
YEN 15500	YEN 17300	YEN 21200	YEN 26000	YEN 36600	YEN 36600	
YEN 17400	YEN 20000	YEN 25600	YEN 36600			

Coil

Web Code

975-797-933
 648-197-945
 024-741-422

Width 170mm

		Quantity
		1 Reel
Length	0.5 m	YEN 26800
	1 m	YEN 32800
	2 m	YEN 50000

Discs

Web Code

875-903-579
 487-937-758
 992-218-780
 027-341-741
 417-715-053
 214-377-820
 797-231-871

		Quantity			
Diameter		10 discs	20 discs	50 discs	100 discs
4 mm	YEN 23000	YEN 25600	YEN 32400	YEN 43400	
6 mm	YEN 23200	YEN 26000	YEN 33000	YEN 44200	
8 mm	YEN 23400	YEN 26400	YEN 33400	YEN 45000	
10 mm	YEN 23800	YEN 26800	YEN 34000	YEN 45600	
15 mm	YEN 24400	YEN 27600	YEN 35400	YEN 47600	
25 mm	YEN 25600	YEN 29400	YEN 38200	YEN 51500	
50 mm	YEN 28600	YEN 33800	YEN 45200		

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

CU070451

Thickness 0.25mm

Temper Half hard

Size

Web Code

504-972-960
 390-423-016
 120-434-717
 176-444-392
 884-897-152

Size
 25 x 25 mm
 50 x 50 mm
 100 x 100 mm
 150 x 150 mm
 300 x 300 mm

		Quantity				
	1pc	2pcs	5pcs	10pcs	20pcs	
YEN 12600	YEN 13200	YEN 14800	YEN 16900	YEN 20600	YEN 20600	
YEN 13500	YEN 14600	YEN 16900	YEN 20000	YEN 25000	YEN 25000	
YEN 15500	YEN 17300	YEN 21200	YEN 26000	YEN 36600	YEN 36600	
YEN 17400	YEN 20000	YEN 25600	YEN 36600			
YEN 23200	YEN 30000	YEN 58000				

Coil

Web Code

362-121-388
 066-489-708

Width 300mm

		Quantity
		1 Reel
Length	0.5 m	YEN 30800
	1 m	YEN 46000

Discs

Web Code

075-995-946
 817-873-156
 498-813-036
 787-951-182
 334-373-698
 809-556-255
 850-923-747

		Quantity			
Diameter		10 discs	20 discs	50 discs	100 discs
4 mm	YEN 23000	YEN 25600	YEN 32400	YEN 43400	
6 mm	YEN 23200	YEN 26000	YEN 33000	YEN 44200	
8 mm	YEN 23400	YEN 26400	YEN 33400	YEN 44800	
10 mm	YEN 23800	YEN 26800	YEN 34000	YEN 45600	
15 mm	YEN 24400	YEN 27600	YEN 35400	YEN 47600	
25 mm	YEN 25600	YEN 29400	YEN 38200	YEN 51500	
50 mm	YEN 28600	YEN 33800	YEN 45200		

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

CU070458

Thickness 0.30mm
 Temper Half hard

Coil width 15.5mm

Coil

Web Code

323-280-080
 269-276-806
 157-595-687
 539-046-520

Width 15.5mm

		Quantity
		1 Reel
Length	0.5 m	YEN 19300
	1 m	YEN 20800
	2 m	YEN 23200
	5 m	YEN 27600

CU070475

Thickness 0.38mm

Temper Annealed

Size

Web Code

653-977-181
 747-149-685
 155-726-398
 130-616-858

Size
 25 x 25 mm
 50 x 50 mm
 89 x 89 mm
 178 x 178 mm

		Quantity				
	1pc	2pcs	5pcs	10pcs	20pcs	
YEN 12800	YEN 13500	YEN 15300	YEN 17600	YEN 21600	YEN 21600	
YEN 14000	YEN 15200	YEN 17900	YEN 21400	YEN 27000	YEN 27000	
YEN 15800	YEN 17900	YEN 22200	YEN 27200	YEN 40600	YEN 40600	
YEN 20000	YEN 23800	YEN 37000	YEN 62500			

Coil

Web Code

669-113-282
 595-350-962

Width 178mm

		Quantity
		1 Reel
Length	0.5 m	YEN 29800
	1 m	YEN 43000

Discs

Web Code

223-999-151
 999-889-462
 986-186-647
 273-328-161
 166-019-034
 752-382-746
 047-848-019

