

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 Platinum

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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

Ceramics: ANSI B18.6.7M-1985



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): $< 100\text{mm}$ $\pm 1\text{mm}$
 $\geq 100\text{mm}$ $+2\% / -1\%$



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): $< 100\text{mm}$ $\pm 5\text{mm}$
 $> 100\text{mm}$ $\pm 5\%$



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

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



Powder

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

Tolerances

Dimensions shown are nominal

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

Ceramics:	see item
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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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USA
A Pennsylvania corporation
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Siren : 381486836
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Import VAT number DE112610478

Goodfellow (Shanghai) Trading Co., Ltd

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SHANGHAI
200070
The People's Republic of China

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

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- 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,

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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

Platinum

Pt

Platinum was known to native South Americans before the arrival of Columbus and was introduced into Europe around 1750.

Platinum is a member of the platinum group metals and is lustrous, malleable and ductile; it has an abundance of approximately 0.001 ppm in the earth's crust. Of the group of six metals (Pt, Pd, Os, Ir, Rh and Ru), it is the most important. It is unaffected by oxygen and water and is only soluble in aqua regia or fused alkalis.

Applications for platinum are many and varied; for example, it is used to make weights and measures standards, it is used in the electronics industry for electrical contacts which might be subject to high temperatures, and it is used to manufacture electrodes which might be subject to chemical attack. A current and important use of platinum is in car exhaust catalysts, in which a ceramic honeycomb is coated with platinum. Platinum is also used to manufacture jewellery and, along with gold and silver, has its own hallmark.

Atomic Properties

Atomic number	78
Atomic radius - Goldschmidt	0.138 nm
Atomic weight	195.08 amu
Crystal structure	Face centred cubic
Electronic structure	Xe 4f ¹⁴ 5d ⁹ 6s ¹
Photo-electric work function	5.3 eV
Thermal neutron absorption cross-section	9.0 Barns
Valences shown	1, 2, 3, 4

Physical Properties

Boiling point	3827 C
Density @20C	21.45 g cm ⁻³
Melting point	1772 C

Electrical Properties

Electrical resistivity @20C	10.58 μOhmcm
Temperature coefficient @0-100C	0.00392 K ⁻¹

Thermal Properties

Coefficient of thermal expansion @0-100C	9.0 x10 ⁻⁶ K ⁻¹
Latent heat of evaporation	2405 J g ⁻¹
Latent heat of fusion	101 J g ⁻¹
Specific heat @25C	133 J K ⁻¹ kg ⁻¹
Thermal conductivity @0-100C	71.6 W m ⁻¹ K ⁻¹

Natural isotope distribution

Mass No.	%
190	0.01
192	0.79
194	32.90
195	33.80
196	25.30
198	7.20

Mechanical Properties

Material condition	Soft	Hard	Polycrystalline	
Bulk modulus			276	GPa
Hardness - Vickers	40	100		
Poisson's ratio			0.39	
Tensile modulus			170	GPa
Tensile strength	125-150	200-300	MPa	
Yield strength	14-35	185	MPa	



Microfoil

CONTRACT COATING of customers' own components or assemblies is available to special order.

PT004500	Thickness..... 0.1μm	Area density..... 120μg.cm⁻²			
	Purity..... 99.99%	Support..... Permanent Mylar 3.5μm			
Quantity					
Web Code	Disc diam.	1 disc	2discs	5discs	10discs
525-690-307	10 mm	YEN 36200	YEN 49800	YEN 90500	YEN 145000
912-089-098	25 mm	YEN 54000	YEN 77000	YEN 145000	YEN 235000

Typical Analysis : Starting Material : Ag < 1, Au 1, Ca < 1, Cu 1, Fe 3, Mg 1, Pd 1, Si 5.
 This item is normally made to order for delivery within 4-5 weeks.

PT004600	Thickness..... 0.25μm	Area density..... 300μg.cm⁻²			
	Purity..... 99.99%	Support..... Permanent Mylar 3.5μm			
Quantity					
Web Code	Disc diam.	1 disc	2discs	5discs	10discs
829-475-169	10 mm	YEN 40200	YEN 56000	YEN 103000	YEN 165000
549-761-579	25 mm	YEN 61000	YEN 87000	YEN 165000	YEN 269000

Typical Analysis : Starting Material : Ag < 1, Au 1, Ca < 1, Cu 1, Fe 3, Mg 1, Pd 1, Si 5.
 This item is normally made to order for delivery within 4-5 weeks.

PT004700	Thickness..... 0.5μm	Area density..... 600μg.cm⁻²			
	Purity..... 99.99+%	Support..... Permanent Mylar 3.5μm			
Quantity					
Web Code	Disc diam.	1 disc	2discs	5discs	10discs
517-566-554	10 mm	YEN 43000	YEN 60000	YEN 111000	YEN 179000

Typical Analysis : Starting Material : Ag < 1, Au 1, Ca < 1, Cu 1, Fe 3, Mg 1, Pd 1, Si 5.
 This item is normally made to order for delivery within 4-5 weeks.

PT004800	Thickness..... 0.75μm	Area density..... 900μg.cm⁻²			
	Purity..... 99.99+%	Support..... Permanent Mylar 3.5μm			
Quantity					
Web Code	Disc diam.	1 disc	2discs	5discs	10discs
285-042-784	10 mm	YEN 45600	YEN 64000	YEN 119000	YEN 192000

Typical Analysis : Starting Material : Ag < 1, Au 1, Ca < 1, Cu 1, Fe 3, Mg 1, Pd 1, Si 5.
 This item is normally made to order for delivery within 4-5 weeks.

PT004850	Thickness..... 1.0μm	Area density..... 900μg.cm⁻²			
	Purity..... 99.99+%	Support..... Permanent Mylar 3.5μm			
Quantity					
Web Code	Disc diam.	1 disc	2discs	5discs	10discs
423-206-306	10 mm	YEN 45600	YEN 64000	YEN 119000	YEN 192000
294-646-674	25 mm	YEN 70000	YEN 101000	YEN 192000	YEN 315000

Typical Analysis : Starting Material : Ag < 1, Au 1, Ca < 1, Cu 1, Fe 3, Mg 1, Pd 1, Si 5.
 This item is normally made to order for delivery within 4-5 weeks.

Metal - Platinum

Platinum

Pt



Foil

PT000170 Thickness **0.0005mm** Purity..... **99.85%**

Support..... **Permanent Polyester**

Sizes LT

Web Code
 541-740-126
 694-634-807

Size	Quantity		
	1pc	2pcs	5pcs
25 x 25 mm	YEN 53000	YEN 70500	YEN 106000
50 x 50 mm	YEN 92500	YEN 126000	

Typical Analysis : Ag 50, Al 80, Au 4, Bi 2, Ca 300, Co 25, Cr 5, Cu 250, Fe 300, Mg 4, Mn 25, Ni 150, Pb 25, Pd 15, Rh 10, Si 20, Ti 10, Zn 150.
 The support for this foil cannot be removed without destroying the foil itself.

PT000180 Thickness **0.00075mm** Purity..... **99.85%**

Support..... **Permanent Polyester**

Sizes LT

Web Code
 399-891-768
 024-501-805

Size	Quantity		
	1pc	2pcs	5pcs
25 x 25 mm	YEN 49800	YEN 66000	YEN 99000
50 x 50 mm	YEN 86500	YEN 118000	

Typical Analysis : Ag 50, Al 80, Au 4, Bi 2, Ca 300, Co 25, Cr 5, Cu 250, Fe 300, Mg 4, Mn 25, Ni 150, Pb 25, Pd 15, Rh 10, Si 20, Ti 10, Zn 150.
 The support for this foil cannot be removed without destroying the foil itself.

PT000190 Thickness **0.001mm** Purity..... **99.85%**

Support..... **Permanent Polyester**

Sizes LT

Web Code
 494-811-523
 389-377-078

Size	Quantity
	1pc
23 x 23 mm	YEN 45200
23 x 25 mm	YEN 46600

Typical Analysis : Ag 50, Al 80, Au 4, Bi 2, Ca 300, Co 25, Cr 5, Cu 250, Fe 300, Mg 4, Mn 25, Ni 150, Pb 25, Pd 15, Rh 10, Si 20, Ti 10, Zn 150.
 The support for this foil cannot be removed without destroying the foil itself.

PT000200 Thickness **0.001mm** Purity..... **99.95%**

Temper **As rolled**

Sizes LT

Web Code
 420-829-168

Size	Quantity	
	1pc	2pcs
25 x 25 mm	YEN 87500	YEN 125000

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000201 Thickness **0.00125mm** Purity..... **99.95%**

Temper **As rolled**

Sizes LT

Web Code
 744-153-607

Size	Quantity	
	1pc	2pcs
25 x 25 mm	YEN 80500	YEN 115000

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000202 Thickness **0.0015mm** Purity..... **99.95%**

Temper **As rolled**

Sizes LT

Web Code
 006-022-663
 123-446-773

Size	Quantity	
	1pc	2pcs
25 x 25 mm	YEN 59000	YEN 74000
50 x 50 mm	YEN 109000	

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000203 Thickness **0.002mm** Purity..... **99.95%**

Temper **As rolled**

Sizes LT

Web Code
 661-205-332
 484-276-013
 151-993-318

Size	Quantity		
	1pc	2pcs	5pcs
25 x 25 mm	YEN 47000	YEN 57500	YEN 94000
50 x 50 mm	YEN 76500	YEN 120000	
100 x 100 mm	YEN 201000		

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000206 Thickness **0.0025mm** Purity..... **99.95%**

Temper **As rolled**

Sizes LT

Web Code
 920-498-916
 334-600-843
 367-217-626

Size	Quantity		
	1pc	2pcs	5pcs
25 x 25 mm	YEN 41000	YEN 51000	YEN 85500
50 x 50 mm	YEN 68500	YEN 109000	
100 x 100 mm	YEN 186000		

