# SOLPRO

## BRAZING & SOLDERING

### Brazing alloys, fluxes and preforms

Range and ordering guide



Sheffield-made silver brazing alloys and copper-phosphorus fillers, with flux selection and ordering references. Specify the alloy and form for made-to-order supply.

| Range | Typical application | Page |
|---|---|---|
| **General-purpose silver** | Capillary joints in compatible steels and copper alloys | 2–3 |
| **Specialist silver** | Stainless, carbide, cast iron and electrical work | 4 |
| **Copper phosphorus** | Copper tube and fittings for HVAC and refrigeration | 5 |
| **Flux-coated silver** | Silver brazing rods with integral flux coating | 6 |
| **Fluxes** | Match flux chemistry and temperature to the joint | 7 |
| **Trade and made-to-order** | Wire, strip, rings, preforms and other alloy families | 8 |

Specify the parent metal, filler grade, diameter, pack and part number when ordering.

### Need help selecting a filler?

For technical advice and availability, call 023 8033 9443 or email sales@rhdaveywelding.co.uk.



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# General-purpose Silver

## M25T

**Ag155 / 55% Ag / 630–660°C / Flux F or Y**
Low-temperature, close-fitting joints in compatible steels, copper alloys and dissimilar assemblies.

| Part number | Size / pack |
|---|---|
| 31120-RO-150500-5PK-ECOM | 1.5mm × 500mm / 5 Rod Pack |
| 31120-RO-150500-5PKF-ECOM | 1.5mm × 500mm / 5 Rod Pack with 25g Flux |
| 31120-RO-150500-10PK-ECOM | 1.5mm × 500mm / 10 Rod Pack |
| 31120-RO-150500-10PKF-ECOM | 1.5mm × 500mm / 10 Rod Pack with 25g Flux |
| 31120-RO-150500-30PK-ECOM | 1.5mm × 500mm / 30 Rod Pack |
| 31120-RO-150500-30PKF-ECOM | 1.5mm × 500mm / 30 Rod Pack with 100g Flux |
| 31120-RO-150500-60PK-ECOM | 1.5mm × 500mm / 60 Rod Pack |
| 31120-RO-150500-60PKF-ECOM | 1.5mm × 500mm / 60 Rod Pack with 100g Flux |
| 31120-RO-150500-1Kg-ECOM | 1.5mm × 500mm / 1Kg Pack |
| 31120-RO-150500-1KgF-ECOM | 1.5mm × 500mm / 1Kg Pack with 100g Flux |



**Alloy data**

## M15T

**Ag145 / 45% Ag / 640–680°C / Flux F or Y**
General-purpose silver brazing for compatible copper alloys, steels and dissimilar assemblies.

| Part number | Size / pack |
|---|---|
| 31641-RO-150500-5PK-ECOM | 1.5mm × 500mm / 5 Rod Pack |
| 31641-RO-150500-5PKF-ECOM | 1.5mm × 500mm / 5 Rod Pack with 25g Flux |
| 31641-RO-150500-10PK-ECOM | 1.5mm × 500mm / 10 Rod Pack |
| 31641-RO-150500-10PKF-ECOM | 1.5mm × 500mm / 10 Rod Pack with 25g Flux |
| 31641-RO-150500-30PK-ECOM | 1.5mm × 500mm / 30 Rod Pack |
| 31641-RO-150500-30PKF-ECOM | 1.5mm × 500mm / 30 Rod Pack with 100g Flux |
| 31641-RO-150500-60PK-ECOM | 1.5mm × 500mm / 60 Rod Pack |
| 31641-RO-150500-60PKF-ECOM | 1.5mm × 500mm / 60 Rod Pack with 100g Flux |
| 31641-RO-150500-1Kg-ECOM | 1.5mm × 500mm / 1Kg Pack |
| 31641-RO-150500-1KgF-ECOM | 1.5mm × 500mm / 1Kg Pack with 100g Flux |



**Alloy data**

### Choose a melting range that fits the assembly

M25T starts melting at 630°C and is fully molten at 660°C. Consider it for compatible close-fitting joints where the assembly needs a lower brazing temperature.