		Quantity			
Diameter		10 discs	20 discs	50 discs	100 discs
4 mm	YEN 23200	YEN 25800	YEN 32600	YEN 43600	
6 mm	YEN 23400	YEN 26200	YEN 33400	YEN 44600	
8 mm	YEN 23800	YEN 26800	YEN 34000	YEN 45600	
10 mm	YEN 24000	YEN 27200	YEN 34600	YEN 46600	
15 mm	YEN 24800	YEN 28200	YEN 36400	YEN 49000	
25 mm	YEN 26200	YEN 30400	YEN 39800	YEN 54000	
50 mm	YEN 30200	YEN 35800	YEN 51000		

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

Copper/Beryllium

Cu98/Be 2



Foil

CU070501

Thickness **0.5mm**

Temper **Half hard**

Size

Web Code

621-663-488
 020-714-938
 555-239-210
 883-337-807
 568-525-678

Size
 25 x 25 mm
 50 x 50 mm
 100 x 100 mm
 150 x 150 mm
 300 x 300 mm

		Quantity							
		1pc	2pcs	5pcs	10pcs	20pcs			
YEN	12900	YEN	13600	YEN	15400	YEN	17900	YEN	22000
YEN	14100	YEN	15400	YEN	18300	YEN	21800	YEN	27800
YEN	16700	YEN	19000	YEN	24000	YEN	31200		
YEN	19200	YEN	22600	YEN	32200				
YEN	27200	YEN	43200						

Coil

Web Code

884-525-131
 001-348-627

Width 305mm

Length

0.5 m
 1 m

Quantity

1 Reel
 YEN 42000
 YEN 68500

Discs

Web Code

532-920-564
 516-474-186
 053-325-756
 644-854-906
 154-044-424
 636-306-820
 841-571-409

Diameter
 4 mm
 6 mm
 8 mm
 10 mm
 15 mm
 25 mm
 50 mm

		Quantity			
		10 discs	20 discs	50 discs	
YEN	24600	YEN	28000	YEN	36200
YEN	25000	YEN	28400	YEN	37000
YEN	25400	YEN	29000	YEN	37800
YEN	25800	YEN	29600	YEN	38800
YEN	26800	YEN	31000	YEN	41000
YEN	28600	YEN	33600	YEN	45200
YEN	33600	YEN	40600	YEN	61000

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

CU070525

Thickness **0.75mm**

Temper **Half hard**

Size

Web Code

172-064-770
 508-095-078
 511-885-537
 985-697-718
 459-148-236

Size
 25 x 25 mm
 50 x 50 mm
 100 x 100 mm
 150 x 150 mm
 300 x 300 mm

		Quantity							
		1pc	2pcs	5pcs	10pcs	20pcs			
YEN	12500	YEN	13300	YEN	15200	YEN	17700	YEN	22000
YEN	13900	YEN	15200	YEN	18200	YEN	22000	YEN	28000
YEN	16600	YEN	19100	YEN	24200	YEN	33200	YEN	55500
YEN	19300	YEN	23000	YEN	34400	YEN	58000		
YEN	29000	YEN	47000						

Coil

Web Code

793-434-886
 212-218-403

Width 305mm

Length

0.5 m
 1 m

Quantity

1 Reel
 YEN 45200
 YEN 75500

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

CU070550

Thickness **1.0mm**

Temper **Annealed**

Size

Web Code

476-845-264
 605-650-911
 706-368-665
 472-177-084

Size
 25 x 25 mm
 50 x 50 mm
 100 x 100 mm
 200 x 200 mm

		Quantity							
		1pc	2pcs	5pcs	10pcs	20pcs			
YEN	12600	YEN	13500	YEN	15400	YEN	18000	YEN	22400
YEN	14100	YEN	15500	YEN	18700	YEN	22600	YEN	29000
YEN	17000	YEN	19700	YEN	25200	YEN	36400		
YEN	22800	YEN	29800	YEN	58000				