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

Metal – Platinum

Platinum

Pt



Foil

PT000204

Thickness **0.003mm**
 Temper **As rolled**

Purity..... **99.95%**

Sizes LT

Web Code
 005-489-176
 772-704-077
 358-415-846

Size	Quantity		
	1pc	2pcs	5pcs
25 x 25 mm	YEN 39000	YEN 48400	YEN 81500
50 x 50 mm	YEN 65500	YEN 105000	
100 x 100 mm	YEN 178000		

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000207

Thickness **0.004mm**
 Temper **As rolled**

Purity..... **99.95%**

Sizes LT

Web Code
 306-845-400
 582-654-880
 381-228-935

Size	Quantity		
	1pc	2pcs	5pcs
25 x 25 mm	YEN 36800	YEN 45600	YEN 77500
50 x 50 mm	YEN 61500	YEN 98500	
100 x 100 mm	YEN 168000		

Discs

Web Code
 206-999-942
 874-999-062
 374-882-685
 860-331-677
 541-458-853

Diameter	Quantity		
	10 discs	20 discs	50 discs
4 mm	YEN 64000	YEN 87500	YEN 105000
6 mm	YEN 67000	YEN 92000	YEN 122000
8 mm	YEN 70500	YEN 100000	YEN 146000
10 mm	YEN 74500	YEN 113000	YEN 177000
15 mm	YEN 96000	YEN 155000	

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000208

Thickness **0.005mm**
 Temper **As rolled**

Purity..... **99.95%**

NLT Sizes

Web Code
 809-319-555
 577-623-996
 801-649-642

Size	Quantity		
	1pc	2pcs	5pcs
25 x 25 mm	YEN 36600	YEN 45200	YEN 76000
50 x 50 mm	YEN 60500	YEN 96500	
100 x 100 mm	YEN 164000		

Sizes LT

Web Code
 401-555-334
 394-488-736

Size	Quantity		
	1pc	2pcs	5pcs
25 x 25 mm	YEN 40200	YEN 49600	YEN 83500
50 x 50 mm	YEN 72500	YEN 116000	

Discs

Web Code
 150-774-822
 846-852-369
 856-540-191
 067-512-675
 439-077-992

Diameter	Quantity		
	10 discs	20 discs	50 discs
4 mm	YEN 64000	YEN 87000	YEN 105000
6 mm	YEN 67000	YEN 92000	YEN 121000
8 mm	YEN 70000	YEN 99500	YEN 144000
10 mm	YEN 74000	YEN 112000	YEN 175000
15 mm	YEN 95000	YEN 153000	

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000210

Thickness **0.0075mm**
 Temper **As rolled**

Purity..... **99.95%**

Sizes LT

Web Code
 457-509-449
 491-086-192
 150-519-234
 849-383-274

Size	Quantity			
	1pc	2pcs	5pcs	10pcs
25 x 25 mm	YEN 28400	YEN 35800	YEN 49600	YEN 73500
50 x 50 mm	YEN 43400	YEN 58500	YEN 126000	
100 x 100 mm	YEN 101000	YEN 191000		
150 x 150 mm	YEN 212000			

Discs

Web Code
 525-914-626
 739-325-768
 415-724-147
 965-513-540
 689-198-897
 149-861-091

Diameter	Quantity		
	10 discs	20 discs	50 discs
4 mm	YEN 38800	YEN 48800	YEN 75000
6 mm	YEN 43400	YEN 55500	YEN 85500
8 mm	YEN 48000	YEN 62000	YEN 96000
10 mm	YEN 52500	YEN 68500	YEN 109000
15 mm	YEN 64000	YEN 85000	YEN 175000
25 mm	YEN 96000		

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

Metal – Platinum

Platinum

Pt



Foil

PT000215

Thickness **0.01mm**
 Temper **As rolled**

Purity **99.95%**

Sizes LT

Web Code
 377-884-520
 962-385-700
 954-214-501

Size	Quantity		
	1pc	2pcs	5pcs
25 x 25 mm	YEN 28400	YEN 35800	YEN 49600
50 x 50 mm	YEN 43400	YEN 58500	
100 x 100 mm	YEN 101000		

Discs

Web Code
 804-983-916
 700-567-384
 615-476-325
 295-221-014
 593-236-198

Diameter	Quantity		
	10 discs	20 discs	50 discs
4 mm	YEN 38800	YEN 48800	YEN 75000
6 mm	YEN 43400	YEN 55500	YEN 85500
8 mm	YEN 48000	YEN 62000	YEN 96000
10 mm	YEN 52500	YEN 68500	YEN 109000
15 mm	YEN 64000	YEN 85000	

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000220

Thickness **0.0125mm**
 Temper **As rolled**

Purity **99.95%**

Sizes LT

Web Code
 054-103-031
 908-271-855
 987-592-002

Size	Quantity		
	1pc	2pcs	5pcs
25 x 25 mm	YEN 26800	YEN 33600	YEN 46600
50 x 50 mm	YEN 40800	YEN 54000	
100 x 100 mm	YEN 93500		

Discs

Web Code
 568-201-570
 025-199-176
 149-896-415
 737-060-587
 132-572-223

Diameter	Quantity		
	10 discs	20 discs	50 discs
4 mm	YEN 37600	YEN 47400	YEN 73000
6 mm	YEN 41800	YEN 53500	YEN 82500
8 mm	YEN 46000	YEN 59500	YEN 92500
10 mm	YEN 50500	YEN 65500	YEN 104000
15 mm	YEN 61000	YEN 80500	

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000228

Thickness **0.025mm**
 Purity **99.95%**

Coil width **0.4mm**
 Temper **As rolled**

Coil

Web Code
 831-722-699
 510-591-232
 362-800-218
 095-988-094

Length	Quantity	
	1 Reel	
0.05 m	YEN 23800	
0.1 m	YEN 27600	
0.2 m	YEN 32800	
0.5 m	YEN 43400	

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000233

Thickness **0.025mm**
 Purity **99.95%**

Coil width **.85mm**
 Temper **As rolled**

Coil

Web Code
 735-068-985
 528-080-259
 371-818-531
 079-739-610

Length	Quantity	
	1 Reel	
0.05 m	YEN 21400	
0.1 m	YEN 24200	
0.2 m	YEN 28000	
0.5 m	YEN 35600	

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000229

Thickness **0.025mm**
 Temper **As rolled**

Purity **99.95%**

Discs

Web Code
 664-947-957

Diameter	Quantity			
	1 discs	2 discs	5 discs	10 discs
1.2 mm	YEN 31400	YEN 43000	YEN 77000	YEN 110000

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000235

Thickness **0.025mm**
 Purity **99.95%**

Coil width **1.2mm**
 Temper **As rolled**

Coil

Web Code
 437-387-918
 545-061-783
 970-274-435
 658-092-229

Length	Quantity	
	1 Reel	
0.05 m	YEN 22600	
0.1 m	YEN 25800	
0.2 m	YEN 30400	
0.5 m	YEN 39600	

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

Metal – Platinum

Platinum

Pt



Foil

PT000234

Thickness **0.025mm**
 Purity **99.95%**

Coil width **1.6mm**
 Temper **As rolled**

Coil

Web Code
 284-134-131
 150-872-033
 875-062-085
 351-233-077

Width 1.6mm

Length **1 Reel**
 0.05 m YEN 23800
 0.1 m YEN 27600
 0.2 m YEN 33000
 0.5 m YEN 43400

Quantity

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000237

Thickness **0.025mm**
 Purity **99.95%**

Coil width **2mm**
 Temper **As rolled**

Coil

Web Code
 663-477-365
 344-097-183
 921-073-574
 211-695-261

Width 2mm

Length **1 Reel**
 0.05 m YEN 25000
 0.1 m YEN 29200
 0.2 m YEN 35000
 0.5 m YEN 46800

Quantity

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000232

Thickness **0.025mm**
 Purity **99.95%**

Coil width **5mm**
 Temper **As rolled**

Coil

Web Code
 707-079-114
 820-544-924
 610-534-766
 134-202-573

Width 5mm

Length **1 Reel**
 0.05 m YEN 28000
 0.1 m YEN 33600
 0.2 m YEN 41400
 0.5 m YEN 57000

Quantity

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000236

Thickness **0.025mm**
 Purity **99.95%**

Coil width **8mm**
 Temper **As rolled**

Coil

Web Code
 255-290-252
 719-170-053
 281-227-571
 605-944-423

Width 8mm

Length **1 Reel**
 0.05 m YEN 31600
 0.1 m YEN 38600
 0.2 m YEN 48400
 0.5 m YEN 77000

Quantity

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000230

Thickness **0.025mm**
 Temper **As rolled**

Purity **99.95%**

Sizes LT

Web Code
 183-246-607
 058-311-204
 800-456-707

Size	Quantity		
	1pc	2pcs	5pcs
25 x 25 mm	YEN 27400	YEN 36000	POA
50 x 50 mm	YEN 45800	POA	
100 x 100 mm	POA		

Discs

Web Code
 892-103-363
 512-915-924
 114-488-401
 311-058-644
 882-325-422

Diameter	Quantity		
	10 discs	20 discs	50 discs
4 mm	YEN 32800	YEN 40200	YEN 57500
6 mm	YEN 38600	YEN 48400	YEN 71000
8 mm	YEN 44600	YEN 57000	YEN 85500
10 mm	YEN 50500	YEN 66000	YEN 115000
15 mm	YEN 65000	YEN 97000	

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000240

Thickness **0.025mm**
 Temper **As rolled**

High Purity **99.99+%**

NLT Sizes

Web Code
 295-585-712
 820-253-112
 546-941-541

Size	Quantity		
	1pc	2pcs	5pcs
25 x 25 mm	YEN 39400	YEN 51000	POA
50 x 50 mm	YEN 64500	POA	
100 x 100 mm	POA		

Sizes LT

Web Code
 021-029-484
 810-154-651

Size	Quantity		
	1pc	2pcs	5pcs
25 x 25 mm	YEN 43400	YEN 56000	POA
50 x 50 mm	YEN 77500	POA	

Discs

Web Code
 190-850-587
 856-324-081
 040-511-788
 063-965-320
 995-664-105

Diameter	Quantity		
	10 discs	20 discs	50 discs
4 mm	YEN 43200	YEN 52500	YEN 73000
6 mm	YEN 51000	YEN 64000	YEN 92000
8 mm	YEN 59500	YEN 75500	YEN 116000
10 mm	YEN 67500	YEN 88000	YEN 160000
15 mm	YEN 87500	YEN 136000	

Typical Analysis : Ag <1, Au 1, Ca <1, Cu 1, Fe 3, Mg 1, Pd 1, Si 5.

