## Good Fellow





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### **Standard Price List for Gold**

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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 Catalogue 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.





### Bar

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

### **Tolerances**

Section dimensions:  $\leq 10 \text{mm}$   $\pm 10\%$  > 10 mm  $\pm 1 \text{mm}$  Length: < 100 mm  $\pm 1 \text{mm}$   $\geq 100 \text{mm}$  + 5% / -1%



### **Bolt**

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

### **Tolerances**

See item



### **Chopped Fibre**

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

### **Tolerances**

Fibre diameter:  $\pm 25\%$ Number of strands:  $\pm 10\%$ Tex number:  $\pm 10\%$ Length: +5% / - 1%



### Crucible

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

### **Tolerances**

Height:  $\pm 10\%$ Inside Dimensions:  $\pm 10\%$ Outside Dimensions:  $\pm 10\%$ 



### **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:  $\pm 25\%$ Number of yarns:  $\pm 10\%$ Tex number:  $\pm 10\%$ 

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



### **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:  $\pm 25\%$ Number of strands:  $\pm 10\%$ Tex number:  $\pm 10\%$ Length: + 5% / -1%



### Film

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

### **Tolerances**

Thickness:  $\pm 20\%$ 

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



### **Flake**

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

### **Tolerances**

Dimensions shown are nominal





### **Foam**

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



### Foil

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

### **Tolerances**

Thickness: < 0.010mm  $\pm 25\%$ 

 $0.01\text{-}0.05mm \pm 15\%$ 

> 0.050mm  $\pm 10\%$ 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:  $\pm 10\%$ 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:  $\pm 10\%$ 

Size (linear dimension):  $\leq 100 \text{mm}$   $\pm 1 \text{mm}$ 

> 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:  $\pm 10\%$ 

electroformed:

 $\pm 20\%$ 

Wire diameter:  $\pm 10\%$ 

Size (linear dimension): < 100mm  $\pm 1$ mm

 $\geqslant$  100mm + 2% / -1%





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



### Nut

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

### **Tolerances**

See item



### **Powder**

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

### **Tolerances**

Dimensions shown are nominal





### Rod

A straight length of circular section material.

### **Tolerances**

Diameter:  $\leq 10$ mm  $\pm 10\%$ 

Polymer +20%/-10%Ceramic +20%/-10%

> 10mm  $\pm 5$ %

Ceramic +20%/-10%Polymer +20%/-10%

+5% / -1%

Length: < 100mm  $\pm 1$ mm

≥ 100mm



### Sheet

Flat material with a thickness > 0.5mm.

### **Tolerances**

Thickness:  $\pm 10\%$ 

 $\begin{array}{ll} \text{Ceramic} & \pm 20\% \\ \text{Composite} & \pm 20\% \\ \end{array}$ 

Polymer  $\pm 20\%$ Size (linear dimension): < 100mm  $\pm 1$ mm

≥ 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:  $\pm 3^{\circ}$ 

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):  $\pm 5\%$ 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:  $\pm 0.5$ mm Size:  $\pm 0.5$ mm



### Tube

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

### **Tolerances**

Outside diameter:  $\leq 2 \text{mm}$   $\pm 0.05 \text{mm}$ 

 $\begin{array}{ll} \text{Polymer} & \pm\,10\% \\ \text{Ceramic} & \pm\,10\% \end{array}$ 

 $\leq$ 5mm  $\pm$  0.1mm Polymer  $\pm$  10% Ceramic  $\pm$  10%

 $\begin{array}{lll} > 5 \text{mm} & \pm 5\% \\ \text{Polymer} & \pm 10\% \\ \text{Ceramic} & \pm 10\% \end{array}$ 

Wall thickness: + 10%

Polymer  $\pm 20\%$ Ceramic  $\pm 20\%$ 

Length: < 100 mm + 1 mm

≥ 100mm + 5% / -1%



### Washer

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

### **Tolerances**

See item





### Wire

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

### **Tolerances**

Wire diameter:  $\pm$  10% Length:  $\pm$  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



### Corrosive

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



### Dangerous when wet

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



### **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.



### **Extremely Flammable**

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



### Harmful

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



### Highly flammable

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



### Irritant

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



### 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.



Toxic

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



**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  $3.5\mu m$  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<sup>-9</sup> atm-cm<sup>3</sup>.s<sup>-1</sup>.

### **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

Ermine Business Park

### Goodfellow Cambridge Limited

**HUNTINGDON PE29 6WR England** Registered in England and Wales no. 1188162

VAT registration GB 212 8527 79

### Goodfellow Corporation

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### Goodfellow GmbH

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### Goodfellow (Shanghai) Trading Co., Ltd

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

The People's Republic of China



### GENERAL

1.1 In these Conditions:
1.1.1 the following expressions shall have the following meanings:-

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; a contract for the Supply of Goods and/or Services by the Seller to the Buyer;

"Contract"

"Date of Delivery" the date on which delivery of the Goods or Services takes place pursuant to Condition 7; 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; 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

ons 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

"Seller

Supplier); 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; 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
- 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
- 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
- In relation to all obligations of the Buyer under these Conditions, the time of performance is of the essence
- The legal construction of these Conditions shall not be effected by their headings which are for convenience of reference only **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 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

### 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
- 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

### SPECIFICATIONS AND INTELLECTUAL PROPERTY

- 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 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 idemnified 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
- 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 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

### QUOTATIONS

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

### 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
  - 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
  - Teduction of the total price payable by the buyer times the Contract;

    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.

- Delivery of Goods shall be deemed to be effected by the Seller at the
  - 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



- accordance with a means of delivery specifically requested by the Buyer, when the same are collected; .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 fbe 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 beginning.
- 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 withold 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. 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:

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 y cancellation by the Buyer will only be binding upon the Seller if it is made in writing
- 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

- .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 2 The Buyer standing 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,



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
  - 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

  - uniess ornerwise 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

### 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 keen indemnified the Seller in full
- 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

  - 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
- 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



Condition	ons of Sale
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



### Au

This metal has been known since prehistoric times Gold is a soft metal with a characteristic yellow colour. It is the most malleable and ductile of any element. It is unaffected by air, water, alkalis and acids, with the exception of "aqua regia",  $HNO_3/HCI$ . The fact that it is chemically unreactive means that it is often found in its natural state. It is a good thermal and electrical conductor and has excellent reflective properties to both light and infrared. It has an abundance in the earth's crust of 0.0011 ppm.

Most of the metal is retained for use as bullion reserves, but some is used within the electronics and jewellery industries, where it is frequently alloyed with other elements to improve the mechanical properties of the metal (e.g. copper and silver). Other uses for the metal are as a heat reflecting coating for glass as well as as a decorative medium.

Atomic Properties			Electrical Properties				
Atomic number	79		Electrical resistivity @20C			2.20 μOhm	cm
Atomic radius - Goldschmidt	0.144 nm		Temperature coefficient @0-10	0C		0.0040 K <sup>-1</sup>	
Atomic weight	196.9665 amu		Thermal emf against Pt (cold 0C	- hot 100C)		+0.74 mV	
Crystal structure	Face centred cubi	С	3 (	,			
Electronic structure	Xe 4f <sup>14</sup> 5d <sup>10</sup> 6s <sup>1</sup>		Thermal Properties				
Photo-electric work function	4.8 eV		Coefficient of thermal expansion	@0-100C		14.1 x10 <sup>-6</sup> l	K <sup>-1</sup>
Thermal neutron absorption cross-section	98.8 Barns		Latent heat of evaporation	_		1738 J g <sup>-1</sup>	
Valences shown	1,3		Latent heat of fusion			64.9 J g <sup>-1</sup>	
			Specific heat @25C			129 J K <sup>-1</sup> k	a <sup>-1</sup>
Natural isotope distribution	Mass No.	%	Thermal conductivity @0-100C			318 W m <sup>-1</sup>	
	197	100	, , , , , , , , , , , , , , , , , , , ,				
			Mechanical Properties				
Ionisation potential	No.	eV	Material condition	Soft	Hard	Polycrysta	lline
·	1	9.22	Bulk modulus			171	GPa
	2	20.5	Hardness - Vickers	20-30	60		
			Poisson's ratio			0.42	
Physical Properties			Tensile modulus			78.5	GPa
Boiling point	3080 C		Tensile strength	130	220	MPa	
Density @20C	19.30 g cm <sup>-3</sup>		Yield strength		205	MPa	
Melting point	1064.4 C						