Coil

Web Code

962-007-592
 009-383-704

Width 215mm

Length

0.5 m
 1 m

Quantity

1 Reel
 YEN 39800
 YEN 64500

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

CU070576

Thickness **2.0mm**

Temper **Half hard**

Size

Web Code

637-181-739
 443-814-263
 435-993-476

Size
 46 x 50 mm
 46 x 100 mm
 46 x 250 mm

		Quantity			
		1pc	2pcs	5pcs	
YEN	17800	YEN	22000	YEN	29200
YEN	19400	YEN	24400		
YEN	22600	YEN	32200		

CU070575

Thickness **2.0mm**

Temper **1/4 Hard**

Size

Web Code

777-887-609
 875-852-720
 830-280-893
 013-291-950

Size
 92 x 100 mm
 92 x 200 mm
 92 x 400 mm
 92 x 894 mm

		Quantity			
		1pc	2pcs	5pcs	
YEN	21800	YEN	27600	YEN	43000
YEN	25000	YEN	34800		
YEN	32000	YEN	53000		
YEN	54500				

CU070600

Thickness **3.0mm**

Temper **Annealed**

Size

Web Code

931-096-866
 432-912-345

Size
 50 x 50 mm
 100 x 100 mm

		Quantity			
		1pc	2pcs	5pcs	
YEN	19500	YEN	24600	YEN	33000
YEN	25200	YEN	35200	YEN	67000

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

Alloy - Copper/Beryllium

Copper/Beryllium

Cu98/Be 2



Foil

CU070601

Thickness **3.0mm**

Temper **1/4 Hard**

Size

Web Code
 517-387-893
 581-087-431

Size
 90 x 90 mm
 180 x 180 mm

Quantity		
1pc	2pcs	5pcs
YEN 24000	YEN 31600	YEN 58000
YEN 44200	YEN 77500	

Coil

Web Code
 753-815-327

Width 180mm

Length
 0.5 m YEN 95500

Quantity

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

CU070650

Thickness **6.35mm**

Temper **Hard**

Size

Web Code
 376-631-399
 647-384-806

Size
 50 x 50 mm
 100 x 100 mm

Quantity		
1pc	2pcs	5pcs
YEN 20200	YEN 24600	YEN 36400
YEN 27800	YEN 44200	

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000



Wire

CU075110

Diameter **0.025mm**

Temper **Hard**

Length

Web Code
 345-956-807
 702-473-471
 394-068-666
 258-583-898
 373-007-660
 768-437-276

Quantity	
Length	1 Reel
10 m	YEN 12200
20 m	YEN 14800
50 m	YEN 20200
100 m	YEN 26800
500 m	YEN 48000
1000 m	YEN 64000

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

CU075111

Diameter **0.030mm**

Temper **Hard**

Length

Web Code
 535-859-272
 325-160-414
 290-512-212
 651-977-833
 562-821-042
 451-499-462

Quantity	
Length	1 Reel
10 m	YEN 12000
20 m	YEN 14400
50 m	YEN 19600
100 m	YEN 26000
500 m	YEN 46000
1000 m	YEN 61500

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

CU075113

Diameter **0.035mm**

Temper **Hard**

Length

Web Code
 779-501-870

Quantity	
Length	1 Reel
10 m	YEN 12700

CU075115

Diameter **0.05mm**

Temper **Hard**

Length

Web Code
 625-951-310
 243-916-837
 489-605-029
 200-626-398
 078-293-652
 786-708-958
 338-622-040

Quantity	
Length	1 Reel
50 m	YEN 15500
100 m	YEN 17100
250 m	YEN 20800
500 m	YEN 25600
1000 m	YEN 33600
2000 m	YEN 40800
5000 m	YEN 57000

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

CU075117

Diameter **0.05mm**
 Condition **Gold plated wire**

Temper **Hard**

Length

Web Code
 673-025-254
 025-135-842
 084-877-260
 983-524-013
 859-942-850

Quantity	
Length	1 Reel
1 m	YEN 17000
5 m	YEN 23000
10 m	YEN 27600
20 m	YEN 34000
50 m	YEN 46800

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

Alloy – Copper/Beryllium

Copper/Beryllium

Cu98/Be 2



Wire

CU075118 Diameter **0.075mm** Temper **Hard**

Length		Quantity	
Web Code	Length	1 Reel	
327-756-668	50 m	YEN	16000
969-575-562	100 m	YEN	17800
196-940-985	250 m	YEN	21800
617-624-394	500 m	YEN	27000
203-041-002	1000 m	YEN	35800
380-131-518	2000 m	YEN	43800
516-444-603	5000 m	YEN	67000