Platinum

Pt



Foil

PT000231 Thickness **0.025mm** Purity **99.95%**
 Temper **As rolled**

Sizes LT	Quantity
Web Code	Size
697-553-053	150 x 150 mm
	1pc
	POA

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000242 Thickness **0.029mm** Coil width **.34mm**
 Purity **99.99%** Temper **Annealed**

Coil	Width 0.34mm	Quantity
Web Code	Length	1 Reel
555-340-466	0.05 m	YEN 20400
725-666-574	0.1 m	YEN 22800
686-112-373	0.2 m	YEN 26000
521-508-016	0.5 m	YEN 32400
194-600-333	1 m	YEN 39800

Typical Analysis : Ag <1, Au 5, Ca <1, Cu <1, Fe 5, Mg <1, Pd 10, Si 2.

PT000227 Thickness **0.030mm** Coil width **.7mm**
 Purity **99.95%** Temper **As rolled**

Coil	Width 0.7mm	Quantity
Web Code	Length	1 Reel
054-329-360	0.05 m	YEN 21400
884-813-576	0.1 m	YEN 24000
914-114-448	0.2 m	YEN 28000
917-780-245	0.5 m	YEN 35600

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000246 Thickness **0.045mm** Coil width **.75mm**
 Purity **99.95%** Temper **As rolled**

Coil	Width 0.75mm	Quantity
Web Code	Length	1 Reel
906-353-173	0.05 m	YEN 23200
663-807-116	0.1 m	YEN 26600
832-020-837	0.2 m	YEN 31400
251-028-975	0.5 m	YEN 41200

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000249 Thickness **0.05mm** Coil width **1mm**
 Purity **99.99%** Temper **As rolled**

Coil	Width 1mm	Quantity
Web Code	Length	1 Reel
808-635-776	0.05 m	YEN 25000
914-221-322	0.1 m	YEN 29200
418-583-098	0.2 m	YEN 35000
042-677-952	0.5 m	YEN 46800

Typical Analysis : Ag <1, Au 5, Ca <1, Cu <1, Fe 5, Mg <1, Pd 10, Si 2.

PT000247 Thickness **0.05mm** Coil width **5mm**
 Purity **99.95%** Temper **As rolled**

Coil	Width 5mm	Quantity
Web Code	Length	1 Reel
363-534-598	0.05 m	YEN 33600
153-179-060	0.1 m	YEN 41400
892-598-678	0.2 m	YEN 53500

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000248 Thickness **0.05mm** Purity **99.95%**
 Temper **As rolled**

Size	Quantity
Web Code	Size
145-103-594	25 x 25 mm
690-996-105	50 x 50 mm
577-507-348	100 x 100 mm
	1pc
	2pcs
	5pcs
	POA
	POA

Discs	Quantity
Web Code	Diameter
064-400-485	4 mm
265-626-071	6 mm
606-754-422	8 mm
631-347-822	10 mm
342-172-769	15 mm
	10 discs
	20 discs
	50 discs
	YEN 38600
	YEN 48400
	YEN 71000
	YEN 47600
	YEN 61500
	YEN 92000
	YEN 56500
	YEN 74500
	YEN 127000
	YEN 66000
	YEN 88000
	YEN 180000
	YEN 87500
	YEN 154000

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

Metal – Platinum

Platinum

Pt



Foil

PT000261

Thickness **0.1mm**
 Temper **As rolled**

Purity **99.95%**

Size	Quantity		
Web Code	1pc	2pcs	5pcs
332-547-939	25 x 25 mm YEN 48400	YEN 67500	POA
614-976-588	50 x 50 mm YEN 123000	POA	
174-852-524	100 x 100 mm POA		

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000260

Thickness **0.1mm**
 Temper **As rolled**

High Purity **99.99+%**

Size	Quantity		
Web Code	1pc	2pcs	5pcs
901-822-577	25 x 25 mm YEN 53000	YEN 82000	POA
727-822-316	50 x 50 mm YEN 153000	POA	
977-792-019	100 x 100 mm POA		

Discs	Quantity		
Web Code	10 discs	20 discs	50 discs
224-003-454	4 mm YEN 49000	YEN 63500	YEN 95500
000-425-906	6 mm YEN 63500	YEN 85000	YEN 166000
053-241-838	8 mm YEN 78500	YEN 120000	YEN 271000
655-230-349	10 mm YEN 96500	YEN 173000	YEN 405000
903-790-648	15 mm YEN 184000	YEN 350000	

Typical Analysis : Ag <1, Au 1, Ca <1, Cu 1, Fe 3, Mg 1, Pd 1, Si 5.

PT000262

Thickness **0.1mm**
 Temper **As rolled**

High Purity **99.99+%**

Size	Quantity
Web Code	1pc
260-050-147	150 x 150 mm POA

Typical Analysis : Ag <1, Au 1, Ca <1, Cu 1, Fe 3, Mg 1, Pd 1, Si 5.

PT000252

Thickness **0.125mm**
 Purity **99.99%**

Coil width **2.5mm**
 Temper **As rolled**

Coil	Width 2.5mm	Quantity
Web Code	Length	1 Reel
137-961-071	0.05 m	YEN 30800
121-521-240	0.1 m	YEN 39600
584-454-339	0.2 m	YEN 57500

Typical Analysis : Ag <1, Au 5, Ca <1, Cu <1, Fe 5, Mg <1, Pd 10, Si 2.

PT000251

Thickness **0.125mm**
 Temper **As rolled**

Purity **99.95%**

Size	Quantity		
Web Code	1pc	2pcs	5pcs
302-593-572	25 x 25 mm YEN 51500	YEN 76500	YEN 177000
824-194-087	50 x 50 mm YEN 142000	POA	
024-261-832	100 x 100 mm POA		

Discs	Quantity		
Web Code	10 discs	20 discs	50 discs
032-728-684	4 mm YEN 48000	YEN 62000	YEN 93000
091-083-568	6 mm YEN 62000	YEN 82500	YEN 156000
385-439-467	8 mm YEN 76500	YEN 113000	YEN 253000
179-933-681	10 mm YEN 91000	YEN 162000	YEN 378000
491-705-736	15 mm YEN 172000	YEN 326000	

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000250

Thickness **0.125mm**
 Temper **As rolled**

High Purity **99.99+%**

Size	Quantity		
Web Code	1pc	2pcs	5pcs
920-362-358	25 x 25 mm YEN 56500	YEN 93000	POA
045-295-387	50 x 50 mm YEN 175000	POA	
661-919-022	100 x 100 mm POA		

Discs	Quantity		
Web Code	10 discs	20 discs	50 discs
484-969-776	4 mm YEN 51500	YEN 66500	YEN 101000
621-224-524	6 mm YEN 67000	YEN 89500	YEN 187000
653-070-900	8 mm YEN 83000	YEN 135000	YEN 308000
633-871-080	10 mm YEN 108000	YEN 197000	YEN 464000
233-875-318	15 mm YEN 210000	YEN 401000	

Typical Analysis : Ag <1, Au 1, Ca <1, Cu 1, Fe 3, Mg 1, Pd 1, Si 5.

Metal – Platinum

Platinum

Pt



Foil

PT000263

Thickness **0.15mm**
 Purity **99.99%**

Coil width **.9mm**
 Temper **As rolled**

Coil

Width 0.9mm

Quantity

Web Code

294-794-381
 001-871-635
 343-404-084

Length

1 Reel
 0.05 m YEN 25600
 0.1 m YEN 32200
 0.2 m YEN 42000

Typical Analysis : Ag <1, Au 5, Ca <1, Cu <1, Fe 5, Mg <1, Pd 10, Si 2.

PT000255

Thickness **0.15mm**
 Temper **As rolled**

Purity **99.95%**

Size

Web Code
 006-051-913
 297-823-129
 112-807-106

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

Quantity

1pc	2pcs	5pcs	10pcs
YEN 55500	YEN 90000	YEN 210000	POA
YEN 168000	POA		
POA			

Discs

Web Code
 343-235-996
 952-254-630
 676-488-216
 125-488-083
 890-711-956

Diameter
 4 mm
 6 mm
 8 mm
 10 mm
 15 mm

Quantity

10 discs	20 discs	50 discs
YEN 50500	YEN 66000	YEN 99500
YEN 66000	YEN 88500	YEN 181000
YEN 82000	YEN 130000	YEN 297000
YEN 105000	YEN 190000	YEN 447000
YEN 202000	YEN 386000	

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000265

Thickness **0.2mm**
 Purity **99.95%**

Coil width **5mm**
 Temper **As rolled**

Coil

Width 5mm

Quantity

Web Code
 377-548-598
 570-625-501

Length
 0.05 m YEN 52500
 0.1 m YEN 77000

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000264

Thickness **0.2mm**
 Temper **As rolled**

Purity **99.95%**

Size

Web Code
 354-284-067
 876-861-732
 973-938-439

Size
 15 x 15 mm
 30 x 30 mm
 60 x 60 mm

Quantity

1pc	2pcs	5pcs
YEN 42400	YEN 57000	POA
YEN 91500	POA	
POA		

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000272

Thickness **0.25mm**
 Temper **As rolled**

Purity **99.95%**

Size

Web Code
 602-795-763
 902-415-232
 948-090-333

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

Quantity

1pc	2pcs
YEN 74500	POA
POA	
POA	

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000270

Thickness **0.25mm**
 Temper **As rolled**

High Purity **99.99+%**

Size

Web Code
 728-197-151
 024-641-293
 080-159-031

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

Quantity

1pc	2pcs
YEN 84000	POA
POA	
POA	

Typical Analysis : Ag <1, Au 1, Ca <1, Cu 1, Fe 3, Mg 1, Pd 1, Si 5.