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# General-purpose Silver

## M10T

**Ag140 / 40% Ag / 640–680°C / Flux F or Y**
General-purpose capillary brazing where 40% silver and Ag140 are specified.

| Part number | Size / pack |
|---|---|
| 31780-RO-200500-5PK-ECOM | 2mm × 500mm / 5 Rod Pack |
| 31780-RO-200500-5PKF-ECOM | 2mm × 500mm / 5 Rod Pack with 25g Flux |
| 31780-RO-200500-10PK-ECOM | 2mm × 500mm / 10 Rod Pack |
| 31780-RO-200500-10PKF-ECOM | 2mm × 500mm / 10 Rod Pack with 25g Flux |
| 31780-RO-200500-30PK-ECOM | 2mm × 500mm / 30 Rod Pack |
| 31780-RO-200500-30PKF-ECOM | 2mm × 500mm / 30 Rod Pack with 100g Flux |
| 31780-RO-200500-1kg-ECOM | 2mm × 500mm / 1Kg Pack |
| 31780-RO-200500-1KGF-ECOM | 2mm × 500mm / 1Kg Pack with 100g Flux |
| 31780-RO-150500-5PK-ECOM | 1.5mm × 500mm / 5 Rod Pack |
| 31780-RO-150500-5PKF-ECOM | 1.5mm × 500mm / 5 Rod Pack with 25g Flux |
| 31780-RO-150500-10PK-ECOM | 1.5mm × 500mm / 10 Rod Pack |
| 31780-RO-150500-10PKF-ECOM | 1.5mm × 500mm / 10 Rod Pack with 25g Flux |
| 31780-RO-150500-30PK-ECOM | 1.5mm × 500mm / 30 Rod Pack |
| 31780-RO-150500-30PKF-ECOM | 1.5mm × 500mm / 30 Rod Pack with 100g Flux |
| 31780-RO-150500-60PK-ECOM | 1.5mm × 500mm / 60 Rod Pack |
| 31780-RO-150500-60PKF-ECOM | 1.5mm × 500mm / 60 Rod Pack with 100g Flux |
| 31780-RO-150500-1kg-ECOM | 1.5mm × 500mm / 1Kg Pack |
| 31780-RO-150500-1KGF-ECOM | 1.5mm × 500mm / 1Kg Pack with 100g Flux |



**Alloy data**

## MOT

**Ag130 / 30% Ag / 665–755°C / Flux U or F**
30% silver grade where the higher melting range suits the assembly.

**Quote the grade and required form.**

**Alloy data**

## M8T

**Ag138 / 38% Ag / 650–720°C / Flux U or F**
General-purpose brazing where the joint and heating cycle suit the wider melting range.

| Part number | Size / pack |
|---|---|
| 31526-RO-200500-5PK-ECOM | 2mm × 500mm / 5 Rod Pack |
| 31526-RO-200500-5PKF-ECOM | 2mm × 500mm / 5 Rod Pack with 25g Flux |
| 31526-RO-200500-10PK-ECOM | 2mm × 500mm / 10 Rod Pack |
| 31526-RO-200500-10PKF-ECOM | 2mm × 500mm / 10 Rod Pack with 25g Flux |
| 31526-RO-200500-30PK-ECOM | 2mm × 500mm / 30 Rod Pack |
| 31526-RO-200500-30PKF-ECOM | 2mm × 500mm / 30 Rod Pack with 100g Flux |
| 31526-RO-200500-1Kg-ECOM | 2mm × 500mm / 1Kg Pack |
| 31526-RO-200500-1KGF-ECOM | 2mm × 500mm / 1Kg with 100g Flux |
| 31526-RO-150500-5PK-ECOM | 1.5mm × 500mm / 5 Rod Pack |
| 31526-RO-150500-5PKF-ECOM | 1.5mm × 500mm / 5 Rod Pack with 25g Flux |
| 31526-RO-150500-10PK-ECOM | 1.5mm × 500mm / 10 Rod Pack |
| 31526-RO-150500-10PKF-ECOM | 1.5mm × 500mm / 10 Rod Pack with 25g Flux |
| 31526-RO-150500-30PK-ECOM | 1.5mm × 500mm / 30 Rod Pack |
| 31526-RO-150500-30PKF-ECOM | 1.5mm × 500mm / 30 Rod Pack with 100g Flux |
| 31526-RO-150500-1KG-ECOM | 1.5mm × 500mm / 1Kg Pack |
| 31526-RO-150500-1KGF-ECOM | 1.5mm × 500mm / 1Kg Pack with 100g Flux |



**Alloy data**

## CS77

**Ag138Si / 38% Ag / 650–720°C / Flux U or F**
Silicon-bearing 38% silver grade for assemblies specifying Ag138Si.

**Quote the grade and required form.**

**Alloy data**

## L13S

**Ag220Si / 20% Ag / 690–810°C / Flux F or E**
20% silver grade for compatible joints where a higher melting range is acceptable.