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

CU075116 Diameter **0.08mm** Temper **Hard**

Length		Quantity	
Web Code	Length	1 Reel	
096-245-627	25 m	YEN	16700

CU075119 Diameter **0.1mm** Temper **Hard**

Length		Quantity	
Web Code	Length	1 Reel	
423-251-634	50 m	YEN	16300
722-533-684	100 m	YEN	18300
911-372-698	250 m	YEN	22600
660-064-804	500 m	YEN	28200
032-126-488	1000 m	YEN	37400
465-040-873	2000 m	YEN	46000
977-099-903	5000 m	YEN	75500

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

CU075120 Diameter **0.125mm** Temper **Hard**

Length		Quantity	
Web Code	Length	1 Reel	
555-577-604	10 m	YEN	12900
447-211-090	20 m	YEN	13600
901-386-638	100 m	YEN	16800
673-328-764	500 m	YEN	25800
166-099-562	1000 m	YEN	34400

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

CU075121 Diameter **0.125mm** Temper **Hard**

Condition **Gold plated wire**

Length		Quantity	
Web Code	Length	1 Reel	
724-388-808	1 m	YEN	20600
122-301-988	2 m	YEN	24000
953-812-195	5 m	YEN	31000
388-389-652	10 m	YEN	38800
405-193-130	20 m	YEN	49800

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

CU075131 Diameter **0.25mm** Condition **Straight wire**

Temper **Hard**

Size	Length	Quantity			
		1pc	2pcs	5pcs	10pcs
Web Code				0.4040g	#1000 mm#

CU075130 Diameter **0.25mm** Temper **Hard**

Length		Quantity	
Web Code	Length	1 Reel	
141-678-187	5 m	YEN	12700
709-774-609	25 m	YEN	15100
721-830-903	50 m	YEN	17000
228-874-674	100 m	YEN	19800
609-332-032	500 m	YEN	33000
166-501-540	1000 m	YEN	45600

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

Alloy – Copper/Beryllium

Copper/Beryllium

Cu98/Be 2



Wire

CU075133

Diameter **0.25mm** Temper **Hard**
 Condition **Gold plated wire**

Length		Quantity	
Web Code	Length		1 Reel
787-643-059	1 m	YEN	27600
115-017-053	2 m	YEN	34000
443-478-889	5 m	YEN	46800
966-196-298	10 m	YEN	61000

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

CU075132

Diameter **0.30mm** Temper **Annealed**

Length		Quantity	
Web Code	Length		1 Reel
620-530-512	5 m	YEN	12700
867-900-881	25 m	YEN	15100
695-086-826	50 m	YEN	17000
100-956-344	100 m	YEN	19800
002-526-381	500 m	YEN	33000
300-347-741	1000 m	YEN	45600

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

CU075319

Diameter **0.5mm** Condition **Straight wire**
 Temper **Hard**

Web Code	Length	Quantity				
		10pcs	20pcs	50pcs	100pcs	200pcs
				0.1131g	#70 mm#	

CU075320

Diameter **0.5mm** Condition **Straight wire**
 Temper **Hard**

Web Code	Length	Quantity				
		1pc	2pcs	5pcs	10pcs	20pcs
				1.6g	#1000 mm#	

CU075140

Diameter **0.5mm** Temper **Hard**

Length		Quantity	
Web Code	Length		1 Reel
585-972-173	2 m	YEN	12300
246-515-038	10 m	YEN	14600
814-375-759	20 m	YEN	16300
796-972-557	50 m	YEN	19900
621-567-180	100 m	YEN	24000
695-896-923	500 m	YEN	56000
987-112-532	1000 m	YEN	102000

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

CU075340

Diameter **1.0mm** Condition **Straight wire**
 Temper **Hard**

Web Code	Length	Quantity				
		1pc	2pcs	5pcs	10pcs	20pcs
				6.5g	#1000 mm#	

CU075150

Diameter **1.0mm** Temper **Hard**

Length		Quantity	
Web Code	Length		1 Reel
633-182-259	1 m	YEN	12900
147-776-464	5 m	YEN	15900
056-508-932	10 m	YEN	18200
472-058-395	25 m	YEN	22800
007-294-806	50 m	YEN	28000
911-861-518	100 m	YEN	41400