PT000271

Thickness **0.25mm**
 Temper **As rolled**

High Purity **99.999%**

Size

Web Code
 288-026-957
 374-743-315
 361-667-877

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

Quantity

1pc	2pcs
YEN 112000	POA
POA	
POA	

Typical Analysis : Ag <1, Cu <3, Pd <1.

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PT000300

Thickness **0.5mm**
 Temper **As rolled**

Purity **99.95%**

		Quantity	
Size	Web Code	Size	1pc
10 x 10 mm	675-222-048	10 x 10 mm	POA
25 x 25 mm	167-029-053	25 x 25 mm	POA
50 x 50 mm	878-625-409	50 x 50 mm	POA

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000320

Thickness **1.0mm**
 Temper **As rolled**

Purity **99.95%**

		Quantity	
Size	Web Code	Size	1pc
10 x 10 mm	596-931-478	10 x 10 mm	POA
25 x 25 mm	828-175-908	25 x 25 mm	POA
50 x 50 mm	521-990-393	50 x 50 mm	POA

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000321

Thickness **1.0mm**
 Temper **As rolled**

Purity **99.95%**
 Condition **Polished on 1 side**

		Quantity	
Size	Web Code	Size	1pc
5 x 10 mm	298-988-044	5 x 10 mm	POA
10 x 10 mm	597-710-434	10 x 10 mm	POA

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT000350

Thickness **2.0mm**
 Temper **As rolled**

Purity **99.95%**

		Quantity	
Size	Web Code	Size	1pc
10 x 10 mm	717-540-159	10 x 10 mm	POA
25 x 25 mm	248-794-595	25 x 25 mm	POA
50 x 50 mm	099-315-745	50 x 50 mm	POA

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.



Sputtering Target

PT009100

Thickness **0.1mm**
 Purity **99.95%**

Tolerance **15%**

		Quantity	
Size	Web Code	Disc diam.	1disc
25 mm	985-992-247	25 mm	POA
50 mm	688-690-748	50 mm	POA
54 mm	834-172-384	54 mm	POA
57 mm	488-030-928	57 mm	POA

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.
 These targets are normally available for immediate shipment from stock. Other sizes are available to special order.

PT009202

Thickness **0.2mm**

Purity **99.95%**

		Quantity	
Size	Web Code	Disc diam.	1disc
25 mm	517-031-741	25 mm	POA
50 mm	162-949-456	50 mm	POA
54 mm	566-077-567	54 mm	POA
57 mm	727-312-800	57 mm	POA

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.
 These targets are normally available for immediate shipment from stock. Other sizes are available to special order.

PT009205

Thickness **0.5mm**

Purity **99.95%**

		Quantity	
Size	Web Code	Disc diam.	1disc
25 mm	086-903-517	25 mm	POA
50 mm	595-793-978	50 mm	POA
54 mm	029-821-807	54 mm	POA

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.
 These targets are normally available for immediate shipment from stock. Other sizes are available to special order.

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Sputtering Target

PT009206

Thickness **1.0mm** Purity **99.95%**

Size	Quantity
Web Code	Disc diam. 1disc
560-553-154	25.4 mm POA
917-415-180	50.8 mm POA
748-107-851	76.2 mm POA

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.
 These targets are normally available for immediate shipment from stock. Other sizes are available to special order.

PT009210

Thickness **2.0mm** Purity **99.95%**

Size	Quantity
Web Code	Disc diam. 1disc
378-151-160	25.4 mm POA
548-851-783	50.8 mm POA
654-201-193	76.2 mm POA

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.
 These targets are normally available for immediate shipment from stock. Other sizes are available to special order.



Mesh

PT008720

Nominal Aperture **0.12mm** Wire diameter **0.04mm**
 Wires/inch **152** Open area **56%**
 Purity **99.9%** Type **Plain weave mesh**

Size	Quantity
Web Code	Size 1pc 2pcs 5pcs
382-062-561	20 x 20 mm YEN 33600 YEN 43200 YEN 63000
350-210-232	50 x 50 mm YEN 55500 YEN 90500
020-094-727	100 x 100 mm YEN 154000

Typical Analysis : Ag 100, Au 75, Cu 50, Fe <50, Ni <100, Pd 150, Rh <20, Si <50.

PT008710

Nominal Aperture **0.25mm** Wire diameter **0.06mm**
 Wires/inch **82x82** Open area **65%**
 Purity **99.9%** Type **Plain weave mesh**

Size	Quantity
Web Code	Size 1pc 2pcs 5pcs
985-469-901	20 x 20 mm YEN 34400 YEN 44000 YEN 64500
183-742-386	50 x 50 mm YEN 57000 YEN 96500
967-797-723	100 x 100 mm YEN 166000

Typical Analysis : Ag 100, Au 75, Cu 50, Fe <50, Ni <100, Pd 150, Rh <20, Si <50.

PT008705

Nominal Aperture **0.4mm** Wire diameter **0.1mm**
 Wires/inch **52** Open area **63%**
 Purity **99.9%** Type **Plain weave mesh**

Size	Quantity
Web Code	Size 1pc 2pcs 5pcs
512-248-138	20 x 20 mm YEN 42200 YEN 54500 YEN 91500
088-167-557	50 x 50 mm YEN 94500 YEN 172000
011-623-035	100 x 100 mm YEN 315000

Typical Analysis : Ag 100, Au 75, Cu 50, Fe <50, Ni <100, Pd 150, Rh <20, Si <50.



Wire

For high-temperature thermocouples we supply Platinum, Platinum/Rhodium alloys, Tungsten and Tungsten/Rhenium alloys.

PT005101

Diameter **0.0006mm** Purity **99.9%**
 Condition **Wollaston wire**

Length	Quantity
Web Code	Length 1 Reel
100-409-716	0.1 m YEN 46600
551-216-775	0.2 m YEN 58500
902-096-842	0.5 m YEN 87000
762-109-949	1 m YEN 156000
263-738-099	2 m POA

Typical Analysis : Ag 25, Au 40, B 5, Bi 1, Ca 2, Cu 25, Fe 50, Ir 150, Mg 2, Mn 2, Ni 15, Pb 5, Pd 150, Rh 50, Ru 100, Sb 20, Si 3, Sn 10, Zn 5.
 Wollaston wire, Silver coated. Overall outside diameter approx 0.05mm - 0.1mm. The weight shown is for the Platinum core only. The Silver outer sheath may be dissolved in aqueous 10% Nitric Acid.

Metal – Platinum

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Wire

PT005102

Diameter **0.001mm** Purity **99.9%**
 Condition **Wollaston wire**

Length		Quantity	
Web Code	Length	1 Reel	
967-250-549	0.1 m	YEN	43000
906-323-693	0.2 m	YEN	54500
290-460-344	0.5 m	YEN	80000
307-539-184	1 m	YEN	144000
442-398-446	2 m		POA

Typical Analysis : Ag 25, Au 40, B 5, Bi 1, Ca 2, Cu 25, Fe 50, Ir 150, Mg 2, Mn 2, Ni 15, Pb 5, Pd 150, Rh 50, Ru 100, Sb 20, Si 3, Sn 10, Zn 5.
 Wollaston wire, Silver coated. Overall outside diameter approx 0.05mm - 0.1mm. The weight shown is for the Platinum core only. The Silver outer sheath may be dissolved in aqueous 10% Nitric Acid.

PT005103

Diameter **0.002mm** Purity **99.9%**
 Condition **Wollaston wire**

Length		Quantity	
Web Code	Length	1 Reel	
299-811-994	0.1 m	YEN	39400
476-490-447	0.2 m	YEN	49200
561-305-008	0.5 m	YEN	78000
163-137-239	1 m	YEN	140000
392-162-146	2 m		POA

Typical Analysis : Ag 25, Au 40, B 5, Bi 1, Ca 2, Cu 25, Fe 50, Ir 150, Mg 2, Mn 2, Ni 15, Pb 5, Pd 150, Rh 50, Ru 100, Sb 20, Si 3, Sn 10, Zn 5.
 Wollaston wire, Silver coated. Overall outside diameter approx. 0.1 mm. The weight shown is for the Platinum core only. The Silver outer sheath may be dissolved in aqueous 10% Nitric Acid.

PT005105

Diameter **0.005mm** Purity **99.9%**
 Condition **Wollaston wire**

Length		Quantity	
Web Code	Length	1 Reel	
020-269-652	0.1 m	YEN	37400
533-703-783	0.2 m	YEN	46400
712-967-574	0.5 m	YEN	71000
120-943-650	1 m	YEN	127000
117-956-321	2 m		POA

Typical Analysis : Ag 25, Au 40, B 5, Bi 1, Ca 2, Cu 25, Fe 50, Ir 150, Mg 2, Mn 2, Ni 15, Pb 5, Pd 150, Rh 50, Ru 100, Sb 20, Si 3, Sn 10, Zn 5.
 Wollaston wire, Silver coated. Overall outside diameter approx 0.05mm - 0.1mm. The weight shown is for the Platinum core only. The Silver outer sheath may be dissolved in aqueous 10% Nitric Acid.

PT005106

Diameter **0.006mm** Purity **99.9%**
 Condition **Wollaston wire**

Length		Quantity	
Web Code	Length	1 Reel	
744-548-245	0.1 m	YEN	35400
068-529-008	0.2 m	YEN	43800
566-125-279	0.5 m	YEN	72500
765-650-769	1 m	YEN	129000
706-347-183	2 m		POA

Typical Analysis : Ag 25, Au 40, B 5, Bi 1, Ca 2, Cu 25, Fe 50, Ir 150, Mg 2, Mn 2, Ni 15, Pb 5, Pd 150, Rh 50, Ru 100, Sb 20, Si 3, Sn 10, Zn 5.
 Wollaston wire, Silver coated. Overall outside diameter approx 0.05mm - 0.1mm. The weight shown is for the Platinum core only. The Silver outer sheath may be dissolved in aqueous 10% Nitric Acid.