**Quote the grade and required form.**

**Alloy data**



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# Specialist Silver

## H0

**60% Ag / 695–730°C / Flux F**
Electrical applications where conductivity and mechanical strength are required.

**Quote the grade and required form.**

**Alloy data**

## H7TN

**67.5% Ag / 730–760°C / Flux G**
Stainless steel in wet, oxygenated conditions and selected furnace-brazing work.

**Quote the grade and required form.**

**Alloy data**

## M20N

**Ag450 / 50% Ag / 660–705°C / Flux F**
Cemented carbides and difficult parent metals including selected cast irons.

**Quote the grade and required form.**

**Alloy data**

## M10N

**Ag440 / 40% Ag / 675–790°C / Flux F**
Carbide and cast-iron work where Ag440 is specified.

**Quote the grade and required form.**

**Alloy data**

## M19MN

**Ag449 / 49% Ag / 680–705°C / Flux U or F**
Tungsten-carbide tip tools and difficult graphite-bearing parent metals.

**Quote the grade and required form.**

**Alloy data**

### Match the alloy to the service

H7TN is intended for selected stainless assemblies in wet, oxygenated service. M19MN is designed to wet difficult graphite-bearing materials and is an option for carbide-tipped tooling.



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# Copper Phosphorus

## PHOS 15

**CuP 284 / 15% Ag / 645–800°C / Rod, wire, strip, ring**
Copper joints where the assembly calls for the 15% silver grade.

| Part number | Size / pack |
|---|---|
| 33670-RO-250500-10PK-ECOM | 2.5mm × 500mm / 10 Rod Pack |
| 33670-RO-250500-30PK-ECOM | 2.5mm × 500mm / 30 Rod Pack |
| 33670-RO-250500-1kg-ECOM | 2.5mm × 500mm / 1kg Pack |
| 33670-RO-200500-10PK-ECOM | 2mm × 500mm / 10 Rod Pack |
| 33670-RO-200500-30PK-ECOM | 2mm × 500mm / 30 Rod Pack |
| 33670-RO-200500-60PK-ECOM | 2mm × 500mm / 60 Rod Pack |



**Alloy data**

## PHOS 2

**CuP 279 / 2% Ag / 710–825°C / Rod, wire, ring**
Compatible copper joints where CuP 279 is specified.

| Part number | Size / pack |
|---|---|
| 31481-RO-150500-10PK-ECOM | 2mm × 500mm / 10 rod pack |
| 31481-RO-150500-30PK-ECOM | 2mm × 500mm / 30 rod pack |
| 31481-RO-150500-60PK-ECOM | 2mm × 500mm / 60 rod pack |



**Alloy data**

## PHOS 0

**CuP 182 / 0% Ag / 710–770°C / Rod, wire, ring**
Copper-to-copper joints where CuP 182 is specified.

**Quote the grade and required form.**

**Alloy data**

## PHOS 5

**CuP 281 / 5% Ag / 645–815°C / Rod, wire, ring**
Compatible copper refrigeration and HVAC joints. Consider where vibration resistance matters.

| Part number | Size / pack |
|---|---|
| 31495-RO-250500-10PK-ECOM | 2.5mm × 500mm / 10 Rod Pack |
| 31495-RO-250500-30PK-ECOM | 2.5mm × 500mm / 30 Rod Pack |
| 31495-RO-250500-1KG-ECOM | 2.5mm × 500mm / 1Kg Pack |
| 31495-RO-200500-10PK-ECOM | 2mm × 500mm / 10 Rod Pack |
| 31495-RO-200500-30PK-ECOM | 2mm × 500mm / 30 Rod Pack |
| 31495-RO-200500-60PK-ECOM | 2mm × 500mm / 60 Rod Pack |



**Alloy data**

## PHOS 0.2

**0.2% Ag / 645–850°C / Square rod**
Copper-to-copper sanitary, heating and gas installations where this filler is specified.

| Part number | Size / pack |
|---|---|
| 32657-RS-200500-ECOM | 2mm × 500mm / 1kg Pack |



**Alloy data**

## PHOS 0R

**CuP 179 / 0% Ag / 710–890°C / Rod, wire, strip, ring**
Compatible copper pipework. Lower phosphorus than PHOS 0.

**Quote the grade and required form.**

**Alloy data**

### Choose for copper tube and fittings

Phos 5 suits compatible HVAC and refrigeration copper joints where vibration matters. Confirm parent-metal compatibility. Copper-phosphorus fillers can give brittle joints on ferrous and nickel-containing materials.