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

CU075160

Diameter **1.63mm** Temper **Hard**

Length		Quantity	
Web Code	Length		1 Reel
836-709-251	0.5 m	YEN	13100
588-660-031	1 m	YEN	14200
582-506-393	2 m	YEN	15700
813-293-517	5 m	YEN	18900
661-699-858	10 m	YEN	22400
712-476-524	20 m	YEN	30000

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

Copper/Beryllium

Cu98/Be 2



Insulated Wire

CU075820

Conductor diameter..... **0.025mm**
 Insulation **Polyimide**

Insulation thickness..... **0.004mm**
 Temper..... **Hard**

Length

Web Code
 836-479-528
 978-306-691
 602-143-629
 179-473-238
 777-852-730
 299-122-496

Quantity

Length	1 Reel
10 m	YEN 12800
20 m	YEN 15500
50 m	YEN 21400
100 m	YEN 28600
200 m	YEN 36200
500 m	YEN 52000

CU075830

Conductor diameter..... **0.075mm**
 Insulation **Polyimide**

Insulation thickness..... **0.008mm**
 Temper..... **Hard**

Length

Web Code
 627-310-983
 983-787-350
 553-053-348
 049-848-253
 704-442-454

Quantity

Length	1 Reel
10 m	YEN 14100
20 m	YEN 17400
50 m	YEN 24400
100 m	YEN 32600
200 m	YEN 42200

CU075835

Conductor diameter..... **0.1mm**
 Insulation **Polyimide**

Insulation thickness..... **0.01mm**
 Temper..... **Hard**

Length

Web Code
 108-832-357
 849-334-563
 166-615-619
 842-025-565
 153-295-728

Quantity

Length	1 Reel
10 m	YEN 15100
20 m	YEN 18800
50 m	YEN 26400
100 m	YEN 35800
200 m	YEN 46400



Rod

CU077903

Diameter..... **1.8mm**
 Condition..... **Centreless ground**

Temper..... **Half hard**

Size

Web Code
 795-232-084
 272-800-099
 565-764-038
 921-475-864

Quantity

Length	1pc	2pcs	5pcs	10pcs	20pcs
100 mm	YEN 12800	YEN 14800	YEN 17700	YEN 21000	YEN 26000
200 mm	YEN 14100	YEN 16700	YEN 20600	YEN 25200	
500 mm	YEN 16800	YEN 20400			
1000 mm	YEN 19800				

May contain lead as a free machining additive.

CU077905

Diameter..... **2.0mm**

Temper..... **Half hard**

Size

Web Code
 195-052-020
 027-871-503
 930-157-948
 223-946-177

Quantity

Length	1pc	2pcs	5pcs	10pcs	20pcs
100 mm	YEN 12400	YEN 14300	YEN 16900	YEN 19900	YEN 24200
200 mm	YEN 13600	YEN 16000	YEN 19500	YEN 23600	YEN 29600
500 mm	YEN 16000	YEN 19300	YEN 24800	YEN 31000	
1000 mm	YEN 18600	YEN 23000	YEN 30600		

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

May contain lead as a free machining additive.

CU077910

Diameter..... **3.2mm**

Temper..... **Half hard**

Size

Web Code
 445-721-926
 715-241-332
 405-168-375
 646-045-727

Quantity

Length	1pc	2pcs	5pcs	10pcs	20pcs
100 mm	YEN 12600	YEN 14500	YEN 17100	YEN 20200	YEN 24800
200 mm	YEN 13800	YEN 16200	YEN 19900	YEN 24200	YEN 30400
500 mm	YEN 16200	YEN 19700	YEN 25400	YEN 32000	
1000 mm	YEN 19000	YEN 23600	YEN 31600		

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

May contain lead as a free machining additive.

CU077915

Diameter..... **4.0mm**

Temper..... **Hard**

Size

Web Code
 847-640-101
 811-004-154
 335-706-373
 423-244-651

Quantity

Length	1pc	2pcs	5pcs	10pcs
100 mm	YEN 14600	YEN 17700	YEN 22800	YEN 29400
200 mm	YEN 16300	YEN 20200	YEN 26800	YEN 35000
500 mm	YEN 19800	YEN 25200		
1000 mm	YEN 23800	YEN 30600		

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000

May contain lead as a free machining additive.