### **Microfoil**

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

AU004100	Thinness 0.01μm Purity 99.99+%		Area o Suppo	density ort	20.7μg. Perman	cm <sup>-2</sup> ent Mylar 3.5μm
			Quanti			
	<b>Web Code</b> 252-946-202	Disc diam. 10 mm	<b>1 disc</b> GBP 193.00	<b>2discs</b> GBP 262.00		<b>10discs</b> GBP 745.00
	Typical Analysis : Starting Material : Ag 3, Ca This item is normally made to order for			, Pd 1, Si 1.		
AU004300	Thinness 0.05μm Purity 99.99+%		Area o Suppo	density	101.3μg Perman	.cm <sup>-2</sup> ent Mylar 3.5µm
			Quanti			
	<b>Web Code</b> 469-909-744 339-549-368			2discs GBP 241.00 GBP 365.00		
	Typical Analysis : Starting Material : Ag 3, Ca This item is normally made to order for		l-5 weeks.			
AU004500	Thinness 0.1μm Purity 99.99+%		Suppo			.cm <sup>-2</sup> ent Mylar 3.5μm
				4		
			Quanti			
	<b>Web Code</b> 237-823-507	Disc diam. 10 mm	1 disc	2discs GBP 262.00		<b>10discs</b> GBP 746.00
		10 mm < 1, Cd < 1, Cu 1	1 disc GBP 193.00 , Fe <1, Mg <1	<b>2discs</b> GBP 262.00		<b>10discs</b> GBP 746.00
AU004600	237-823-507  Typical Analysis: Starting Material: Ag 3, Ca	10 mm < 1, Cd < 1, Cu 1	1 disc GBP 193.00 Fe <1, Mg <1 I-5 weeks. Area of Support	2discs GBP 262.00 , Pd 1, Si 1.	GBP 470.00	GBP 746.00
AU004600	237-823-507  Typical Analysis: Starting Material: Ag 3, Ca This item is normally made to order for Thinness	10 mm <1, Cd <1, Cu 1 delivery within 4	1 disc GBP 193.00 Fe < 1, Mg < 1 I-5 weeks. Area of Suppo	2discs GBP 262.00 , Pd 1, Si 1. density	GBP 470.00 483µg.c Perman	GBP 746.00 ·m·² ent Mylar 3.5μm
AU004600	237-823-507  Typical Analysis: Starting Material: Ag 3, Ca This item is normally made to order for Thinness	10 mm <1, Cd <1, Cu 1 delivery within 4  Disc diam. 10 mm	1 disc GBP 193.00 Fe <1, Mg <1 I-5 weeks. Area ( Suppo Quanti 1 disc GBP 214.00	2discs GBP 262.00 , Pd 1, Si 1.	GBP 470.00 483μg.c Perman 5discs GBP 533.00	GBP 746.00 ·m <sup>-2</sup> ent Mylar 3.5μm 10discs
AU004600	237-823-507  Typical Analysis: Starting Material: Ag 3, Ca This item is normally made to order for Thinness	10 mm <1, Cd <1, Cu 1 delivery within 4  Disc diam. 10 mm 25 mm <1, Cd <1, Cu 1	1 disc GBP 193.00 , Fe <1, Mg <1 I-5 weeks. Area c Suppo Quanti 1 disc GBP 214.00 GBP 320.00 , Fe <1, Mg <1	2discs GBP 262.00  Pd 1, Si 1.  density	GBP 470.00 483μg.c Perman 5discs GBP 533.00	GBP 746.00 ·m <sup>-2</sup> ent Mylar 3.5μm 10discs
AU004600 AU004700	237-823-507  Typical Analysis: Starting Material: Ag 3, Ca This item is normally made to order for Thinness	10 mm <1, Cd <1, Cu 1 delivery within 4  Disc diam. 10 mm 25 mm <1, Cd <1, Cu 1	1 disc GBP 193.00 , Fe <1, Mg <1 -5 weeks. Area of Support Quanti 1 disc GBP 214.00 GBP 320.00 , Fe <1, Mg <1 -5 weeks.	2discs GBP 262.00 , Pd 1, Si 1.  density ty 2discs GBP 294.00 GBP 453.00 , Pd 1, Si 1.	GBP 470.00 483µg.c Perman 5discs GBP 533.00 GBP 851.00	GBP 746.00 ·m <sup>-2</sup> ent Mylar 3.5μm 10discs GBP 851.00
	237-823-507  Typical Analysis: Starting Material: Ag 3, Ca This item is normally made to order for Thinness	10 mm <1, Cd <1, Cu 1 delivery within 4  Disc diam. 10 mm 25 mm <1, Cd <1, Cu 1 delivery within 4	1 disc GBP 193.00 , Fe <1, Mg <1 i-5 weeks. Area of Support Quanti 1 disc GBP 214.00 GBP 320.00 , Fe <1, Mg <1 i-5 weeks. Area of Support Quanti	2discs GBP 262.00 , Pd 1, Si 1. density	GBP 470.00 483µg.c Perman 5discs GBP 533.00 GBP 851.00 966µg.c Perman	GBP 746.00  m <sup>-2</sup> ent Mylar 3.5μm  10discs GBP 851.00
	237-823-507  Typical Analysis: Starting Material: Ag 3, Ca This item is normally made to order for Thinness	10 mm <1, Cd <1, Cu 1 delivery within 4  Disc diam. 10 mm 25 mm <1, Cd <1, Cu 1 delivery within 4	1 disc GBP 193.00 , Fe <1, Mg <1 i-5 weeks. Area of Suppo Quanti 1 disc GBP 214.00 GBP 320.00 , Fe <1, Mg <1 i-5 weeks. Area of Suppo Quanti 1 disc	2discs GBP 262.00 , Pd 1, Si 1.  density ty 2discs GBP 294.00 GBP 453.00 , Pd 1, Si 1.	GBP 470.00 483μg.c Perman 5discs GBP 533.00 GBP 851.00 966μg.c Perman 5discs	GBP 746.00  m-2 ent Mylar 3.5μm  10discs GBP 851.00  m-2 ent Mylar 3.5μm
	237-823-507  Typical Analysis: Starting Material: Ag 3, Ca This item is normally made to order for Thinness	10 mm <1, Cd <1, Cu 1 delivery within 4  Disc diam. 10 mm 25 mm <1, Cd <1, Cu 1 delivery within 4	1 disc GBP 193.00 , Fe <1, Mg <1 i-5 weeks. Area ( Suppo Quanti 1 disc GBP 214.00 GBP 320.00 , Fe <1, Mg <1 i-5 weeks. Area ( Suppo Quanti 1 disc GBP 214.00	2discs GBP 262.00 , Pd 1, Si 1. density	GBP 470.00  483µg.c Perman  5discs GBP 533.00 GBP 851.00  966µg.c Perman  5discs GBP 576.00	GBP 746.00  m-2 ent Mylar 3.5μm  10discs GBP 851.00  m-2 ent Mylar 3.5μm  10discs GBP 923.00



### Αu



### **Microfoil**

AU004800

Thinness..... 0.75μm

Area density . . . . . . . . 1449μg.cm<sup>-2</sup> Support . . . . . . . . . Permanent Mylar 3.5μm

Quantity

Web Code

Web Code 192-291-155

122-312-230

Disc diam.

2discs 1 disc

10discs

877-860-403

10 mm

5discs GBP 243.00 GBP 337.00 GBP 619.00 GBP 995.00

Tvoical Analysis: Starting Material: Ag 3, Ca < 1, Cd < 1, Cu 1, Fe < 1, Mg < 1, Pd 1, Si 1.

This item is normally made to order for delivery within 4-5 weeks.

AU004850

Purity......99.99+% Area density . . . . . . . 1932μg.cm<sup>-2</sup>
Support . . . . . . Permanent Mylar 3.5μm

Quantity

1 disc 2discs

5discs 10discs GBP 264.00 GBP 369.00 GBP 684.00 GBP 1103.00

Disc diam. 10 mm

Typical Analysis: Starting Material: Ag 3, Ca < 1, Cd < 1, Cu 1, Fe < 1, Mg < 1, Pd 1, Si 1.

This item is normally made to order for delivery within 4-5 weeks.



### Microleaf

These items are supplied on a temporary support for ease of handling and full removal instructions will be supplied with each delivery.

AU004925

 $\begin{array}{lll} \text{Thinness}. & & \textbf{0.25} \mu m \\ \text{Purity}. & & \textbf{99.99} + \% \end{array}$ 

Specific density . . . . . . . . Support..... Removable

483μg.cm<sup>-2</sup>

Web Code

Quantity Disc diam. 1 disc 2discs

10 mm GBP 294.00 GBP 413.00 GBP 771.00

Typical Analysis: Starting Material: Ag 3, Ca < 1, Cd < 1, Cu 1, Fe < 1, Mg < 1, Pd 1, Si 1.

This item is normally made to order for delivery within 4-5 weeks. This foil has a limited shelf-life and should be used within 7-10 days o receipt. Returns will not be accepted unless we are notified within 14 days of our invoice date.

AU004950

Specific density . . . . . . . 966μg.cm<sup>-2</sup> Support..... Removable

Quantity

Web Code Disc diam. 470-781-293

**diam.** 1 disc 2 discs 5 discs 10 mm GBP 315.00 GBP 445.00 GBP 836.00

Typical Analysis : Starting Material : Ag 3, Ca <1, Cd <1, Cu 1, Fe <1, Mg <1, Pd 1, Si 1.

This item is normally made to order for delivery within 4-5 weeks. This foil has a limited shelf-life and should be used within 7-10 days of receipt. Returns will not be accepted unless we are notified within 14 days of our invoice date.

AU004990

Thinness . . . . . . . . . . . . 1.0  $\mu m$ Purity......99.99+%

Specific density . . . . . . 1932μg.cm<sup>-2</sup> Support..... Removable

Quantity c diam. 1 disc 2discs 5discs 10 mm GBP 369.00 GBP 526.00 GBP 997.00 Disc diam.

Typical Analysis: Starting Material: Ag 3, Ca < 1, Cd < 1, Cu 1, Fe < 1, Mg < 1, Pd 1, Si 1.

This item is normally made to order for delivery within 4-5 weeks. This foil has a limited shelf-life and should be used within 7-10 days of receipt. Returns will not be accepted unless we are notified within 14 days of our invoice date.



### Foil

Web Code

661-356-418

AU000060

Thickness . . . . . . . . . 0.001mm

Purity..... 99.9% Quantity

Sizes LT Web Code

**Size 1pc 2pcs** 25 x 25 mm GBP 285.00 GBP 401.00

Typical Analysis: Ag 300, Al 1, B 1, Bi 2, Ca 4, Cd 4, Cr 5, Cu 500, Fe 2, K 15, Mg 1, Mn 1, Na 1, Ni 100, Pb 15, Pd 7, Sb 7, Si 2, Sn 5, V 2, Zr 10.

AU000065

Thickness . . . . . . . . . 0.0015mm

Purity..... 99.9% Quantity

Sizes LT Web Code 559-947-430 686-204-402

Typical Analysis: Ag 300, Al 1, B 1, Bi 2, Ca 4, Cd 4, Cr 5, Cu 500, Fe 2, K 15, Mg 1, Mn 1, Na 1, Ni 100, Pb 15, Pd 7, Sb 7, Si 2, Sn 5, V 2, Zr 10.

AU000070

Thickness . . . . . . . . . 0.002mm

Purity......99.9% Quantity

Sizes LT Web Code 907-750-868 537-787-854

Typical Analysis: Ag 300, Al 1, B 1, Bi 2, Ca 4, Cd 4, Cr 5, Cu 500, Fe 2, K 15, Mg 1, Mn 1, Na 1, Ni 100, Pb 15, Pd 7, Sb 7, Si 2, Sn 5, V 2, Zr 10.







### Foil

AU000080 Thickness . . . . . . . . . 0.0025mm

Purity..... 99.9%

Web Code 722-905-059 347-102-416

Quantity Sizes LT | Size | 1pc | 2pcs | 5pcs | 10pcs | 25 x 25 mm | GBP 252.00 | GBP 329.00 | GBP 489.00 | GBP 686.00 | 100 x 100 mm | GBP 991.00 | GBP 571.00 | 321-143-374

Typical Analysis: Ag 300, Al 1, B 1, Bi 2, Ca 4, Cd 4, Cr 5, Cu 500, Fe 2, K 15, Mg 1, Mn 1, Na 1, Ni 100, Pb 15, Pd 7, Sb 7, Si 2, Sn 5, V 2, Zr 10.

AU000090

Thickness 0.003mm		Purity.		99.9%
Sizes LT			Quantity	
Web Code	Size	1pc	2pcs	5pcs
903-054-346	25 x 25 mm	GBP 243.00	GBP 317.00	GBP 469.00
867-914-270	50 x 50 mm	GBP 405.00	GBP 546.00	
120-403-003	100 x 100 mm	GRP 962 00		

Typical Analysis: Ag 300, Al 1, B 1, Bi 2, Ca 4, Cd 4, Cr 5, Cu 500, Fe 2, K 15, Mg 1, Mn 1, Na 1, Ni 100, Pb 15, Pd 7, Sb 7, Si 2, Sn 5, V 2, Zr 10.