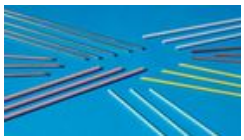
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# Flux-coated Silver

## M10T Flux-Coated

**Ag140 / 40% Ag / 640–680°C**
Integral flux coating for continuous brazing on compatible assemblies.

| Part number | Size / pack |
|---|---|
| **34362-RC-150500-5PK-ECOM** | 1.5mm × 500mm / 5 Rod Pack |
| **34362-RC-150500-10PK-ECOM** | 1.5mm × 500mm / 10 Rod Pack |
| **34362-RC-150500-30PK-ECOM** | 1.5mm × 500mm / 30 Rod Pack |

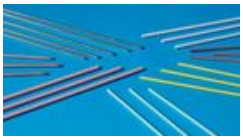


**Alloy data**

## M25T Flux-Coated

**Ag155 / 55% Ag / 630–660°C**
Integral flux coating for continuous brazing on compatible assemblies.

| Part number | Size / pack |
|---|---|
| **34252-RC-200500-5PK-ECOM** | 2mm × 500mm / 5 Rod Pack |
| **34252-RC-200500-10PK-ECOM** | 2mm × 500mm / 10 Rod Pack |
| **34252-RC-200500-30PK-ECOM** | 2mm × 500mm / 30 Rod Pack |
| **34252-RC-150500-5PK-ECOM** | 1.5mm × 500mm / 5 Rod Pack |
| **34252-RC-150500-10PK-ECOM** | 1.5mm × 500mm / 10 Rod Pack |
| **34252-RC-150500-30PK-ECOM** | 1.5mm × 500mm / 30 Rod Pack |



**Alloy data**



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# Fluxes

## F Flux

**650–850°C / Powder or paste**
Long-life flux for compatible low- and medium-melting silver alloys.

| Part number | Size / pack |
|---|---|
| 44647-FL-00025-ECOM | Powder / 25g Pot |
| 44747-FL-01000-ECOM | Paste / 1kg |
| 44647-FL-00500-ECOM | Powder / 0.5kg |
| 44647-FL-00100-ECOM | Powder / 100g Pot |



**Flux data**

## G Flux

**650–900°C / Powder**
Very long-life flux for the specified higher-temperature cycle.

**Quote the grade and required form.**

**Flux data**

## E Flux

**650–850°C / Powder**
High activity and very long life for compatible applications.

**Quote the grade and required form.**

**Flux data**

## AB1 Flux

**550–800°C / Paste**
Active paste for compatible brazing applications.

**Quote the grade and required form.**

**Flux data**

## Y Flux

**550–750°C / Powder or paste**
Active, lower-temperature flux for compatible silver alloys.

| Part number | Size / pack |
|---|---|
| 44726-FL-01000-ECOM | Paste / 1kg |
| 44568-FL-00500-ECOM | Powder / 0.5kg |




**Flux data**

## U Flux

**600–800°C / Powder or paste**
Active flux for compatible silver alloys requiring a longer working window.

| Part number | Size / pack |
|---|---|
| 40204-FL-01000-ECOM | Paste / 1kg |
| 40190-FL-00500-ECOM | Powder / 0.5kg |




**Flux data**

## B Flux

**750–1000°C / Powder**
Very long-life flux for compatible high-temperature brazing.

**Quote the grade and required form.**

**Flux data**



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# Trade and Made-to-order

## High-temperature copper alloys

**Grade and form by enquiry**
Specify the parent metals and service conditions for grade selection.

**Quote the grade and required form.**

**Supplier range information**

## Aluminium brazing alloys

**Grade and form by enquiry**
Specify the aluminium grade and joining process when requesting an alloy.

**Quote the grade and required form.**

**Supplier range information**

## Soft solders

**Grade and form by enquiry**
Specify the base metals, service temperature and any composition requirements.

**Quote the grade and required form.**

**Supplier range information**

## Wire and strip

**Wire down to 0.5mm**
Specify alloy, cross-section and supply format. Wire can be supplied in coils or on spools.

**Quote the grade and required form.**

**Supplier range information**

## Rings and preforms

**Single- or multi-turn rings / cut or stamped preforms**
Use to meter filler consistently in repeat production. Specify alloy, wire size, ring dimensions or drawing and quantity.

**Quote the grade and required form.**

**Supplier range information**

## Specialist fluxes

**Formulation by enquiry**
Specify base metals, filler and heating cycle.

**Quote the grade and required form.**

**Supplier range information**

### Meter the filler on repeat jobs

Rings and stamped preforms place a repeatable amount of alloy at each joint. Send a drawing, alloy, dimensions and expected run quantity when requesting a preform.



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