PT005109

Diameter **0.01mm** Purity **99.9%**
 Condition **Wollaston wire**

Length		Quantity	
Web Code	Length	1 Reel	
503-494-278	0.05 m	YEN	24400
205-180-062	0.1 m	YEN	31400
647-503-059	0.2 m	YEN	44800
937-882-525	0.5 m	YEN	85500

Typical Analysis : Ag 25, Au 40, B 5, Bi 1, Ca 2, Cu 25, Fe 50, Ir 150, Mg 2, Mn 2, Ni 15, Pb 5, Pd 150, Rh 50, Ru 100, Sb 20, Si 3, Sn 10, Zn 5.
 Wollaston wire, Silver coated. Overall outside diameter approx 0.05mm - 0.1mm. The weight shown is for the Platinum core only. The Silver outer sheath may be dissolved in aqueous 10% Nitric Acid.

PT005107

Diameter **0.01mm** Purity **99.9%**
 Temper **Hard**

Length		Quantity	
Web Code	Length	1 Reel	
293-392-866	1 m	YEN	43600
674-107-723	5 m	YEN	84000
263-463-710	10 m		POA

Typical Analysis : Ag 100, Au 75, Cu 50, Fe <50, Ni <100, Pd 150, Rh <20, Si <50.
 1m, 5m and 10m reels only.

Metal – Platinum

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Pt



Wire

PT005108

Diameter..... **0.0125mm**
 Temper..... **Hard**

Purity..... **99.9%**

Length

Web Code
 620-377-727
 547-213-135
 401-641-402

Quantity	
Length	1 Reel
1 m	YEN 41600
5 m	YEN 81500
10 m	POA

Typical Analysis : Ag 100, Au 75, Cu 50, Fe <50, Ni <100, Pd 150, Rh <20, Si <50.
 1m, 5m and 10m reels only.

PT005122

Diameter..... **0.015mm**
 Temper..... **Annealed**

Purity..... **99.99%**

Length

Web Code
 175-572-740
 946-591-593
 323-937-856

Quantity	
Length	1 Reel
1 m	YEN 40200
5 m	YEN 79500
10 m	POA

Typical Analysis : Ag <1, Au 5, Ca <1, Cu <1, Fe 5, Mg <1, Pd 10, Si 2.
 1m and 5m reels only.

PT005110

Diameter..... **0.02mm**
 Temper..... **As drawn**

Purity..... **99.9%**

Length

Web Code
 855-498-328
 937-291-347
 161-423-967
 177-987-767

Quantity	
Length	1 Reel
1 m	YEN 26800
5 m	YEN 41000
10 m	YEN 51500
20 m	YEN 68500

Typical Analysis : Ag 100, Au 75, Cu 50, Fe <50, Ni <100, Pd 150, Rh <20, Si <50.
 1m and 5m reels only.

PT005113

Diameter..... **0.025mm**
 Temper..... **Hard**

Purity..... **99.9%**

Length

Web Code
 673-324-165
 689-797-951
 224-739-417
 237-991-344
 092-425-685

Quantity	
Length	1 Reel
1 m	YEN 15500
5 m	YEN 22000
10 m	YEN 27000
20 m	YEN 34000
50 m	YEN 52500

Typical Analysis : Ag 100, Au 75, Cu 50, Fe <50, Ni <100, Pd 150, Rh <20, Si <50.

PT005114

Diameter..... **0.025mm**
 Temper..... **Annealed**

Purity..... **99.99%**

Thermocouple wire **May be used as one component of a Thermocouple**

Length

Web Code
 151-452-868
 931-610-116
 451-264-464
 408-055-808
 006-981-607

Quantity	
Length	1 Reel
1 m	YEN 15500
5 m	YEN 22000
10 m	YEN 27000
20 m	YEN 34000
50 m	YEN 52500

Typical Analysis : Ag <1, Au 5, Ca <1, Cu <1, Fe 5, Mg <1, Pd 10, Si 2.
 Thermocouple wire.

PT005124

Diameter..... **0.04mm**
 Temper..... **Annealed**

Purity..... **99.99%**

Thermocouple wire **May be used as one component of a Thermocouple**

Length

Web Code
 435-832-831
 519-810-265
 479-100-781
 887-595-794
 949-473-284

Quantity	
Length	1 Reel
1 m	YEN 16600
2 m	YEN 19200
5 m	YEN 24600
10 m	YEN 30800
20 m	YEN 40000

Typical Analysis : Ag <1, Au 5, Ca <1, Cu <1, Fe 5, Mg <1, Pd 10, Si 2.
 Thermocouple wire.

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Wire

PT005116

Diameter **0.05mm**
 Temper **Annealed**

Purity **99.99%**
 Thermocouple wire **May be used as one component of a Thermocouple**

Length

Web Code
 599-615-947
 951-997-441
 999-675-618
 959-453-940
 931-743-182
 467-894-197

Quantity	
Length	1 Reel
0.5 m	YEN 15000
1 m	YEN 17500
2 m	YEN 21000
5 m	YEN 28000
10 m	YEN 36000
20 m	YEN 50500

Typical Analysis : Ag <1, Au 5, Ca <1, Cu <1, Fe 5, Mg <1, Pd 10, Si 2.
 Thermocouple wire.

PT005115

Diameter **0.05mm**
 Temper **Hard**

Purity **99.99%**

Length

Web Code
 087-662-877
 957-850-609
 731-337-483
 417-182-580
 147-814-384
 476-796-981

Quantity	
Length	1 Reel
0.5 m	YEN 14300
1 m	YEN 16300
2 m	YEN 19100
5 m	YEN 24600
10 m	YEN 30800
20 m	YEN 49800

Typical Analysis : Ag <1, Au 5, Ca <1, Cu <1, Fe 5, Mg <1, Pd 10, Si 2.

PT005112

Diameter **0.063mm**
 Temper **Hard**

Purity **99.9%**

Length

Web Code
 049-732-498
 216-555-045
 069-386-570

Quantity	
Length	1 Reel
2 m	YEN 20400
5 m	YEN 28400
10 m	YEN 38800

Typical Analysis : Ag 100, Au 75, Cu 50, Fe <50, Ni <100, Pd 150, Rh <20, Si <50.

PT005123

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

Purity **99.9%**

Length

Web Code
 858-651-814
 748-913-026
 614-134-984
 766-869-244
 331-486-616

Quantity	
Length	1 Reel
1 m	YEN 17300
2 m	YEN 21200
5 m	YEN 29600
10 m	YEN 41200
20 m	YEN 71500

Typical Analysis : Ag 100, Au 75, Cu 50, Fe <50, Ni <100, Pd 150, Rh <20, Si <50.

PT005327

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

Purity **99.99%**
 Condition **Straight wire**

Size

Web Code

Length

Quantity				
1pc	2pcs	5pcs	10pcs	20pcs
		0.01684g	#100 mm#	
		0.03369g	#200 mm#	
		0.05053g	#300 mm#	
		0.07917g	#470 mm#	
		0.1583g	#940 mm#	

Typical Analysis : Ag <1, Au 5, Ca <1, Cu <1, Fe 5, Mg <1, Pd 10, Si 2.

PT005127

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

Purity **99.99%**

Length

Web Code
 089-308-756
 885-996-725
 497-755-073
 358-839-069
 360-785-094

Quantity	
Length	1 Reel
0.2 m	YEN 12500
0.5 m	YEN 15000
1 m	YEN 17800
2 m	YEN 22000
5 m	YEN 30800

Typical Analysis : Ag <1, Au 5, Ca <1, Cu <1, Fe 5, Mg <1, Pd 10, Si 2.

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Wire

PT005117	Diameter 0.125mm Temper As drawn	Purity 99.95%
Length	Quantity	
Web Code	Length	1 Reel
486-767-532	0.1 m	YEN 14900
780-412-800	0.2 m	YEN 17200
845-948-971	0.5 m	YEN 21600
743-619-113	1 m	YEN 26600
952-389-397	2 m	YEN 33600
048-670-615	5 m	YEN 50000
Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.		
PT005118	Diameter 0.125mm Temper Annealed	Purity 99.99% Thermocouple wire May be used as one component of a Thermocouple
Length	Quantity	
Web Code	Length	1 Reel
851-028-379	0.1 m	YEN 14900
887-636-310	0.2 m	YEN 17200
378-542-650	0.5 m	YEN 21600
317-827-080	1 m	YEN 26600
728-383-454	2 m	YEN 33600
047-931-714	5 m	YEN 50000
Typical Analysis : Ag <1, Au 5, Ca <1, Cu <1, Fe 5, Mg <1, Pd 10, Si 2. Thermocouple wire.		
PT005119	Diameter 0.15mm Temper Annealed	Purity 99.99% Thermocouple wire May be used as one component of a Thermocouple
Length	Quantity	
Web Code	Length	1 Reel
934-134-930	0.1 m	YEN 13300
562-339-195	0.2 m	YEN 15300
766-871-056	0.5 m	YEN 19300
858-875-458	1 m	YEN 24600
359-426-329	2 m	YEN 40800
Typical Analysis : Ag <1, Au 5, Ca <1, Cu <1, Fe 5, Mg <1, Pd 10, Si 2. Thermocouple wire.		
PT005126	Diameter 0.175mm Temper As drawn	Purity 99.95%
Length	Quantity	
Web Code	Length	1 Reel
785-323-192	0.05 m	YEN 12400
552-136-573	0.1 m	YEN 14000
360-808-610	0.2 m	YEN 16400
456-991-154	0.5 m	YEN 21000
455-919-813	1 m	YEN 26200
098-537-571	2 m	YEN 42600
Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.		
PT005130	Diameter 0.20mm Temper Annealed	Purity 99.99% Thermocouple wire May be used as one component of a Thermocouple
Length	Quantity	
Web Code	Length	1 Reel
195-788-311	0.05 m	YEN 12500
473-545-085	0.1 m	YEN 14200
008-736-372	0.2 m	YEN 16600
193-127-253	0.5 m	YEN 21400
140-906-443	1 m	YEN 26800
613-304-526	2 m	YEN 44600
Typical Analysis : Ag <1, Au 5, Ca <1, Cu <1, Fe 5, Mg <1, Pd 10, Si 2. Thermocouple wire.		
PT005121	Diameter 0.25mm Temper Annealed	Purity 99.99% Thermocouple wire May be used as one component of a Thermocouple
Length	Quantity	
Web Code	Length	1 Reel
033-837-045	0.1 m	YEN 16200
498-998-417	0.2 m	YEN 19200
374-807-988	0.5 m	YEN 25200
850-988-645	1 m	YEN 35400
373-580-512	2 m	YEN 61500
Typical Analysis : Ag <1, Au 5, Ca <1, Cu <1, Fe 5, Mg <1, Pd 10, Si 2. Thermocouple wire.		