AU000100

Thickness 0.004mm		Purity		99.9%	
NLT Sizes			Quai	ntity	
Web Code	Size	1pc	2pcs	5pcs	10pcs
421-328-660	25 x 25 mm	GBP 235.00	GBP 305.00	GBP 450.00	GBP 653.00
936-626-248	50 x 50 mm	GBP 389.00	GBP 522.00	GBP 1179.00	
388-227-774	100 x 100 mm	GBP 939.00	GBP 1803.00		
324-369-188	150 x 150 mm	GBP 2011.00			

Sizes LT Quantity Web Code 767-738-754 046-703-339

Typical Analysis: Ag 300, Al 1, B 1, Bi 2, Ca 4, Cd 4, Cr 5, Cu 500, Fe 2, K 15, Mg 1, Mn 1, Na 1, Ni 100, Pb 15, Pd 7, Sb 7, Si 2, Sn 5, V 2, Zr 10.

Durity

00 0%

AU000110

THICKHESS		Fully		99.970	
NLT Sizes			Quai	ntity	
Web Code	Size	1pc	2pcs	5pcs	10pcs
638-061-379	25 x 25 mm	GBP 233.00	GBP 302.00	GBP 445.00	GBP 636.00
113-749-165	50 x 50 mm	GBP 384.00	GBP 515.00	GBP 1145.00	
038-835-962	100 x 100 mm	GBP 912.00	GBP 1748.00		
110-400-956	150 x 150 mm	GBP 1949.00			

0.005mm

Sizes LT Quantity Web Code 652-240-210 452-202-835

Typical Analysis: Ag 300, Al 1, B 1, Bi 2, Ca 4, Cd 4, Cr 5, Cu 500, Fe 2, K 15, Mg 1, Mn 1, Na 1, Ni 100, Pb 15, Pd 7, Sb 7, Si 2, Sn 5, V 2, Zr 10.

AU000120

THICKHESS U.UUUIIIII	m Fullty				
NLT Sizes			Quar	ntity	
Web Code	Size	1pc	2pcs	5pcs	10pcs
588-979-739	25 x 25 mm	GBP 225.00	GBP 290.00	GBP 427.00	GBP 622.00
597-767-343	50 x 50 mm	GBP 368.00	GBP 493.00	GBP 1117.00	
769-097-973	100 x 100 mm	GBP 889.00	GBP 1704.00		
596-932-931	150 x 150 mm	GBP 1899.00			

Sizes LT Quantity 
 Size
 1pc
 2pcs
 5pcs
 10pcs

 25 x 25 mm
 GBP 270.00
 GBP 348.00
 GBP 512.00
 GBP 747.00

 50 x 50 mm
 GBP 478.00
 GBP 640.00
 GBP 1452.00
 Web Code 694-372-781 933-237-745

Discs			Quantity	
Web Code	Diameter	10 discs	20 discs	50 discs
779-676-579	4 mm	GBP 258.00	GBP 315.00	GBP 452.00
459-572-806	6 mm	GBP 299.00	GBP 373.00	GBP 545.00
446-607-077	8 mm	GBP 340.00	GBP 431.00	GBP 640.00
825-882-475	10 mm	GBP 381.00	GBP 491.00	GBP 736.00
235-306-984	15 mm	GBP 482.00	GBP 634.00	GBP 1297.00
413-368-722	25 mm	GBP 743.00		

Typical Analysis: Ag 300, Al 1, B 1, Bi 2, Ca 4, Cd 4, Cr 5, Cu 500, Fe 2, K 15, Mg 1, Mn 1, Na 1, Ni 100, Pb 15, Pd 7, Sb 7, Si 2, Sn 5, V 2, Zr 10.







### Foil

Sizos I T

11000400	Thiskness

11110K11633		i unity			
NLT Sizes			Quai	ntity	
Web Code	Size	1pc	2pcs	5pcs	10pcs
329-180-705	25 x 25 mm	GBP 217.00	GBP 280.00	GBP 411.00	GBP 613.00
806-323-023	50 x 50 mm	GBP 353.00	GBP 484.00	GBP 1098.00	
951-582-994	100 x 100 mm				
475-087-784	150 x 150 mm	GBP 1866.00			

SIZES LI			Quai	ility	
Web Code	Size	1pc	2pcs	5pcs	10pcs
949-700-765 490-414-919				GBP 452.00 GBP 1373.00	GBP 675.00

Discs			Quantity		
Web Code	Diameter	10 discs	20 discs	50 discs	
689-282-270	4 mm	GBP 254.00	GBP 309.00	GBP 443.00	
160-276-919	6 mm	GBP 293.00	GBP 364.00	GBP 531.00	
034-623-754	8 mm	GBP 331.00	GBP 420.00	GBP 621.00	
327-967-263	10 mm	GBP 371.00	GBP 476.00	GBP 727.00	
995-905-855	15 mm	GBP 467.00	GBP 613.00	GBP 1279.00	
488-234-542	25 mm	GBP 733.00			

Typical Analysis: Ag 300, Al 1, B 1, Bi 2, Ca 4, Cd 4, Cr 5, Cu 500, Fe 2, K 15, Mg 1, Mn 1, Na 1, Ni 100, Pb 15, Pd 7, Sb 7, Si 2, Sn 5, V 2, Zr 10.

AU000140	Thickness 0.008mm		Purity		99.9%	
	NLT Sizes			Quai	ntity	
	Web Code	Size	1pc	2pcs	5pcs	10pcs
	021-787-724	25 x 25 mm	GBP 225.00	GBP 290.00	GBP 427.00	GBP 622.00
	410-439-908	50 x 50 mm	GBP 368.00	GBP 493.00	GBP 1116.00	
	168-438-999	100 x 100 mm	GBP 889.00	GBP 1703.00		
	836-260-165	150 x 150 mm	GBP 1898.00			

Sizes LT		Quantity			
Web Code	Size	1pc	2pcs	5pcs	10pcs
331-686-852	25 x 25 mm	GBP 247.00	GBP 319.00	GBP 469.00	GBP 684.00
890-511-379	50 x 50 mm	GBP 460.00	GBP 616.00	GBP 1395.00	

Discs			Quantity	
Web Code	Diameter	10 discs	20 discs	50 discs
378-118-423	4 mm	GBP 258.00	GBP 315.00	GBP 452.00
264-808-755	6 mm	GBP 299.00	GBP 373.00	GBP 545.00
101-092-815	8 mm	GBP 339.00	GBP 431.00	GBP 640.00
636-600-457	10 mm	GBP 381.00	GBP 490.00	GBP 736.00
575-052-373	15 mm	GBP 482.00	GBP 634.00	GBP 1297.00
881-539-040	25 mm	GBP 743 00		

Typical Analysis: Ag 300, Al 1, B 1, Bi 2, Ca 4, Cd 4, Cr 5, Cu 500, Fe 2, K 15, Mg 1, Mn 1, Na 1, Ni 100, Pb 15, Pd 7, Sb 7, Si 2, Sn 5, V 2, Zr 10.

AU000150	Thickness 0.009i	mm	Purity		99.9%	
	NLT Sizes			Quar	ntity	
	Web Code	Size	1pc	2pcs	5pcs	10
	391-473-299	25 x 25 mm	GBP 217.00	GBP 279.00	GBP 409.00	GBP 607
	270-458-730	50 x 50 mm	GBP 352.00	GBP 479.00	GBP 1086.00	
	432-751-919	100 x 100 mm	GBP 865.00	GBP 1654.00		
	056-180-447	150 x 150 mm	GBP 1844.00			

Sizes LT		Quantity			
Web Code	Size	1pc	2pcs	5pcs	10pcs
025-273-652				GBP 450.00	GBP 668.00
010-368-206	50 x 50 mm	GBP 440.00	GBP 599.00	GBP 1357.00	

Discs			Quantity	
Web Code	Diameter	10 discs	20 discs	50 discs
875-566-964	4 mm	GBP 253.00	GBP 308.00	GBP 442.00
445-871-765	6 mm	GBP 292.00	GBP 363.00	GBP 530.00
733-972-125	8 mm	GBP 330.00	GBP 418.00	GBP 619.00
746-513-060	10 mm	GBP 369.00	GBP 474.00	
314-129-991	15 mm	GBP 465.00	GBP 610.00	GBP 1266.00
266-238-855	25 mm	GBP 726.00		

Typical Analysis: Ag 300, Al 1, B 1, Bi 2, Ca 4, Cd 4, Cr 5, Cu 500, Fe 2, K 15, Mg 1, Mn 1, Na 1, Ni 100, Pb 15, Pd 7, Sb 7, Si 2, Sn 5, V 2, Zr 10.

n Coil width

Coil	Width 0.35mm		Quantity
Web Code	Length	1 Reel	
722-419-055	0.1 m	GBP 135.00	
517-254-488	0.2 m	GBP 149.00	
164-603-000	0.5 m	GBP 176.00	
158-508-290	1 m	GBP 213.00	
349-268-466	2 m	GBP 324.00	

Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1, Si 1.



