

Technical data

Silver brazing filler metal

Silver-flo™ 16 – Cadmium free silver brazing filler metal

Product description

Silver-flo™ 16 is a high melting point cadmium free silver brazing filler metal. It has a high melting temperature (790 to 830°C) but a narrow melting range of only 40°C providing good flow properties when molten.

The high brazing temperature of the filler metal makes it less easy to use than the high silver content alloys. Consequently it is not widely used. This product is a relatively inexpensive filler metal to purchase. However the cost per brazed joint of actually using the alloy may not be favourable in comparison to lower melting point, higher silver content filler metals. Optimum joint gaps at brazing temperature are 0.075-0.2mm

Composition: 16%Ag, 50%Cu, 34%Zn,

Conforms to: Proprietary JM Specification

Melting range: 790-830 °C

Uses for this product

Silver-flo™ 16 is not widely used. It may be considered for joining mild steel and copper in for example tube applications. It can be used as the first stage, high melting point alloy in a step or sequential brazing operation. It may also be used for brazing brass joints where a filler metal with colour matching characteristics is required however in this instance care should be taken, as the difference between the melting point of the filler metal and that of the brass could be as little as 65°C for 60/40 brass.

Silver-flo™ 16 can be used for brazing small tungsten carbide tips to steel, the filler metal's high ductility allowing dissipation of the stresses developed on cooling, due to the different coefficients of expansion of the carbide and the steel.

Conditions for use

Silver-flo™ 16 is designed for brazing in air with the use of a flux. Generally it is necessary to use a flux with a higher working range than Easy-flo™ flux, such as Tenacity™ No.4A, Tenacity™ No.5 or Tenacity™ 20.

Product availability

Rods	Limited availability 1.5mm dia
Wire	On request
Foil	On request
Braze-pastes	On request
Powder	On request
Others	Rings, Preformed Shapes

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