Platinum

Pt



Wire

PT005120

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

Purity **99.95%**

Length

Web Code
 036-505-548
 358-989-245
 563-196-996
 399-618-625
 952-337-109

Quantity	
Length	1 Reel
0.1 m	YEN 16200
0.2 m	YEN 19200
0.5 m	YEN 25200
1 m	YEN 35400
2 m	YEN 61500

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT005140

Diameter **0.25mm**
 Temper **As drawn**

High Purity **99.99+%**

Length

Web Code
 433-416-344
 046-253-556
 177-039-304
 129-920-470
 240-058-321

Quantity	
Length	1 Reel
0.1 m	YEN 16600
0.2 m	YEN 19700
0.5 m	YEN 26000
1 m	YEN 38400
2 m	YEN 67500

Typical Analysis : Ag <1, Au 1, Ca <1, Cu 1, Fe 3, Mg 1, Pd 1, Si 5.

PT005141

Diameter **0.25mm**
 Temper **As drawn**

High Purity **99.998%**

Length

Web Code
 016-929-520
 826-838-947
 789-436-746
 941-512-570

Quantity	
Length	1 Reel
0.05 m	YEN 17600
0.1 m	YEN 21400
0.2 m	YEN 26800
0.5 m	YEN 43000

Typical Analysis : Al 2, Cu 2, Fe 5, Si 2, Rh 2, Zr 5.

PT005125

Diameter **0.3mm**
 Temper **Annealed**

Purity **99.99%**
 Thermocouple wire **May be used as one component of a Thermocouple**

Length

Web Code
 279-829-741
 801-868-891
 233-602-404
 200-311-966
 038-999-315

Quantity	
Length	1 Reel
0.1 m	YEN 17500
0.2 m	YEN 21000
0.5 m	YEN 28000
1 m	YEN 46000
2 m	YEN 82500

Typical Analysis : Ag <1, Au 5, Ca <1, Cu <1, Fe 5, Mg <1, Pd 10, Si 2.
 Thermocouple wire.

PT005128

Diameter **0.3mm**
 Temper **As drawn**

Purity **99.99%**

Length

Web Code
 576-383-807
 961-879-004
 919-875-875
 654-986-868
 007-161-494

Quantity	
Length	1 Reel
0.1 m	YEN 17500
0.2 m	YEN 21000
0.5 m	YEN 28000
1 m	YEN 46000
2 m	YEN 82500

Typical Analysis : Ag <1, Au 5, Ca <1, Cu <1, Fe 5, Mg <1, Pd 10, Si 2.
 Thermocouple wire.

PT005143

Diameter **0.38mm**
 Temper **Annealed**

Purity **99.99%**

Length

Web Code
 507-591-632
 188-265-882
 013-600-003
 325-124-963

Quantity	
Length	1 Reel
0.1 m	YEN 19700
0.2 m	YEN 24000
0.5 m	YEN 38200
1 m	YEN 67000

Typical Analysis : Ag <1, Au 5, Ca <1, Cu <1, Fe 5, Mg <1, Pd 10, Si 2.
 Thermocouple wire.

PT005142

Diameter **0.40mm**
 Temper **As drawn**

Purity **99.99%**

Length

Web Code
 162-493-279
 461-447-737
 311-651-182
 956-399-016

Quantity	
Length	1 Reel
0.1 m	YEN 20000
0.2 m	YEN 24600
0.5 m	YEN 40600
1 m	YEN 72000

Typical Analysis : Ag <1, Au 5, Ca <1, Cu <1, Fe 5, Mg <1, Pd 10, Si 2.
 Thermocouple wire.

Metal – Platinum

Platinum

Pt



Wire

PT005139

Diameter **0.5mm**
 Temper **As drawn**

High Purity **99.99%**

Length

Web Code
 241-522-285
 477-152-283
 702-712-985

Quantity

Length 1 Reel
 0.05 m YEN 23000
 0.1 m YEN 29200
 0.2 m YEN 48000

Typical Analysis : Au 2, B 2, Ca 2, Co 2, Cr 2, Cu 2, Fe 5, Ir 2, Ni 20, Os 2, Rh 5.

PT005146

Diameter **0.5mm**
 Temper **Annealed**

Purity **99.99%**
 Thermocouple wire **May be used as one component of a Thermocouple**

Length

Web Code
 759-669-467
 958-681-418
 835-183-648
 397-955-089
 744-376-565

Quantity

Length 1 Reel
 0.05 m YEN 18100
 0.1 m YEN 22600
 0.2 m YEN 28200
 0.5 m YEN 56500
 1 m YEN 104000

Typical Analysis : Ag <1, Au 5, Ca <1, Cu <1, Fe 5, Mg <1, Pd 10, Si 2.
 Thermocouple wire.

PT005145

Diameter **0.5mm**
 Temper **As drawn**

High Purity **99.99+%**

Length

Web Code
 049-748-800
 218-611-431
 326-431-549
 803-949-148
 493-642-640

Quantity

Length 1 Reel
 0.05 m YEN 18600
 0.1 m YEN 23400
 0.2 m YEN 30400
 0.5 m YEN 62000
 1 m YEN 115000

Typical Analysis : Ag <1, Au 1, Ca <1, Cu 1, Fe 3, Mg 1, Pd 1, Si 5.

PT005148

Diameter **0.6mm**
 Temper **As drawn**

High Purity **99.99+%**

Length

Web Code
 581-985-179
 117-941-470
 483-355-199
 603-147-124

Quantity

Length 1 Reel
 0.05 m YEN 19900
 0.1 m YEN 25200
 0.2 m YEN 36200
 0.5 m YEN 76500

Typical Analysis : Ag <1, Au 1, Ca <1, Cu 1, Fe 3, Mg 1, Pd 1, Si 5.

PT005348

Diameter **0.635mm**
 Temper **As drawn**

Purity **99.99%**
 Condition **Straight wire**

Size

Web Code Length

Quantity

1pc 2pcs 5pcs
 0.6792g
 1.4g
 3.4g

Typical Analysis : Ag <1, Au 5, Ca <1, Cu <1, Fe 5, Mg <1, Pd 10, Si 2.

PT005149

Diameter **0.8mm**
 Temper **Annealed**

Purity **99.99%**
 Thermocouple wire **May be used as one component of a Thermocouple**

Length

Web Code
 788-929-813
 616-230-644
 028-831-575

Quantity

Length 1 Reel
 0.05 m YEN 23400
 0.1 m YEN 32200
 0.2 m YEN 55000

Typical Analysis : Ag <1, Au 5, Ca <1, Cu <1, Fe 5, Mg <1, Pd 10, Si 2.
 Thermocouple wire.

PT005156

Diameter **1.0mm**
 Temper **Annealed**

Purity **99.99%**
 Thermocouple wire **May be used as one component of a Thermocouple**

Length

Web Code
 432-884-878
 110-609-964
 826-249-343

Quantity

Length 1 Reel
 0.05 m YEN 27000
 0.1 m YEN 44800
 0.2 m YEN 80500

Typical Analysis : Ag <1, Au 5, Ca <1, Cu <1, Fe 5, Mg <1, Pd 10, Si 2.
 Thermocouple wire.

Metal – Platinum

Platinum

Pt



Wire

PT005150

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

Purity **99.95%**

Length

Web Code
 283-664-320
 458-038-972
 254-873-874

Quantity

Length 1 Reel
 0.05 m YEN 27000
 0.1 m YEN 44800
 0.2 m YEN 80500

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT005155

Diameter **1.0mm**
 Temper **As drawn**

High Purity **99.99+%**

Length

Web Code
 552-311-183
 038-889-513
 861-190-388

Quantity

Length 1 Reel
 0.05 m YEN 31000
 0.1 m YEN 54000
 0.2 m YEN 98500

Typical Analysis : Ag <1, Au 1, Ca <1, Cu 1, Fe 3, Mg 1, Pd 1, Si 5.

PT005157

Diameter **1.0mm**
 Temper **As drawn**

High Purity **99.998%**

Length

Web Code
 728-975-196
 516-199-230
 713-826-328

Quantity

Length 1 Reel
 0.05 m YEN 38200
 0.1 m YEN 68000
 0.2 m YEN 127000

Typical Analysis : Al 2, Cu 2, Fe 5, Si 2, Rh 2, Zr 5.



Insulated Wire

Insulating coatings of polyurethane, polyimide and Nylon are also available.

PT005805

Conductor diameter **0.015mm**
 Purity **99.99%**

Insulation thickness **0.002mm**
 Insulation **Polyimide**

Length

Web Code
 407-359-198
 987-404-356

Quantity

Length 1 Reel
 1 m YEN 30400
 5 m YEN 89000

Typical Analysis : Please ask.
 5m reels only.