Gold						
Au						
	Foil					
AU000160	Thickness 0.01mm  NLT Sizes		Purity.	Quantity	99.9%	
	Web Code 404-886-444	<b>Size</b> 25 x 25 mm	<b>1pc</b> GBP 207.00	<b>2pcs</b> GBP 265.00	<b>5pcs</b> GBP 388.00	
	885-899-188 876-167-728	50 x 50 mm 100 x 100 mm	GBP 333.00	GBP 458.00		
	Sizes LT Web Code	Size	1no	Quantity	Enac	
	042-059-006 267-345-854	25 x 25 mm	<b>1pc</b> GBP 228.00 GBP 416.00	<b>2pcs</b> GBP 292.00 GBP 572.00	<b>5pcs</b> GBP 426.00	
	Discs			Quantity		
	Web Code 273-209-476		<b>10 discs</b> GBP 248.00	<b>20 discs</b> GBP 301.00	<b>50 discs</b> GBP 430.00	
	151-177-579 897-188-455	8 mm	GBP 320.00	GBP 352.00 GBP 403.00	GBP 595.00	
	148-554-634 569-333-105		GBP 356.00 GBP 445.00	GBP 455.00 GBP 581.00	GBP 696.00	
AU000329	Typical Analysis : Ag 300, Al 1, B 1, Bi 2, C  Thickness			Mg 1, Mn 1, Na 1		<sup>2</sup> d 7, Sb 7, Si 2, Sn 5, V 2, Zr 10.
10000323	Purity 99.95%			er	As rolled	i
	Coil Web Code	Width 0.127mm Length	1 Reel	Quantity		
	559-016-395 027-919-755	0.1 m	GBP 123.00 GBP 143.00			
	547-809-699 715-970-987	0.5 m	GBP 185.00 GBP 236.00			
	935-479-304	2 m	GBP 311.00			
11000000	Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1		0-11	: -141-	20	
	Thickness 0.0125mn Purity				As rolled	i
	Coil Web Code	Width 0.38mm Length	1 Reel	Quantity		
	860-485-907 811-326-783	0.1 m	GBP 134.00 GBP 159.00			
	053-227-099 408-305-998	0.5 m	GBP 210.00 GBP 271.00			
	425-947-905		GBP 361.00			
	Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1					
AU000331	Thickness	1	Coil w Tempe	idth	508mm As rolled	d
	Coil Web Code	Width 0.508mm Length	1 Reel	Quantity		
	764-689-005 086-424-159	0.1 m	GBP 143.00 GBP 171.00			
	622-184-692	0.5 m	GBP 230.00			
	916-712-171 929-542-235		GBP 298.00 GBP 400.00			
	Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1					
AU000170	Thickness 0.0125mn  NLT Sizes	1	Purity.			
	Web Code 539-430-264	Size	1pc	<b>2pcs</b> GBP 242.00	5pcs	<b>10pcs</b> GBP 538.00
	971-041-683	50 x 50 mm	GBP 299.00	GBP 424.00		GBP 330.00
	610-852-796 437-029-387	100 x 100 mm 150 x 150 mm		GBP 1434.00		
	Sizes LT Web Code	Size	1pc	Quan 2pcs	tity 5pcs	10pcs
	424-266-592 125-522-071	25 x 25 mm	GBP 209.00	GBP 266.00 GBP 467.00	GBP 385.00	GBP 592.00
	643-704-716	100 x 100 mm	GBP 868.00	GBP 1649.00	ODI 1073.00	
	Discs Web Code	Diamete:	10 diasa	Quantity	50 diasa	
	Web Code 732-910-687		10 discs GBP 239.00	<b>20 discs</b> GBP 288.00		
	613-833-152 729-139-458	8 mm	GBP 301.00	GBP 332.00 GBP 377.00	GBP 552.00	
	142-434-977 804-367-207 545-900-929		GBP 332.00 GBP 409.00 GBP 649.00	GBP 422.00 GBP 543.00		
				Ma 1 Ma 1 N - 1	Ni 100 Di 15 D	M7 0h7 0i 0 0= 5 V 0 7-40
	Typical Analysis : Ag 300, Al 1, B 1, Bi 2, C	a 4, Cu 4, Cr 5, Cu t	ουυ, re ∠, K 15, ľ	vig i, iVin i, Na 1	, INI 100, PD 15, P	u 1, 30 1, 31 2, 3N 5, V 2, Zr 10.



Gold						
Au						
	Foil					
AU000180	Thickness 0.015mm		Purity.		99.9%	
	NLT Sizes Web Code	Sizo	1na	Quan	•	10pcs
	876-004-053		1pc GBP 206.00			GBP 572.00
	537-789-329 967-586-783	50 x 50 mm 100 x 100 mm		GBP 451.00 GBP 1542.00	GBP 1016.00	
	245-869-048	150 x 150 mm				
	Sizes LT			Quan	tity	
	Web Code 774-434-654	Size	1pc	<b>2pcs</b> GBP 290.00	5pcs	<b>10pcs</b> GBP 629.00
	498-961-188	50 x 50 mm	GBP 364.00	GBP 497.00		GBI 029.00
	376-219-648	100 x 100 mm	GBP 1011.00	GBP 1920.00		
	Discs	D:	40 -1:	Quantity	50 di	
	<b>Web Code</b> 898-127-943		<b>10 discs</b> GBP 248.00		<b>50 discs</b> GBP 428.00	
	265-990-787 248-837-790	8 mm	GBP 283.00 GBP 319.00	GBP 350.00 GBP 401.00	GBP 509.00 GBP 592.00	
	104-724-868 090-608-927	10 mm	GBP 354.00 GBP 442.00	GBP 453.00 GBP 578.00	GBP 689.00	
	326-117-997		GBP 687.00			
	Typical Analysis : Ag 300, Al 1, B 1, Bi 2, Ca	4, Cd 4, Cr 5, Cu 5	500, Fe 2, K 15, I	Mg 1, Mn 1, Na 1	, Ni 100, Pb 15,	Pd 7, Sb 7, Si 2, Sn 5, V 2, Zr 10.
AU000190	Thickness 0.02mm		Purity.		99.9%	
	NLT Sizes			Quantity	_	
	<b>Web Code</b> 610-260-383		<b>1pc</b> GBP 190.00	<b>2pcs</b> GBP 241.00	<b>5pcs</b> GBP 349.00	
	225-267-598 831-773-324	50 x 50 mm 100 x 100 mm	GBP 298.00 GBP 750.00	GBP 422.00		
	Sizes LT Web Code	Size	1pc	Quantity 2pcs	5pcs	
	383-241-013 564-291-529	25 x 25 mm	GBP 209.00 GBP 328.00	GBP 265.00 GBP 464.00	GBP 384.00	
	795-088-418	100 x 100 mm		JDI +04.00		
	Discs			Quantity		
	Web Code	Diameter	10 discs	20 discs	50 discs	
	403-173-190 396-645-035	6 mm	GBP 239.00 GBP 269.00	GBP 287.00 GBP 331.00	GBP 408.00 GBP 479.00	
	580-627-754 578-466-286		GBP 300.00 GBP 332.00	GBP 376.00 GBP 421.00	GBP 551.00 GBP 655.00	
	308-278-422	15 mm	GBP 408.00	GBP 540.00		
	Typical Analysis : Ag 300, Al 1, B 1, Bi 2, Ca	4, Cd 4, Cr 5, Cu 5	500, Fe 2, K 15, I	Mg 1, Mn 1, Na 1	, Ni 100, Pb 15,	Pd 7, Sb 7, Si 2, Sn 5, V 2, Zr 10.
AU000342	Thickness 0.025mm			idth		
	Purity 99.95%  Coil	Width 2mm	rempe	Quantity	AS FOILE	eu .
	Web Code	Length	1 Reel			
	621-833-922 791-630-510	0.1 m	GBP 107.00 GBP 123.00			
	179-048-542 689-775-916	0.2 m 0.5 m	GBP 146.00 GBP 238.00			
	Typical Applysis - Ac 90 Co. 40 Fo 2 Adv. 4	Çi 1				
A11000040	Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1,	ΟΙ I.	D9		00.0564	
AU000340	Thickness 0.025mm Temper As rolled		Purity.		99.95%	
	NLT Sizes	O:-	4	Quantity	F	
	<b>Web Code</b> 584-905-457		<b>1pc</b> GBP 213.00	<b>2pcs</b> GBP 278.00	<b>5pcs</b> GBP 410.00	
	809-444-657 825-097-122	50 x 50 mm 100 x 100 mm	GBP 360.00 GBP 722.00	GBP 486.00		
	Sizoe I T			Quantity		
	Sizes LT Web Code	Size	1pc	2pcs	5pcs	
	028-124-967 724-407-594		GBP 234.00 GBP 396.00	GBP 306.00 GBP 535.00	GBP 451.00	
	128-071-432	100 x 100 mm				
	Discs			Quantity		
	Web Code 007-623-192	Diameter	<b>10 discs</b> GBP 254.00	<b>20 discs</b> GBP 325.00	<b>50 discs</b> GBP 502.00	
	952-899-358	6 mm	GBP 300.00	GBP 391.00	GBP 608.00	
	112-417-848 052-225-402	10 mm	GBP 346.00 GBP 393.00	GBP 458.00 GBP 526.00	GBP 718.00 GBP 829.00	
	528-183-072	15 mm	GBP 507.00	GBP 688.00		
	Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1,	Si 1.				



Au						
	Foil					
AU000341	Thickness 0.025mm Temper As rolled		High P	•	99.99+%	
	NLT Sizes Web Code	Size	1pc	Quantity 2pcs	5pcs	
	946-686-761 030-468-784 864-391-787	25 x 25 mm	GBP 239.00 GBP 412.00		GBP 468.00	
	Sizes LT Web Code	Size	1pc	Quantity 2pcs	5pcs	
	299-271-009 481-264-835 380-901-903	25 x 25 mm	GBP 263.00 GBP 453.00	GBP 346.00 GBP 615.00		
	Discs Web Code	Diameter	10 discs	Quantity 20 discs	50 discs	
	187-126-611 390-826-752	4 mm 6 mm	GBP 270.00 GBP 324.00	GBP 348.00 GBP 426.00	GBP 539.00 GBP 665.00	
	853-346-876 668-355-254 544-408-278	8 mm 10 mm	GBP 379.00 GBP 435.00 GBP 569.00	GBP 505.00 GBP 586.00	GBP 796.00	
	Typical Analysis : Ag 3, Ca <1, Cd <1, Cu	1, Fe <1, Mg <1, I				 
AU000343	Thickness 0.05mm Purity				4mm As rolled	
	Coil Web Code	Width 4mm Length	1 Reel	Quantity		
	004-049-526 481-751-283 282-148-274	0.05 m 0.1 m	GBP 123.00 GBP 146.00 GBP 203.00			
	282-148-274 471-118-462		GBP 203.00 GBP 405.00			
	Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1,	Si 1.				 
AU000344	Thickness 0.05mm Condition Central 0.0	)6mm diameter l			99.95%	
	Discs Web Code	Diameter	Quantity 1 discs			
	286-910-407	8 mm	GBP POA			
AU000345	Typical Analysis: Ag 80, Cu 10, Fe 3, Mg 1,  Thickness	Si 1.	Purity.		99 95%	
40000343	Temper As rolled		, and			
	Size Web Code 375-941-545	<b>Size</b> 25 x 25 mm	<b>1pc</b> GBP 185.00	Quantity 2pcs GRP 238 00		
	992-698-698 087-333-710	50 x 50 mm 100 x 100 mm	GBP 305.00	GBP 482.00	GBP 340.00	
	Discs Web Code	Diameter	10 discs	Quantity 20 discs	50 discs	
	916-723-425 590-437-423	4 mm 6 mm	GBP 237.00 GBP 274.00	GBP 301.00 GBP 355.00	GBP 464.00 GBP 551.00	
	804-682-646 585-329-460 166-182-825	10 mm	GBP 312.00 GBP 351.00 GBP 444.00	GBP 466.00	GBP 642.00 GBP 824.00	
	Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1,		GDF 444.00	GDF 000.00		
AU000347	Thickness 0.05mm Temper As rolled		High P	Purity	99.99%	 
	Size	Qi	40.5	Quantity		
	<b>Web Code</b> 008-856-079 420-687-743 700-505-180	25 x 25 mm 50 x 50 mm 100 x 100 mm		2pcs GBP 295.00 POA	<b>5pcs</b> POA	
	Discs			Quantity		
	Web Code 028-718-953	Diameter 4 mm			<b>50 discs</b> GBP 432.00	
	589-868-156 733-514-697 689-337-287	6 mm 8 mm 10 mm	GBP 347.00	GBP 438.00	GBP 537.00 GBP 768.00 GBP 1064.00	
	167-161-351		GBP 543.00		GDF 1004.00	
		1 Fo < 1 Mg < 1	Pd 1, Si 1.			
	Typical Analysis : Ag 3, Ca <1, Cd <1, Cu	1, Fe < 1, Mg < 1,				
	Typical Analysis : Ag 3, Ca <1, Cd <1, Cu	1, Fe < 1, Mg < 1,				



