

Technical data

Silver brazing filler metal

Silver-flo™ 56S – Cadmium free silver brazing filler metal

Product description

Johnson Matthey's Silver-flo™ 56S is a cadmium free silver brazing alloy. It combines a low brazing temperature with a short melting range. Silver-flo™ 56S has a small addition of silicon, is very free flowing and produces smooth neat joints with small fillets. This characteristic can be of use where a joint needs to be smooth for aesthetic reasons. This filler metal may be used to braze steel assemblies but is not recommended on carbon steel components that are subject to high impact or fatigue stress in service.

Silver-flo™ 56S can be used as a cadmium-free alternative to the low-melting cadmium containing alloys.

The optimum joint gap for this filler metal at brazing temperature is normally 0.05-0.15mm.

Composition: 56%Ag, 22%Cu, 17%Zn, 4.8%Sn, 0.2%Si

Specification: Proprietary JM specification

Melting range: 618-652 °C

Uses for this product

This filler metal can be used to join all the common engineering materials (excluding aluminium) – such as copper, copper alloys (including, brasses, bronzes, gun metal, nickel silvers, aluminium bronze, copper nickel) and stainless steel. It may be used for brazing tungsten carbide and PCD segments however where cracking of the carbide or wetting of the filler metal may be an issue specialised silver brazing filler metals containing nickel / manganese 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™ 56S. However, flux selection is application dependent. Please refer to JM technical department or flux product datasheets before selecting a flux.

Product availability

Rod	1.5mm diameter
Flux coated rod	On request
Wire	On request
Strip	On request
Foil	On request
Braze-pastes	On request

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