PT005808

Conductor diameter **0.018mm**
 Purity **99.99%**

Insulation thickness **0.002mm**
 Insulation **Polyester**

Length

Web Code
 849-180-449
 503-589-227
 433-445-814
 321-137-962

Quantity

Length 1 Reel
 0.5 m YEN 19500
 1 m YEN 23600
 2 m YEN 34200
 5 m YEN 68000

Typical Analysis : Please ask.

PT005820

Conductor diameter **0.025mm**
 Purity **99.99%**

Insulation thickness **0.005mm**
 Insulation **Polyester**

Length

Web Code
 392-664-224
 083-033-304
 379-164-116
 395-521-722

Quantity

Length 1 Reel
 0.5 m YEN 19500
 1 m YEN 23600
 2 m YEN 34200
 5 m YEN 68000

Typical Analysis : Please ask.

PT005821

Conductor diameter **0.025mm**
 Purity **99.99%**

Insulation thickness **0.005mm**
 Insulation **Polyimide**

Length

Web Code
 554-006-662
 250-828-728
 353-589-149
 198-641-870

Quantity

Length 1 Reel
 0.5 m YEN 17400
 1 m YEN 20800
 2 m YEN 28200
 5 m YEN 54000

Typical Analysis : Please ask.

Metal – Platinum

Platinum

Pt



Insulated Wire

PT005825

Conductor diameter **0.025mm**
 Purity **99.999%**

Insulation thickness **0.001mm**
 Insulation **PTFE (Polytetrafluoroethylene)**

Length

Web Code
 070-492-802
 687-104-844
 026-763-040
 345-384-740

Quantity

Length 1 Reel
 0.2 m YEN 22200
 0.5 m YEN 31400
 1 m YEN 52500
 2 m YEN 94000

Typical Analysis : Please ask.

PT005830

Conductor diameter **0.05mm**
 Purity **99.99%**

Insulation thickness **0.0075mm**
 Insulation **Polyester**

Length

Web Code
 677-780-949
 722-613-122
 326-641-137
 830-145-344

Quantity

Length 1 Reel
 0.5 m YEN 20800
 1 m YEN 25800
 2 m YEN 41200
 5 m YEN 85000

Typical Analysis : Please ask.

PT005835

Conductor diameter **0.05mm**
 Purity **99.99%**

Insulation thickness **0.009mm**
 Insulation **PTFE (Polytetrafluoroethylene)**

Length

Web Code
 021-551-376
 693-921-000
 740-125-874
 515-725-726

Quantity

Length 1 Reel
 0.5 m YEN 19800
 1 m YEN 27200
 2 m YEN 43600
 5 m YEN 90500

Typical Analysis : Please ask.

PT005840

Conductor diameter **0.125mm**
 Purity **99.99%**

Insulation thickness **0.014mm**
 Insulation **Polyester**

Length

Web Code
 215-462-118
 932-772-778
 596-595-432
 574-431-824

Quantity

Length 1 Reel
 0.2 m YEN 19900
 0.5 m YEN 27000
 1 m YEN 43200
 2 m YEN 76000

Typical Analysis : Please ask.

PT005810

Conductor diameter **0.125mm**
 Purity **99.99%**

Insulation thickness **0.016mm**
 Insulation **PTFE (Polytetrafluoroethylene)**

Length

Web Code
 315-910-871
 488-862-284
 107-777-212
 472-153-130

Quantity

Length 1 Reel
 0.1 m YEN 26400
 0.2 m YEN 31600
 0.5 m YEN 50000
 1 m YEN 82500

Typical Analysis : Please ask.



Rod

PT007910

Diameter **1.0mm**

Purity **99.95%**

Size

Web Code
 715-464-297
 061-057-438
 632-180-115
 022-517-309

Quantity

Length 1pc 2pcs 5pcs
 25 mm YEN 35800 YEN 45200 YEN 63500
 50 mm YEN 42000 YEN 54000
 100 mm YEN 51000 YEN 82000
 200 mm YEN 79000

Typical Analysis : Ag 40, Au 10, Cu 10, Fe 10, Pb 5, Pd 40, Rh 20, Si 20.

PT007913

Diameter **1.25mm**

Purity **99.95%**

Size

Web Code
 641-443-805
 761-143-132
 413-928-521

Quantity

Length 1pc 2pcs
 25 mm YEN 39600 YEN 50500
 50 mm YEN 47400 YEN 69500
 100 mm YEN 66000

Typical Analysis : Ag 40, Au 10, Cu 10, Fe 10, Pb 5, Pd 40, Rh 20, Si 20.

Metal – Platinum

Platinum

Pt



Rod

PT007916

Diameter **1.6mm** Purity **99.95%**

Size	Quantity			
Web Code	Length	1pc	2pcs	5pcs
836-628-920	25 mm	YEN 45000	YEN 61000	POA
676-472-021	50 mm	YEN 58000	POA	
821-242-766	100 mm	POA		

Typical Analysis : Ag 40, Au 10, Cu 10, Fe 10, Pb 5, Pd 40, Rh 20, Si 20.

PT007920

Diameter **2.0mm** Purity **99.95%**

Size	Quantity			
Web Code	Length	1pc	2pcs	5pcs
617-988-430	10 mm	YEN 39800	YEN 51000	YEN 85500
833-137-617	25 mm	YEN 51000	YEN 82000	
142-206-494	50 mm	YEN 79000		

Typical Analysis : Ag 40, Au 10, Cu 10, Fe 10, Pb 5, Pd 40, Rh 20, Si 20.

PT007921

Diameter **2.0mm** Purity **99.95%**

Size	Quantity				
Web Code	Length	1pc	2pcs	5pcs	10pcs
190-499-136	2 mm	YEN 23400	YEN 29000	YEN 38000	YEN 57000

Typical Analysis : Ag 40, Au 10, Cu 10, Fe 10, Pb 5, Pd 40, Rh 20, Si 20.

PT007930

Diameter **3.0mm** Purity **99.95%**

Size	Quantity			
Web Code	Length	1pc	2pcs	3pcs
755-592-586	10 mm	YEN 49400	YEN 76500	POA
901-333-769	25 mm	YEN 86500	POA	
666-712-645	50 mm	POA		

Typical Analysis : Ag 40, Au 10, Cu 10, Fe 10, Pb 5, Pd 40, Rh 20, Si 20.

PT007940

Diameter **4.0mm** Purity **99.95%**

Size	Quantity		
Web Code	Length	1pc	2pcs
214-721-411	10 mm	YEN 67500	POA
385-647-695	25 mm	POA	
205-951-029	50 mm	POA	

Typical Analysis : Ag 40, Au 10, Cu 10, Fe 10, Pb 5, Pd 40, Rh 20, Si 20.

PT007950

Diameter **5.0mm** Purity **99.95%**

Size	Quantity		
Web Code	Length	1pc	2pcs
995-034-772	10 mm	YEN 98500	POA
104-632-287	25 mm	POA	
079-030-761	50 mm	POA	

Typical Analysis : Ag 40, Au 10, Cu 10, Fe 10, Pb 5, Pd 40, Rh 20, Si 20.

PT007960

Diameter **6.35mm** Purity **99.95%**

Size	Quantity	
Web Code	Length	1pc
055-341-085	10 mm	POA
721-109-556	25 mm	POA
908-171-958	50 mm	POA

Typical Analysis : Ag 40, Au 10, Cu 10, Fe 10, Pb 5, Pd 40, Rh 20, Si 20.

PT007961

Diameter **6.0mm** High Purity **99.99+%**

Size	Quantity	
Web Code	Length	1pc
470-052-755	6.5 mm	YEN 95000

Typical Analysis : Ag <1, Au 1, Ca <1, Cu 1, Fe 3, Mg 1, Pd 1, Si 5.

PT007981

Diameter **8.0mm** Purity **99.95%**

Size	Quantity	
Web Code	Length	1pc
596-900-878	10 mm	POA
526-930-500	25 mm	POA

Typical Analysis : Ag 40, Au 10, Cu 10, Fe 10, Pb 5, Pd 40, Rh 20, Si 20.

Metal – Platinum

Platinum

Pt



Rod

PT007995

Diameter **12.0mm**

Purity **99.95%**

Size

Web Code
 092-166-712
 455-955-580

Length	Quantity	
	1pc	POA
11 mm	POA	POA
25 mm	POA	POA

Typical Analysis : Ag 40, Au 10, Cu 10, Fe 10, Pb 5, Pd 40, Rh 20, Si 20.



Tube

PT007050

Outside Diameter **0.29mm**
 Inside Diameter **0.07mm**
 Temper **As drawn**

Wall Thickness **0.11mm**
 Purity **99.95%**

Size

Web Code
 350-965-532
 870-697-187

Length	Quantity		
	1pc	2pcs	5pcs
100 mm	YEN 33600	YEN 46000	YEN 91500
200 mm	YEN 45400	YEN 75500	

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT007100

Outside Diameter **0.4mm**
 Inside Diameter **0.1mm**
 Temper **As drawn**

Wall Thickness **0.15mm**
 Purity **99.95%**

Size

Web Code
 383-022-977
 877-872-213
 734-030-304
 753-799-776

Length	Quantity		
	1pc	2pcs	5pcs
100 mm	YEN 30200	YEN 42600	YEN 82500
200 mm	YEN 42000	YEN 68500	YEN 147000
500 mm	YEN 81000	YEN 146000	
1000 mm	YEN 146000		

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT007105

Outside Diameter **0.40mm**
 Inside Diameter **0.16mm**
 Temper **As drawn**

Wall Thickness **0.12mm**
 Purity **99.95%**

Size

Web Code
 434-771-178
 885-067-823
 434-596-568
 396-121-028

Length	Quantity			
	1pc	2pcs	5pcs	10pcs
50 mm	YEN 25800	YEN 30400	YEN 48600	YEN 80500
100 mm	YEN 29800	YEN 41200	YEN 79000	YEN 142000
200 mm	YEN 40600	YEN 65500	YEN 140000	
500 mm	YEN 77500	YEN 139000		