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Gold					
Au					
	Foil				
AU000349	Thickness		Purity	Quantity	99.95%
	Web Code 617-904-635 885-071-431 023-153-373	25 x 25 mm 50 x 50 mm 100 x 100 mm	1pc GBP 216.00 GBP 526.00 POA	2pcs	<b>5pcs</b> POA
	Discs Web Code 395-337-008 381-970-202 684-981-951 846-776-313 555-636-991	6 mm 8 mm 10 mm	GBP 304.00 GBP 352.00	Quantity 20 discs GBP 329.00 GBP 398.00 GBP 492.00 GBP 659.00 GBP 1218.00	GBP 713.00 GBP 1036.00
	Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1,	Si 1.			
AU000348	Thickness 0.10mm Temper As rolled		High F	Ourity	99.99%
	Size Web Code 895-711-782 963-974-088 496-750-452	Size 25 x 25 mm 50 x 50 mm 100 x 100 mm	1pc GBP 259.00 GBP 756.00 POA	Quantity 2pcs GBP 429.00 POA	<b>5pcs</b> POA
	Discs Web Code 093-801-898 725-230-659 653-825-981 728-240-035 030-005-642	6 mm 8 mm 10 mm	GBP 398.00	GBP 450.00 GBP 634.00 GBP 871.00	GBP 1342.00
	Typical Analysis : Ag 3, Ca < 1, Cd < 1, Cu	1, Fe < 1, Mg < 1, I	Pd 1, Si 1.		
AU000351	Thickness 0.125mm Temper As rolled Size		Purity	Quantity	99.95%
	<b>Web Code</b> 134-953-491 157-112-419 921-489-472		1pc GBP 232.00 GBP 650.00 POA	<b>2pcs</b> GBP 376.00 POA	<b>5pcs</b> POA
	Discs Web Code 446-053-911 973-537-268 029-541-456 179-119-642 289-555-715	6 mm 8 mm 10 mm	GBP 309.00 GBP 366.00	GBP 327.00 GBP 414.00 GBP 570.00 GBP 772.00	GBP 792.00 GBP 1183.00
	Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1,	Si 1.			
AU000350	Thickness		High F	Ourity	99.99+9
	Web Code 838-904-027 863-005-244 875-662-153	Size 25 x 25 mm 50 x 50 mm 100 x 100 mm	1pc GBP 282.00 GBP 847.00 POA	2pcs	<b>5pcs</b> POA
	Discs Web Code 457-762-908 220-362-724 545-344-508 168-065-731		GBP 322.00 GBP 427.00		
	008-220-796		GBP 1019.00		GBF 2102.00
	Typical Analysis : Ag 3, Ca < 1, Cd < 1, Cu 1, Fe < 1, Mg < 1, Pd 1, Si 1.				



•	-44 1480 424 800 : Fax +44	1460 424 90	10				
Gold							
Au							
	Foil						
AU000371	Thickness 0.250mm Temper As rolled		Purity				
	Size Web Code 186-747-361 842-791-015 348-887-425 610-925-252	Size 10 x 10 mm 25 x 25 mm 50 x 50 mm 100 x 100 mm		<b>Quan 2pcs</b> GBP 196.00 GBP 605.00	5pcs	<b>10pcs</b> POA	
	Discs Web Code 365-655-444 706-937-247 367-153-610 894-200-031 775-012-463	6 mm 8 mm 10 mm	GBP 355.00 GBP 487.00	Quantity 20 discs GBP 360.00 GBP 548.00 GBP 851.00 GBP 1241.00 GBP 2549.00	GBP 1179.00 GBP 1937.00		
	Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1,	, Si 1.					
AU000370	Thickness 0.250mm Temper As rolled		High F	Purity	99.99% Quantity		
	Size Web Code 871-570-197 948-010-029 449-856-847 232-102-996	12.5 x 12.5 mm	1pc GBP 161.00 GBP 179.00 GBP 441.00 POA		5pcs GBP 396.00	<b>10pcs</b> GBP 711.00 POA	<b>20pcs</b> POA
	Discs Web Code 608-788-741 098-596-961 324-614-882 576-855-405	6 mm 8 mm	10 discs GBP 333.00 GBP 471.00 GBP 668.00 GBP 923.00		<b>50 discs</b> GBP 947.00		
	Typical Analysis : Ag 3, Ca <1, Cd <1, Cu	1, Fe <1, Mg <1, I	Pd 1, Si 1.				
AU000372	Thickness			Purity	tity		
	<b>Web Code</b> 039-578-790 399-879-165 947-964-653 868-725-061	10 x 10 mm 25 x 25 mm 50 x 50 mm 100 x 100 mm	1pc GBP 196.00 GBP 516.00 POA POA	<b>2pcs</b> GBP 242.00 GBP 943.00	5pcs GBP 448.00 POA	<b>10pcs</b> POA	
AU000380	Typical Analysis : Ag 3, Cu 3, Fe 2, Mg 2.  Thickness		Purity		99.95%		
7.000000	Temper As rolled Size Web Code 286-378-152 568-761-692 095-204-885	<b>Size</b> 10 x 10 mm 25 x 25 mm 50 x 50 mm	Quantity 1pc POA POA POA				
	Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1	, Si 1.					
AU000381	Thickness	Size 10 x 10 mm 25 x 25 mm 50 x 50 mm	High F Quantity 1pc POA POA POA	Purity	99.999%	•	
	Typical Analysis : Ag 3, Cu 3, Fe 2, Mg 2.						
AU000385	Thickness	<b>Size</b> 10 x 10 mm 25 x 25 mm 50 x 50 mm	Quantity 1pc POA POA POA		99.95%		
	Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1,	, Si 1.					



### Gold Au Foil Thickness . . . . . . . . . 1.0mm AU000391 Temper . . . . . . . . . . As rolled Quantity **Discs** Web Code 423-075-019 1 discs GBP POA Diameter 12 mm Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1, Si 1. Thickness . . . . . . 1.0mm Temper . . . . . As rolled AU000392 Size Quantity **Web Code** 048-264-932 Size 1pc POA 10 x 10 mm Typical Analysis: Ag 80, Cu 10, Fe 3, Mg 1, Si 1. AU000390 Thickness . . . . . . . . . 1.0mm Purity...... 99.95% Temper . . . . . . . . . . . As rolled Size Quantity Web Code 541-542-898 900-602-303 Size 1pc POA POA POA 10 x 10 mm 25 x 25 mm 575-294-029 50 x 50 mm Typical Analysis: Ag 80, Cu 10, Fe 3, Mg 1, Si 1. Thickness . . . . . . . . 1.0mm High Purity . . . . . . . . . . 99.999% AU000393 Temper . . . . . . . . . . As rolled Size Quantity 1pc POA POA Web Code Size 883-489-553 809-707-239 10 x 10 mm 25 x 25 mm 364-669-605 50 x 50 mm Typical Analysis: Ag 3, Cu 3, Fe 2, Mg 2. AU000395 Thickness . . . . . . . . 1.5mm Purity......99.95% Temper . . . . . . . . . As rolled Quantity Size Web Code Size 1pc POA POA 452-764-083 963-875-208 10 x 10 mm 25 x 25 mm 350-006-375 Typical Analysis: Ag 80, Cu 10, Fe 3, Mg 1, Si 1. High Purity . . . . . . . . . . 99.999% AU000396 Temper . . . . . . . . . As rolled Size Quantity 1pc POA POA Web Code Size 040-882-687 955-485-404 10 x 10 mm 25 x 25 mm 543-580-275 50 x 50 mm Typical Analysis: Ag 3, Cu 3, Fe 2, Mg 2. AU000400 Thickness . . . . . . . . 2.0mm Purity..... 99.95% Temper . . . . . . . . . . . As rolled Quantity Web Code 582-025-462 911-758-561 Size 10 x 10 mm 25 x 25 mm 50 x 50 mm POA Typical Analysis: Ag 80, Cu 10, Fe 3, Mg 1, Si 1. AU000401 Thickness . . . . . 2.0mm Temper . . . . . As rolled High Purity . . . . . . . . . . . 99.999% Size Quantity Web Code 311-900-264 400-160-122 064-301-933 Size 10 x 10 mm 25 x 25 mm 50 x 50 mm Typical Analysis: Ag 3, Cu 3, Fe 2, Mg 2.



### Gold Au **Sputtering Target** AU009100 Thickness . . . . . . . . . . 0.1mm Purity..... 99.95% Size Quantity Web Code 678-449-863 767-152-206 269-620-278 Disc diam. 25 mm 1disc POA POA POA 50 mm 54 mm 631-109-991 57 mm Typical Analysis: Ag 80, Cu 10, Fe 3, Mg 1, Si 1. These targets are normally available for immediate shipment from stock. Other sizes are available to special order. AU009202 Size Quantity **Web Code** 909-757-633 700-195-918 Disc diam. 1disc 25 mm 50 mm POA POA 049-632-480 145-707-263 57 mm Typical Analysis: Ag 80, Cu 10, Fe 3, Mg 1, Si 1. These targets are normally available for immediate shipment from stock. Other sizes are available to special order. Thickness . . . . . . . . . 0.5mm AU009203 Tolerance . . . . . . . . . . . . . . . . . 15% Purity..... 99.95% Size Quantity Web Code Disc diam. 1disc 448-157-218 678-827-311 25 mm 50 mm POA POA 935-007-932 54 mm POA 672-755-791 Typical Analysis: Ag 80, Cu 10, Fe 3, Mg 1, Si 1. These targets are normally available for immediate shipment from stock. Other sizes are available to special order. AU009205 Thickness . . . . . . . . 1.0mm High Purity . . . . . . . . . . 99.999% Quantity Size Web Code 369-712-979 Disc diam. 1disc 627-540-266 POA 25.4 mm Typical Analysis: Ag 3, Cu 3, Fe 2, Mg 2. These targets are normally available for immediate shipment from stock. Other sizes are available to special order. Thickness . . . . . . . . . 1.0mm Purity..... 99.95% AU009206 Quantity Size Web Code Disc diam. 1disc 611-718-263 484-695-179 25 mm 50 mm POA POA 54 mm 300-208-255 57 mm Typical Analysis: Ag 80, Cu 10, Fe 3, Mg 1, Si 1. These targets are normally available for immediate shipment from stock. Other sizes are available to special order. AU009204 Thickness . . . . . . . . . 2.0mm Purity..... 99.95% Quantity Size Web Code 653-414-251 Disc diam. 25 mm 1disc POA 336-338-952 50 mm POA Typical Analysis: Ag 80, Cu 10, Fe 3, Mg 1, Si 1. These targets are normally available for immediate shipment from stock. Other sizes are available to special order. AU009207 High Purity . . . . . . . . . . 99.999% Thickness . . . . . . . . . . 2.0mm Quantity Size Web Code Disc diam. 1disc 25.4 mm 50.8 mm 928-216-201 POA 345-950-847 POA Typical Analysis: Ag 3, Cu 3, Fe 2, Mg 2, These targets are normally available for immediate shipment from stock. Other sizes are available to special order. Purity......99.95% Thickness . . . . . . . . . 3mm AU009208 Size Quantity Web Code Disc diam. 1disc 567-037-208 802-532-440 25 mm 50 mm POA POA Typical Analysis: Ag 80, Cu 10, Fe 3, Mg 1, Si 1. These targets are normally available for immediate shipment from stock. Other sizes are available to special order



### Au



### **Sputtering Target**

AU009209

High Purity . . . . . . . . . . . . 99.999% Thickness . . . . . . . . . . 3mm

Size Quantity Web Code Disc diam. 1disc 623-091-562 324-115-391 25 mm 50 mm POA POA

Typical Analysis: Ag 3, Cu 3, Fe 2, Mg 2.

