

Silver Solder (from CuP Alloys of Chesterfield web site)

Contraries to the story circulated by some suppliers of silver solder, cadmium bearing alloys are not in short supply. Nor is their availability to be curtailed. See the news item to the right of this leader for more information.

The most popular alloys are 842, 424, 440 and 456 and 840. All will produce strong, leaktight joints with small neat fillets.

All will join copper, brass, bronze, mild and stainless steel, nickel alloys in any combination

Your will make your choice based your considering the melting temperature or colour or alloy content or price.

It will not be based on joint strength. If used properly all will produce joints stronger than the parent materials.

If you feel that this range of alloys does not quite fit your requirements, look at the full range of silver solders in the "Industrial" section. We can normally arrange something to suit.

842

This is the alloy most widely used by the model engineer.

It contains 42% silver, cadmium and conforms to BS EN 1044 AG303

Melting Range 610 -620 °C

It is free flowing, offers excellent joint penetration and has the lowest melting range of all silver solders.

It is available as wire 0.5 & 0.7mm dia, rods 1.0, 1.5, 2.0, 2.5mm dia

424

424 contains 24% silver and is cadmium free.

Melting Range 740 - 780 °C It is often used in the first operation of step brazing when several joints are made in close proximity

It is available as rod 1.5mm dia. Its high melting point often requires the use of oxy-acetylene heating. Use it with our HT5 flux

440

440 is another cadmium free alloy containing 40% silver. It conforms to BS EN 1044 AG105

Melting Range 650 - 710 °C

It is used as either the second of three or first of a two stage brazing operation.

Although it contains more silver, it offers considerable advantages in that it can be more readily melted with a propane torch and you can use the same flux as per 842. No duplication.

It is available as 1.0mm dia wire and as rod 1.5, 2.0, 2.5mm dia.

456

456 is cadmium free and contains 56% silver. It conforms to BS EN 1044 AG102.

Melting range 620 - 655 °C.

It is the lowest melting range, cadmium free solder. It offers a reasonable colour match on stainless steel.

It is available as 0.8mm dia wire and rod 1.0, 1.5, 2.0, 2.5mm dia.

840

840 contains 40% silver and cadmium. It conforms to BS EN 1044 AG 304.

Melting range 595 - 630 °C.

Because of its wider melting range it offers better gap-filling qualities than 842.

It is available as 1.5mm dia rod (bare and flux coated), foil and paste.