Technical data

Silver brazing filler metal

Silver-flo™ 40 – Cadmium free silver brazing filler metal

Product description

Silver-flo™ 40 is a very widely used cadmium free silver brazing filler metal. It offers a combination of medium melting temperature and flow characteristics. It can be used to fill gaps that cannot be tightly controlled. These properties make it a popular choice as an alternative to the higher silver content Silver-flo™ filler metals (Silver-flo™ 55 and 56). Silver-flo™ 40 is widely used as a general purpose silver brazing filler metal as well as in joining copper to steel in refrigeration pipe work.

It should be noted that this filler metal contains tin and may be described as being 'hot-short'. It should not be quenched from high temperatures (in excess of 300˚C) and care should be taken when it is used to braze components with widely differing coefficients of thermal expansion as in both cases cracking of the joints may occur.

Optimum joint gaps at brazing temperature are 0.075-0.2mm.

Composition: 40%Ag, 30%Cu, 28%Zn, 2%Sn

Conforms to: ISO 17672:2010 Ag 140, AWS A5.8 BAg-28, formerly EN1044 1999 AG105

Melting range: 660-710˚C

Uses for this product

Silver-flo™ 40 can be used to join most common engineering metals - copper, copper alloys including, brasses, bronzes, gun metal, nickel silver, aluminium bronze, copper nickel, steels including, mild, carbon, tool steel, stainless steels, low alloy steel. This alloy is not normally recommended for brazing tungsten carbide and PCD segments where lower melting or nickel / manganese containing silver brazing filler metals are often preferred.

Conditions for use

This filler metal is mainly used for brazing in air with a flux. In most cases Easy-flo™ Flux can be used in conjunction with Silver-flo™ 40. However, flux selection is application dependent. Please refer to Johnson Matthey technical department or flux product datasheets before selecting a flux.

Product availability

Rod	1.5mm, 2mm, 2.5mm, 3mm
Flux coated rod	1.5mm, 2mm
Wire	0.75mm, 0.8mm
Strip	3 x 1mm, 1.5 x 1mm, 3 x 1.5mm
Foil	20 x 0.15mm
Braze-pastes	On request
Others	Rings, Preformed shapes

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