These targets are normally available for immediate shipment from stock. Other sizes are available to special order.



### Mesh

AU008721

Nominal Aperture..... 0.011mm Thickness . . . . . . . . . 0.004mm Wire diameter..... 0.005mm 

Size Quantity Size 1pc 2pcs 10 x 10 mm GBP 163.00 GBP 210.00 20 x 20 mm GBP 251.00 GBP 335.00 50 x 50 mm GBP 552.00 Web Code 437-659-372 899-125-481 804-703-028

Typical Analysis: Ag 300, Al 1, B 1, Bi 2, Ca 4, Cd 4, Cr 5, Cu 500, Fe 2, K 15, Mg 1, Mn 1, Na 1, Ni 100, Pb 15, Pd 7, Sb 7, Si 2, Sn 5, V 2, Zr 10.

AU008725

Nominal Aperture..... 0.04mm Wire diameter..... 0.011mm Open area ..... 60% Type ..... Electro-formed mesh

Size Quantity 
 Size
 1pc

 10 x 10 mm
 GBP 146.00

 25 x 25 mm
 GBP 251.00

 50 x 50 mm
 GBP 516.00
 Web Code **2pcs 5pcs** GBP 185.00 GBP 266.00 729-929-971 525-067-831 290-503-215

Typical Analysis: Ag 300, Al 1, B 1, Bi 2, Ca 4, Cd 4, Cr 5, Cu 500, Fe 2, K 15, Mg 1, Mn 1, Na 1, Ni 100, Pb 15, Pd 7, Sb 7, Si 2, Sn 5, V 2, Zr 10.

AU008730

Nominal Aperture..... 0.064mm Thickness . . . . . . . . . 0.004mm Wire diameter..... 0.0125mm 
 Open area
 70%

 Type
 Electro-formed mesh
 

Size Quantity Web Code 
 Size
 1pc
 2pcs
 5pcs

 10 x 10 mm
 GBP 108.00
 GBP 131.00
 GBP 175.00

 25 x 25 mm
 GBP 167.00
 GBP 215.00
 GBP 155.00

 50 x 50 mm
 GBP 301.00
 GBP 215.00
 GBP 167.00
 616-585-237 142-974-300 579-165-476

Typical Analysis: Ag 300, Al 1, B 1, Bi 2, Ca 4, Cd 4, Cr 5, Cu 500, Fe 2, K 15, Mg 1, Mn 1, Na 1, Ni 100, Pb 15, Pd 7, Sb 7, Si 2, Sn 5, V 2, Zr 10.

AU008710

Nominal Aperture..... 0.25mm Wire diameter..... 0.06mm Open area ........... 65%
Type ...... Plain weave mesh Purity..... 99.9% Size Quantity

 
 Size
 1pc
 2pcs
 5pcs

 20 x 20 mm
 GBP 169.00
 GBP 211.00
 GBP 300.00

 50 x 50 mm
 GBP 273.00
 GBP 451.00

 00 x 100 mm
 GBP 752.00
 GBP 451.00
 Web Code 011-784-569 473-069-099 100 x 100 mm 133-626-904

Typical Analysis: Ag 300, Al 1, B 1, Bi 2, Ca 4, Cd 4, Cr 5, Cu 500, Fe 2, K 15, Mg 1, Mn 1, Na 1, Ni 100, Pb 15, Pd 7, Sb 7, Si 2, Sn 5, V 2, Zr 10.



### Wire

AU005110

Purity.......99.99+% Temper . . . . . . . . . . Hard

Length Web Code 052-270-517 726-959-758 869-967-279 Quantity ngth 1 m GBP 239.00 5 m GBP 413.00 10 m GBP 553.00 20 m GBP 720.00 Length 10 m 745-904-768

Typical Analysis : Ag <50, Ca <3, Cu <20, Fe <20, Mg <20, Pb <1, Pd <10, Pt <10, Si <1. 1m, 5m, 10m and 20m reels only.



### Gold Au Wire Purity..... 99.99+% AU005115 Diameter..... 0.0125mm Temper . . . . . . . . . . . Hard Quantity Length Length 1 Reel 1 m GBP 239.00 5 m GBP 413.00 10 m GBP 553.00 Web Code 239-706-076 318-610-760 GBP 720 00 656-033-142 20 m Typical Analysis : Ag < 50, Ca < 3, Cu < 20, Fe < 20, Mg < 20, Pb < 1, Pd < 10, Pt < 10, Si < 1. 1m, 5m and 10m reels only. AU005118 Diameter..... 0.0175mm Temper . . . . . . . . . . . Annealed Quantity Length ength 1 Reel 1 m GBP 196.00 5 m GBP 317.00 10 m GBP 418.00 20 m GBP 526.00 Length Web Code 827-001-426 258-902-287 126-413-079 692-379-952 Typical Analysis : Ag <50, Ca <3, Cu <20, Fe <20, Mg <20, Pb <1, Pd <10, Pt <10, Si <1. AU005120 Diameter..... 0.025mm Purity......99.99+% Temper . . . . . . . . . . . . Hard Length Quantity Web Code 238-089-224 Length ngth 1 Reel 1 m GBP 107.00 145-229-036 153-635-479 5 m GBP 156.00 10 m GBP 178.00 204-435-425 403-467-045 20 m GBP 209.00 50 m GBP 276.00 013-643-527 100 m GBP 386.00 Typical Analysis: Aq <50, Ca <3, Cu <20, Fe <20, Mq <20, Pb <1, Pd <10, Pt <10, Si <1. <u>Diameter</u>..... **0.025mm** Purity......99.99+% AU005121 Temper . . . . . . . . . Annealed Length Quantity Length 1 m 5 m 1 Reel GBP 107.00 GBP 156.00 GBP 178.00 GBP 209.00 Web Code 352-911-455 622-281-780 739-110-568 797-996-187 10 m 20 m 50 m GBP 276.00 100 m GBP 386.00 485-823-112 469-690-710 Typical Analysis : Ag < 50, Ca < 3, Cu < 20, Fe < 20, Mg < 20, Pb < 1, Pd < 10, Pt < 10, Si < 1. AU005125 Diameter..... 0.05mm Purity......99.99+% Temper . . . . . . . . . Hard Quantity Length ngth 1 Reel 1 m GBP 182.00 5 m GBP 290.00 10 m GBP 372.00 20 m GBP 487.00 **Web Code** 671-690-436 346-200-166 Length 303-108-501 Typical Analysis: Ag <50, Ca <3, Cu <20, Fe <20, Mg <20, Pb <1, Pd <10, Pt <10, Si <1. AU005126 Diameter..... 0.05mm Purity......99.99+% Temper . . . . . . . . . . Annealed Length Quantity Web Code 800-913-238 966-082-456 845-109-071 Length 1 Reel 1 m GBP 182.00 5 m GBP 290.00 10 m GBP 372.00 815-294-545 GBP 487.00 Typical Analysis : Ag <50, Ca <3, Cu <20, Fe <20, Mg <20, Pb <1, Pd <10, Pt <10, Si <1. Purity......99.99+% AU005130 Temper . . . . . . . . . . . . Hard **Length Web Code**554-430-451 303-802-399 Quantity Length 1 m GBP 182.00 5 m GBP 290.00 10 m GBP 372.00 20 m GBP 487.00 959-561-945 $\label{eq:topical Analysis: Ag <50, Ca <3, Cu <20, Fe <20, Mg <20, Pb <1, Pd <10, Pt <10, Si <1.}$



### Gold Au Wire High Purity . . . . . . . . . . 99.99% AU005132 Diameter..... 0.075mm Temper . . . . . . . . . . Annealed Quantity Length Web Code 162-238-801 861-143-704 **Length** 1 Reel 0.2 m GBP 107.00 0.5 m GBP 129.00 1 m GBP 154.00 2 m GBP 194.00 0.5 m 955-676-865 755-220-233 5 m GBP 277.00 10 m GBP 441.00 891-894-769 367-633-423 Typical Analysis : Ag 3, Ca < 1, Cd < 1, Cu 1, Fe < 1, Mg < 1, Pd 1, Si 1. AU005133 <u>Diameter</u>................................0.10mm High Purity . . . . . . . . . . 99.99% Temper . . . . . . . . . . Annealed Length Web Code 323-162-295 561-044-557 Quantity Length 1 Reel 0.2 m GBP 108.00 0.5 m GBP 131.00 1 m GBP 157.00 2 m GBP 198.00 588-091-564 542-238-712 5 m GBP 283.00 10 m GBP 447.00 092-874-443 879-829-364 Typical Analysis : Ag 3, Ca < 1, Cd < 1, Cu 1, Fe < 1, Mg < 1, Pd 1, Si 1. AU005135 Diameter . . . . . . . . . . . . 0.125mm High Purity . . . . . . . . . . . . 99.99+% Temper . . . . . . . . . . . . Hard **Length Web Code**935-173-863 896-734-638 Quantity Length 0.2 m GBP 108.00 0.5 m GBP 132.00 1 m GBP 159.00 Length 091-825-945 2 m GBP 200.00 5 m GBP 287.00 478-243-863 780-486-255 Typical Analysis : Ag 3, Ca < 1, Cd < 1, Cu 1, Fe < 1, Mg < 1, Pd 1, Si 1. Diameter..... 0.20mm High Purity . . . . . . . . . . . . 99.99% AU005137 Temper . . . . . . . . . . . Annealed Length Web Code Quantity Length 0.1 m GBP 94.00 0.2 m GBP 103.00 0.5 m GBP 122.00 1 m GBP 148.00 968-540-132 260-350-512 281-954-985 783-174-005 920-862-412 615-683-656 Typical Analysis : Ag 3, Ca < 1, Cd < 1, Cu 1, Fe < 1, Mg < 1, Pd 1, Si 1. AU005140 Diameter..... 0.25mm High Purity . . . . . . . . . . . . 99.99+% Temper . . . . . . . . . Hard Length Web Code 097-691-461 211-425-610 Quantity 0.1 m 0.2 m 1 Reel GBP 99.00 GBP 110.00 GBP 133.00 428-204-668 $0.5 \, \mathrm{m}$ GBP 188.00 GBP 303.00 GBP 642.00 525-575-541 1 m 696-946-887 2 m Typical Analysis : Ag 3, Ca < 1, Cd < 1, Cu 1, Fe < 1, Mg < 1, Pd 1, Si 1. Diameter..... 0.33mm AU005145 Purity..... 99.95% Temper . . . . . . . . . . . . . . . . As drawn Length Quantity Web Code 155-315-773 131-965-728 368-916-361 Length 1 Reel 0.1 m GBP 103.00 0.2 m GBP 116.00 0.5 m GBP 148.00 GBP 223.00 GBP 372.00 Typical Analysis: Ag 80, Cu 10, Fe 3, Mg 1, Si 1.