Alloy – Copper/Beryllium

Copper/Beryllium

Cu98/Be 2



Rod

CU077920

Diameter 4.8mm

Temper Hard

Size

Web Code

123-885-527
 401-456-883
 634-221-643
 764-847-282

Length	Quantity			
	1pc	2pcs	5pcs	10pcs
100 mm	YEN 15200	YEN 18500	YEN 24000	YEN 31200
200 mm	YEN 17200	YEN 21400	YEN 28600	YEN 37400
500 mm	YEN 21200	YEN 27000		
1000 mm	YEN 25600	YEN 33200		

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000
 May contain lead as a free machining additive.

CU077925

Diameter 6.35mm

Temper Hard

Size

Web Code

046-759-348
 359-216-404
 061-581-457
 451-350-421

Length	Quantity			
	1pc	2pcs	5pcs	10pcs
100 mm	YEN 16300	YEN 20200	YEN 25800	YEN 32400
200 mm	YEN 18800	YEN 23600	YEN 31200	YEN 40200
500 mm	YEN 23800	YEN 30600	YEN 45000	
1000 mm	YEN 29400	YEN 38600		

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000
 May contain lead as a free machining additive.

CU077930

Diameter 9.5mm

Temper As drawn

Size

Web Code

499-448-206
 066-701-880
 804-531-909
 778-193-947

Length	Quantity			
	1pc	2pcs	5pcs	10pcs
100 mm	YEN 18000	YEN 22800	YEN 28200	YEN 34400
200 mm	YEN 20600	YEN 26200	YEN 33800	YEN 49800
500 mm	YEN 25600	YEN 33400	YEN 57500	
1000 mm	YEN 31200	YEN 48600		

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000
 May contain lead as a free machining additive.

CU077940

Diameter 12.7mm

Temper Hard

Size

Web Code

921-387-223
 103-814-969
 399-661-370
 339-872-809

Length	Quantity		
	1pc	2pcs	5pcs
100 mm	YEN 19500	YEN 24800	YEN 31400
200 mm	YEN 22600	YEN 29200	YEN 43000
500 mm	YEN 29000	YEN 42600	
1000 mm	YEN 40400		

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000
 May contain lead as a free machining additive.

CU077950

Diameter 20mm

Temper Hard

Size

Web Code

576-026-732
 807-003-644
 637-427-097
 965-738-422

Length	Quantity		
	1pc	2pcs	5pcs
50 mm	YEN 17600	YEN 21400	YEN 32600
100 mm	YEN 20400	YEN 27000	YEN 51500
200 mm	YEN 26000	YEN 42200	
500 mm	YEN 48800		

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000
 May contain lead as a free machining additive.

CU077955

Diameter 25mm

Temper Hard

Size

Web Code

216-635-251
 855-708-031
 059-529-339

Length	Quantity	
	1pc	2pcs
50 mm	YEN 18700	YEN 23000
100 mm	YEN 22000	YEN 32000
200 mm	YEN 31000	

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000
 May contain lead as a free machining additive.

CU077960

Diameter 31.75mm

Temper Hard

Size

Web Code

772-375-789
 806-311-326
 917-361-305

Length	Quantity	
	1pc	2pcs
50 mm	YEN 20800	YEN 28200
100 mm	YEN 27200	YEN 44800
200 mm	YEN 43800	

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000
 May contain lead as a free machining additive.

Alloy – Copper/Beryllium

Copper/Beryllium

Cu98/Be 2



Rod

CU077980

Diameter **50.8mm**

Temper **Hard**

Size

Web Code
 939-066-475
 778-724-721
 626-319-856

Length	Quantity	
	1pc	2pcs
25 mm	YEN 21800	YEN 31600
50 mm	YEN 30400	YEN 51500
100 mm	YEN 50500	

Typical Analysis : Be 1.7 - 1.9%, Ni + Co 500 - 4000, total impurities 5000
 May contain lead as a free machining additive.

Alloy – Copper/Beryllium

INDEX

B

Berylco [®]	20
Brush 190 [®]	20

C

Copper/Beryllium (Cu98/Be 2)	20
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F

Foil, Copper/Beryllium	20
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I

Insulated Wire, Copper/Beryllium	31
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M

Mallory [®]	20
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R

Rod, Copper/Beryllium	31
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W

Wire	
.. Copper/Beryllium	28

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