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT007115

Outside Diameter **0.48mm**
 Inside Diameter **0.16mm**
 Temper **As drawn**

Wall Thickness **0.16mm**
 Purity **99.95%**

Size

Web Code
 654-516-741

Length	Quantity		
	1pc	2pcs	5pcs
25 mm	YEN 25600	YEN 30200	YEN 43800

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT007120

Outside Diameter **0.5mm**
 Inside Diameter **0.42mm**
 Temper **As drawn**

Wall Thickness **0.04mm**
 Purity **99.95%**

Size

Web Code
 479-740-566
 967-570-371
 946-288-528
 271-923-599

Length	Quantity		
	1pc	2pcs	5pcs
100 mm	YEN 28400	YEN 36600	YEN 67500
200 mm	YEN 36000	YEN 56500	YEN 117000
500 mm	YEN 66000	YEN 116000	
1000 mm	YEN 116000		

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT007199

Outside Diameter **0.60mm**
 Inside Diameter **0.2mm**
 Temper **As drawn**

Wall Thickness **0.20mm**
 Purity **99.95%**

Size

Web Code
 608-638-670

Length	Quantity				
	1pc	2pcs	5pcs	10pcs	20pcs
7.3 mm	YEN 22200	YEN 25200	YEN 31200	YEN 40600	YEN 64500

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

Metal – Platinum

Platinum

Pt



Tube

PT007125 Outside Diameter..... **0.6mm** Wall Thickness..... **0.05mm**
 Inside Diameter..... **0.5mm** Purity..... **99.95%**
 Temper..... **As drawn**

Size Web Code	Length	Quantity		
		1pc	2pcs	5pcs
224-963-280	100 mm	YEN 29400	YEN 39400	YEN 75000
120-410-081	200 mm	YEN 38800	YEN 62000	YEN 132000
051-258-787	500 mm	YEN 73000	YEN 131000	
407-349-524	1000 mm	YEN 130000		

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT007124 Outside Diameter..... **0.6mm** Wall Thickness..... **0.04mm**
 Inside Diameter..... **0.52mm** Purity..... **99.95%**
 Temper..... **As drawn**

Size Web Code	Length	Quantity	
		1pc	2pcs
002-406-578	30 mm	YEN 23000	YEN 26600
787-456-305	60 mm	YEN 26000	
133-593-711	90 mm	YEN 28200	

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT007150 Outside Diameter..... **0.7mm** Wall Thickness..... **0.15mm**
 Inside Diameter..... **0.4mm** Purity..... **99.95%**
 Temper..... **As drawn**

Size Web Code	Length	Quantity	
		1pc	2pcs
512-258-144	50 mm	YEN 36200	YEN 56500
918-692-275	100 mm	YEN 56000	YEN 96000
836-530-161	200 mm	YEN 95500	

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT007190 Outside Diameter..... **0.95mm** Wall Thickness..... **0.175mm**
 Inside Diameter..... **0.60mm** Purity..... **99.95%**
 Temper..... **As drawn**

Size Web Code	Length	Quantity		
		1pc	2pcs	5pcs
783-275-579	50 mm	YEN 31400	YEN 43600	YEN 84000
212-505-944	100 mm	YEN 42800	YEN 69500	YEN 149000
094-366-190	200 mm	YEN 69000	YEN 121000	
976-613-244	500 mm	YEN 147000		

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT007200 Outside Diameter..... **1.0mm** Wall Thickness..... **0.1mm**
 Inside Diameter..... **0.8mm** Purity..... **99.95%**
 Temper..... **As drawn**

Size Web Code	Length	Quantity		
		1pc	2pcs	5pcs
191-655-529	50 mm	YEN 29400	YEN 36800	YEN 67000
868-877-937	100 mm	YEN 36000	YEN 56000	YEN 115000
609-737-910	200 mm	YEN 55000	YEN 94000	
217-239-936	500 mm	YEN 113000		

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT007220 Outside Diameter..... **1.2mm** Wall Thickness..... **0.1mm**
 Inside Diameter..... **1.0mm** Purity..... **99.95%**
 Temper..... **As drawn**

Size Web Code	Length	Quantity		
		1pc	2pcs	5pcs
442-343-448	50 mm	YEN 30400	YEN 39800	YEN 74500
853-991-724	100 mm	YEN 39200	YEN 62000	YEN 130000
946-616-577	200 mm	YEN 61500	YEN 107000	
153-420-164	500 mm	YEN 128000		

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT007250 Outside Diameter..... **2.0mm** Wall Thickness..... **0.2mm**
 Inside Diameter..... **1.6mm** Purity..... **99.95%**
 Temper..... **As drawn**

Size Web Code	Length	Quantity	
		1pc	2pcs
262-903-130	50 mm	YEN 47400	YEN 78000
374-219-287	100 mm	YEN 77000	YEN 137000
777-406-780	200 mm	YEN 137000	

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

Metal – Platinum

Platinum

Pt



Tube

PT007300

Outside Diameter **3.0mm**
 Inside Diameter **2.8mm**
 Temper **As drawn**

Wall Thickness **0.1mm**
 Purity **99.95%**

Size

Web Code
 220-185-538
 498-125-101
 265-642-057

Length	Quantity	
	1pc	2pcs
50 mm	YEN 42600	YEN 68000
100 mm	YEN 67000	YEN 117000
200 mm	YEN 116000	

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT007500

Outside Diameter **6mm**
 Inside Diameter **5.6mm**
 Temper **As drawn**

Wall Thickness **0.2mm**
 Purity **99.95%**

Size

Web Code
 364-153-576
 309-850-503

Length	Quantity	
	1pc	2pcs
25 mm	YEN 57000	YEN 96500
50 mm	YEN 95500	

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.



Powder

PT006021

Max. Particle size **3.5micron**

Purity **99.95%**



Web Code
 197-616-220
 707-034-239

Quantity	Weight	1 Pot
2 g	YEN 64500	

Typical Analysis : Ag 20, Al 1, Au 5, Ca 35, Cu 2, Fe 70, Ir 5, Mg 12, Pd 200, Rh 50, Si 3.

PT006015

Max. Particle size **45micron**

Purity **99.95%**



Web Code
 472-410-426
 121-238-304

Quantity	Weight	1 Pot
2 g	YEN 61000	

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.

PT006016

Max. Particle size **150micron**

Purity **99.95%**



Web Code
 212-121-872
 996-557-010

Quantity	Weight	1 Pot
2 g	YEN 61000	

Typical Analysis : Ag 5, Au 10, B 4, Ca 1, Cu 10, Fe 10, Ir 10, Mg 1, Na 1, Pb 1, Pd 50, Rh 10, Si 2.



Lump

PT006101

Max. Lump size **6mm**
 Condition **Pellets**

Purity **99.95%**

Web Code
 150-273-979

Quantity	Weight	1 Pot
1.6 g		POA

Typical Analysis : Ag 40, Au 10, Cu 10, Fe 10, Pb 5, Pd 40, Rh 20, Si 20.
 Nominally 4.7mm diameter x 4.7mm length pellets.

PT006102

Max. Lump size **8mm**
 Condition **Granular**

Purity **99.95%**

Web Code
 407-628-294

Quantity	Weight	1 Pot
1 g		POA

Typical Analysis : Ag 40, Au 10, Cu 10, Fe 10, Pb 5, Pd 40, Rh 20, Si 20.

Metal – Platinum

Platinum

Pt



Single Crystal

PT002123 Oriented (100) Thickness 1mm
 Diameter 6mm Purity 99.999%
 Condition Polished on 1 side to 1 micron

Quantity

Web Code 051-076-108 **1pc**
 YEN POA

Typical Analysis : Not applicable

PT002121 Oriented (100) Thickness 1mm
 Diameter 10mm Purity 99.999%
 Condition Polished on 1 side to 1 micron

Quantity

Web Code 302-516-308 **1pc**
 YEN POA

Typical Analysis : Not applicable

PT002120 Oriented (100) Thickness 1mm
 Diameter 10mm Purity 99.999%
 Condition Unpolished

Quantity

Web Code 765-795-543 **1pc**
 YEN POA

Typical Analysis : Not applicable

PT002125 Oriented (100) Diameter 2mm
 Length 10mm Purity 99.999%

Quantity

Web Code 183-437-409 **1pc**
 YEN POA

Typical Analysis : Not applicable

PT002150 Oriented (110) Thickness 1mm
 Diameter 6mm Purity 99.999%
 Condition Polished on both sides to 1 micron

Quantity

Web Code 188-857-521 **1pc**
 YEN POA

Typical Analysis : Not applicable

PT002141 Oriented (110) Thickness 1mm
 Diameter 10mm Purity 99.999%
 Condition Polished on 1 side to 1 micron

Quantity

Web Code 283-357-190 **1pc**
 YEN POA

Typical Analysis : Not applicable

PT002140 Oriented (110) Thickness 1mm
 Diameter 10mm Purity 99.999%
 Condition Unpolished

Quantity

Web Code 745-521-605 **1pc**
 YEN POA

Typical Analysis : Not applicable

PT002142 Oriented (110) Thickness 2mm
 Diameter 10mm Purity 99.999%
 Condition Unpolished

Quantity

Web Code 095-827-237 **1pc**
 YEN POA

Typical Analysis : Not applicable

PT002131 Oriented (111) Thickness 1mm
 Diameter 10mm Purity 99.999%
 Condition Polished on 1 side to 1 micron

Quantity

Web Code 959-865-249 **1pc**
 YEN POA

Typical Analysis : Not applicable

Metal – Platinum

Platinum

Pt



Single Crystal

PT002130

Oriented **(111)**
 Diameter **10mm**
 Condition **Unpolished**

Thickness **1mm**
 Purity **99.999%**

Quantity

Web Code
 835-605-741

1pc
 YEN POA

Typical Analysis : Not applicable

PT002151

Oriented **(111)**
 Diameter **10mm**
 Condition **Polished on 1 side to 1 micron**

Thickness **3mm**
 Purity **99.999%**

Quantity

Web Code
 051-316-841

1pc
 YEN POA

Typical Analysis : Not applicable

Metal – Platinum

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