	-44 1480 424 800 : Fax +44 148	0 424 900	DUUUI EIIUW
Gold			
Au			
	Wire		
AU005148	Diameter	Purity	99.95%
	Length Web Code	Quantity	
	578-069-728 624-652-504	Length 1 Reel 0.1 m GBP 108.00 0.2 m GBP 123.00	
	809-111-552 654-514-166	0.5 m GBP 177.00 1 m GBP 282.00	
	605-006-743	2 m GBP 490.00	
	Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1, Si 1.		
AU005150	Diameter	High Purity	99.99 + %
	Length Web Code	Quantity Length 1 Reel	
	099-706-126 405-247-023	0.05 m GBP 136.00 0.1 m GBP 170.00	
	655-880-463 985-061-544	0.2 m GBP 219.00 0.5 m GBP 318.00	
	132-691-026	1 m GBP 581.00	
ALICOSTA	Typical Analysis : Ag 3, Ca <1, Cd <1, Cu 1, Fe		00.0000/
AU005151	Diameter	High Purity	99.999%
	Length Web Code	Quantity Length 1 Reel	
	447-301-543 508-589-614	0.05 m GBP 155.00 0.1 m GBP 197.00	
	048-448-974 187-028-843	0.2 m GBP 256.00 0.5 m GBP 450.00	
	706-651-052	1 m GBP 846.00	
411005400	Typical Analysis : Ag 3, Cu 3, Fe 2, Mg 2.		00.070/
AU005160	Diameter 0.5mm Temper As drawn	Purity	99.95%
	Length Web Code	Quantity Length 1 Reel	
	238-454-957 092-760-486	0.05 m GBP 115.00 0.1 m GBP 138.00	
	595-054-080 381-759-814 710-070-574	0.2 m GBP 172.00 0.5 m GBP 274.00 1 m GBP 481.00	
	719-979-574	1 III GBF 401.00	
AU005155	Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1, Si 1.  Diameter	Purity	99.99%
A0003133	Temper Annealed		
	Length Web Code	Quantity Length 1 Reel	
	046-437-376 381-038-471 052-457-690	0.05 m GBP 136.00 0.1 m GBP 170.00 0.2 m GBP 219.00	
	704-899-412 259-979-451	0.5 m GBP 318.00 1 m GBP 581.00	
AU005165	Typical Analysis : Ag 3, Ca <1, Cd <1, Cu 1, Fe ·  Diameter	Purity	99.95%
A0003103	Temper As drawn		
	Length Web Code 046-182-010	Quantity Length 1 Reel 0.05 m GBP 130.00	
	074-205-974 275-748-255	0.05 III GBP 130.00 0.1 m GBP 160.00 0.2 m GBP 203.00	
	468-527-461 565-937-493	0.5 m GBP 415.00 1 m GBP 769.00	
	Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1, Si 1.		
AU005166	Diameter 0.75mm	High Purity	99.999%
	Temper	Quantity	
	<b>Web Code</b> 461-206-540	<b>Length</b> 1 Reel 0.1 m GBP 200.00	
	177-686-612 253-395-182	0.2 m GBP 258.00 0.5 m GBP 487.00	
	709-325-406	1 m GBP 906.00	
	Typical Analysis : Ag 3, Cu 3, Fe 2, Mg 2.		



### Goodfellow Cambridge Limited Ermine Business Park, Huntingdon PE29 6WR England Gold

# Au AU005171

### Wire

Temper . . . . . . . . . . . . As drawn Purity..... 99.95%

Length Quantity Web Code 132-513-275 564-158-653 Length 0.05 m **1 Reel** GBP 139.00 0.1 m 0.2 m GBP 187.00 GBP 317.00 978-293-753 GBP 708 00  $0.5 \, \mathrm{m}$ 

Typical Analysis: Ag 80, Cu 10, Fe 3, Mg 1, Si 1.

High Purity . . . . . . . . . . . . 99.99+% AU005170 Diameter..... 1.0mm Temper . . . . . . . . . Hard

Length Web Code Quantity Length 0.05 m GBP 173.00 0.1 m GBP 239.00 0.2 m GBP 395.00 Length 742-181-475 772-681-344 585-172-868 146-602-769

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

AU005172 Diameter . . . . . . . . . . 1.0mm High Purity . . . . . . . . . . . 99.999% Temper . . . . . . . . . . . As drawn

Length Web Code 360-232-289 441-686-211 Quantity Length 1 Reel 0.05 m GBP 205.00 0.1 m GBP 263.00 0.2 m GBP 432.00 0.5 m GBP 977.00 698-656-662 772-595-615

Typical Analysis: Ag 3, Cu 3, Fe 2, Mg 2.



### Insulated Wire

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

Conductor diameter..... 0.025mm Purity...... 99.99% AU005825 Insulation thickness . . . . . 0.002mm Insulation ..... PTFE (Polytetrafluoroethylene)

Length Web Code 924-420-017 Quantity Length 1 Reel 0.2 m GBP 266.00 .5 m GBP 366.00 1 m GBP 605.00 062-627-031

Typical Analysis:

AU005820 Conductor diameter..... 0.025mm Insulation thickness . . . . . 0.005mm Purity...... 99.99% Insulation . . . . . Polyester

> Quantity Length Length 0.5 m GBP 122.00 1 m GBP 149.00 2 m GBP 234.00 5 m GBP 481.00 Web Code 418-574-096 321-755-691 Length 219-451-139 431-395-383

Typical Analysis:

Conductor diameter..... 0.05mm Purity...... 99.99% AU005830 Insulation thickness . . . . . 0.007mm

Length Quantity Web Code 828-383-790 547-963-046 495-384-694 Length 1 Reel 0.5 m GBP 129.00 1 m GBP 172.00 2 m GBP 279.00 Length 923-079-227 GBP 594.00

Typical Analysis:

Conductor diameter..... 0.05mm Insulation thickness..... 0.007mm AU005831 Purity..... 99.99% Insulation . . . . . Polyimide

> Quantity Length Web Code Length 1 Reel 0.5 m GBP 129.00 1 m GBP 172.00 623-991-337 882-145-429 GBP 279.00 GBP 594.00 114-446-111

Typical Analysis:



### Telephone +44 1480 424 800 : Fax +44 1480 424 900 Gold Au **Insulated Wire** Insulation thickness . . . . . 0.009mm Insulation . . . . . . . . . PTFE (Polytetrafluoroethylene) AU005835 Conductor diameter..... 0.05mm Purity..... 99.99% Quantity Length ngth 1 Reel 1.5 m GBP 246.00 1 m GBP 417.00 2 m GBP 760.00 5 m GBP 1725.00 Web Code 384-907-679 113-459-585 Length 0.5 m 182-446-618 805-837-019 Typical Analysis: Conductor diameter..... 0.075mm Insulation thickness . . . . . 0.012mm AU005810 Insulation . . . . . PTFE (Polytetrafluoroethylene) Purity... Length Web Code Quantity ength 1 Reel 0.5 m GBP 168.00 1 m GBP 271.00 Length 753-466-787 183-344-368 2 m GBP 476.00 918-042-716 Typical Analysis: Conductor diameter . . . . 0.10mm Purity . . . . . . . . . . . . 99.99% AU005837 Length Web Code Quantity **Length** 0.1 m 0.2 m 1 Reel GBP 107.00 GBP 123.00 141-157-656 831-453-044 469-022-923 GBP 155.00 GBP 232.00 329-557-013 1 m Typical Analysis: Conductor diameter..... 0.10mm Purity...... 99.99% Insulation thickness . . . . . 0.013mm AU005836 Insulation . . . . . . . . Polyimide Length Web Code 786-655-414 Quantity 1 Reel GBP 95.00 Length 0.1 m Typical Analysis: Conductor diameter..... 0.125mm Insulation thickness . . . . . 0.014mm AU005840 Purity..... 99.99% Insulation . . . . . Polyester Length Web Code Quantity ength 0.5 m GBP 132.00 1 m GBP 182.00 2 m GBP 298.00 5 m GBP 643.00 Length 729-632-214 204-036-389 067-667-136 Typical Analysis: Conductor diameter..... 0.125mm Purity...... 99.99% Insulation thickness..... 0.016mm Insulation ...... PTFE (Polytetrafluoroethylene) AU005845 Length Web Code 332-937-297 Quantity 1 Reel GBP 97.00 Length 0.1 m GBP 97.00 0.2 m GBP 111.00 0.5 m GBP 138.00 545-581-753 458-389-857 GBP 208.00 GBP 352.00 340-994-107 Typical Analysis: Rod AU007905 Purity...... 99.95% Diameter..... 1.6mm Quantity

Temper	s drawn
Size	
Web Code	
984-548-643	
378-678-875	

		,
Length	1pc	2pcs
25 mm	GBP 226.00	GBP 314.00
50 mm	GBP 295.00	GBP 516.00
100 mm	GBP 497.00	

Typical Analysis: Ag 80, Cu 10, Fe 3, Mg 1, Si 1.

304-092-532



Gold		
Au		
	Rod	
AU007910	Diameter 2.0mm Temper As drawn	Purity99.95%
	Size Web Code 310-808-995 851-122-324 390-299-684	Quantity           Length         1pc         2pcs           25 mm         GBP 259.00         GBP 428.00           50 mm         GBP 409.00         GBP 743.00           100 mm         GBP 724.00
	Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1, Si 1.	
AU007920	Diameter         3.0mm           Temper         As drawn           Size	Purity
	Web Code 088-438-672 431-739-300 967-424-793	Length         1pc         2pcs         5pcs           10 mm         GBP 251.00         GBP 396.00         GBP 852.00           25 mm         GBP 448.00         GBP 822.00           50 mm         GBP 803.00         GBP 822.00
	Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1, Si 1.	
AU007940	Diameter         4.0mm           Temper         As drawn           Size	Purity
	Web Code 790-162-940 223-713-193	Length 1pc 2pcs 10 mm GBP 346.00 GBP 617.00 25 mm GBP 724.00
AU007950	Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1, Si 1.  Diameter	Purity <b>99.95%</b>
H9001900	Temper As drawn Size Web Code	Quantity  Length 1pc 2pcs 10 mm GBP 488.00 GBP 900.00
	630-428-707 365-355-639	25 mm GBP 1079.00
AU007941	Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1, Si 1.  Diameter	Purity
	Temper As drawn  Size  Web Code	Quantity Length 1pc 2pcs
	299-814-922	4 mm GBP 259.00 GBP 428.00
AU007960	Typical Analysis : Ag 3, Cu 3, Fe 2, Mg 2.  Diameter	Purity99.95%
	Size Web Code	Quantity Length 1pc 2pcs
	988-120-978	6 mm GBP 434.00 GBP 793.00
AU007961	Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1, Si 1.  Diameter	Purity99.95%
	Temper As drawn Size	Quantity
	<b>Web Code</b> 035-573-365 154-886-247	Length         1pc         2pcs           10 mm         GBP 661.00         POA           25 mm         POA
	Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1, Si 1.	
AU007970	Diameter	Purity
	Size Web Code 556-170-159 367-045-279	Quantity Length 1pc 10 mm POA 25 mm POA
	Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1, Si 1.	



### Gold Au Tube Outside Diameter..... 0.15mm Wall Thickness..... 0.05mm AU007020 Inside Diameter ... 0.05mm Temper ... As drawn Purity......99.95% Size Quantity Length 1pc 2pcs 5pcs 10 mm GBP 311.00 GBP 396.00 GBP 638.00 Web Code Length 101-861-742 Typical Analysis: Ag 80, Cu 10, Fe 3, Mg 1, Si 1. Wall Thickness...... 0.05mm Purity...... 99.95% Outside Diameter..... 0.3mm AU007050 Inside Diameter . . . . . 0.2mm Temper . . . . . As drawn Size Quantity Web Code 348-981-704 732-712-807 589-112-066 Length 1pc 2pcs 50 mm GBP 251.00 GBP 320.00 100 mm GBP 317.00 GBP 524.00 200 mm GBP 520.00 GBP 524.00 Typical Analysis: Ag 80, Cu 10, Fe 3, Mg 1, Si 1. Outside Diameter . . . . 1.0mm Inside Diameter . . . . 0.5mm Temper . . . . . As drawn Wall Thickness...... 0.25mm Purity...... 99.95% AU007150 Quantity Size Length 1pc 2pcs 50 mm GBP 235.00 GBP 285.00 100 mm GBP 282.00 GBP 424.00 Web Code 061-829-407 048-859-375 Typical Analysis: Ag 80, Cu 10, Fe 3, Mg 1, Si 1. Outside Diameter..... 1.0mm Wall Thickness..... 0.15mm AU007100 Inside Diameter . . . . . . 0.7mm Temper . . . . . . . . . . . . As drawn Size Quantity Length 1pc 2pcs 50 mm GBP 229.00 GBP 277.00 100 mm GBP 273.00 GBP 359.00 200 mm GBP 355.00 Web Code 702-234-087 555-395-240 424-412-308 Typical Analysis: Ag 80, Cu 10, Fe 3, Mg 1, Si 1. Wall Thickness...... 0.5mm Purity...... 99.95% Outside Diameter..... 1.60mm AU007180 Inside Diameter . . . . . . . 0.6mm Temper . . . . . . . . . . . As drawn Size Quantity Length 1pc 2pcs 50 mm GBP 341.00 GBP 562.00 100 mm GBP 558.00 GBP 998.00 200 mm GBP 994.00 Web Code 180-831-788 048-397-675 680-498-273 Typical Analysis: Ag 80, Cu 10, Fe 3, Mg 1, Si 1. AU007190 Outside Diameter..... 1.80mm Wall Thickness..... 0.5mm Inside Diameter . . . . 0.8mm Temper . . . . . As drawn Purity...... 99.95% Size Quantity Web Code Length 738-962-618 61 mm GBP 459.00 Typical Analysis: Ag 80, Cu 10, Fe 3, Mg 1, Si 1. Outside Diameter..... 2.0mm Inside Diameter..... 1.7mm Wall Thickness..... 0.15mm AU007201 Temper . . . . . . . . . . As drawn Size Quantity Web Code 479-612-432 481-645-315 Length 50 mm GBP 259.00 GBP 340.00 **2pcs 5pcs** GBP 344.00 GBP 682.00 GBP 562.00 200 mm GBP 558.00 379-967-892 Typical Analysis: Ag 80, Cu 10, Fe 3, Mg 1, Si 1. Wall Thickness...... 0.1mm Purity...... 99.95% Outside Diameter..... 2.0mm AU007200 Inside Diameter . . . . . . . 1.8mm Temper . . . . . . . . . . . . As drawn Quantity Size Length 1pc 2pcs 50 mm GBP 236.00 GBP 287.00 100 mm GBP 283.00 GBP 429.00 200 mm GBP 425.00 **Web Code** 701-617-803 869-903-500 737-947-418 Typical Analysis: Ag 80, Cu 10, Fe 3, Mg 1, Si 1.



Gold					
Au					
	Tube				
AU007290	Outside Diameter. 3.0mm Inside Diameter 2.8mm Temper As drawn			hickness	
	Size Web Code 819-037-537 055-869-698 716-273-950	100 mm	1pc GBP 262.00 GBP 352.00 GBP 582.00	<b>Quantity 2pcs</b> GBP 356.00 GBP 76 GBP 586.00	<b>5pcs</b> 12.00
-	Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1, Si	1.			
AU007650	Outside Diameter		Purity.	hickness	
	Size Web Code 516-019-249 929-602-862 989-899-573	50 mm	Quan 1pc GBP 284.00 GBP 429.00 GBP 735.00	<b>2pcs</b> GBP 433.00	
AU007651	Typical Analysis: Ag 80, Cu 10, Fe 3, Mg 1, Si  Outside Diameter	1.		hickness 0. 99	
	<b>Size Web Code</b> 353-201-827 975-157-040 948-045-447	Length 200 mm 500 mm 1000 mm	Quantity 1pc POA POA POA		
	Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1, Si	1.			
AU007700	Outside Diameter			hickness0.	
	Size Web Code 769-614-369 260-343-209	Length 50 mm 100 mm	<b>Quan</b> <b>1pc</b> GBP 726.00 GBP 1330.00	2ncs	
	Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1, Si	1.			
	Powder				
AU006022	Mean Particle size	Quantity	Purity.	99	9.95%
F Xi	<b>Web Code</b> 665-470-203 897-593-348 359-069-913	<b>Weight</b> 1 g 2 g 5 g	1 Pot POA POA POA		
	Typical Analysis : Ag <50, Al <25, Cu <10, N	Mg < 50, Pd < 50.			
AU006020	Mean Particle size (FSSS) <2micron	Quantity	Purity.	99	1.95%
F Xi	<b>Web Code</b> 283-436-176 429-518-101	<b>Weight</b> 1 g 2 g	<b>1 Pot</b> GBP 199.00 GBP 327.00		
	Typical Analysis : Ag <50, Al <25, Cu <10, N	Mg < 50, Pd < 50.			
AU006015	Max. Particle size 45micron	Quantity	Purity.	99	0.95%
F Xi	<b>Web Code</b> 855-544-451 943-058-108	<b>Weight</b> 1 g 2 g	<b>1 Pot</b> GBP 199.00 GBP 327.00		
	Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1, Si	1.			
AU006010	Max. Particle size 250micron	Quantity	Purity.	99	).95%
F Xi	<b>Web Code</b> 034-346-994 293-366-764	Weight 1 g 2 g	<b>1 Pot</b> GBP 192.00 GBP 302.00		
	Typical Analysis : Ag 80, Cu 10, Fe 3, Mg 1, Si	1.			



Telephone +	44 1480 424 800 : Fax +44 1480 424 900	EUUUI EIIUU
Gold		
Au		
1975	_	
	Lump	
AU006106	Max. Lump size 4mm  Quantity	High Purity
	Web Code Weight 484-071-827 2 g	1 Pot POA
	262-821-231 5 g 722-093-254 10 g	POA POA
	Typical Analysis : Ag 3, Cu 3, Fe 2, Mg 2. Nominally 3mm diameter x 3mm length pellets.	
AU006100	Max. Lump size 6mm	Purity99.99%
	Web Code Weight	1 Pot POA
	983-280-007	POA POA POA
	Typical Analysis: Ag 3, Ca < 1, Cd < 1, Cu 1, Fe < 1, Mg < 1, Pd 1, Si	1.
	Nominally 4.7mm diameter x 4.7mm length pellets.	
	Sphere	
AU006840	Diameter 0.5mm	Purity99.99%
	Quantity Quantity Spheres	1 Pot
	730-799-167 50 pcs GBP	117.00 170.00
	715-523-478 100 pcs GBP 800-824-795 200 pcs GBP	242.00 367.00
	Typical Analysis :	
	Single Crystal	
AU002121	Oriented (100) Diameter	Thickness 1mm Purity
	ConditionPolished on 1 side to 1 micron  Quantity	3333070
	Web Code	1pc P POA
	Typical Analysis: Ag 3, Cu 3, Fe 2, Mg 2.	
AU002120	Oriented (100)	Thickness1mm
	Diameter 10mm Condition Unpolished	Purity99.999%
	Web Code 142-765-490 GB	<b>1pc</b> P POA
		PPOA
AU002131	Typical Analysis : Ag 3, Cu 3, Fe 2, Mg 2.  Oriented	Thickness 1mm
AUUU2131	Diameter 10mm Condition Polished on 1 side to 1 micron	Purity99.999%
	Web Code Quantity	1pc
		P PÓA
AU002130	Typical Analysis : Ag 3, Cu 3, Fe 2, Mg 2.  Oriented	Thickness 1mm
AUUU2130	Diameter 10mm Condition Unpolished	Purity99.999%
	Quantity Web Code	1pc
		P POA
	Typical Analysis : Ag 3, Cu 3, Fe 2, Mg 2.	
AU002141	Oriented (111)  Diameter 10mm  Condition Polished on 1 side to 1 micron	Thickness 1mm Purity
	Quantity	
	<b>Web Code</b> 395-540-068 GB	1pc P POA
	Typical Analysis - Ag 3, Cu 3, Fe 2, Mg 2	



Gold Au		
	Single Crystal	
AU002140	Oriented	Thickness
	Web Code 134-650-215	1pc GBP POA
	Typical Analysis : Ag 3, Cu 3, Fe 2, Mg 2.	



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Rod, Gold	36	
S		
Single Crystal, Gold Sphere, Gold	40 40	
Sputtering Target, Gold	30	
T		
Tube, Gold	38	
W		
Wire Gold	31	