



## Silver-flo™ 43 – Cadmium Free Silver Brazing Filler Metal

Silver-flo™ 43 is a cadmium free silver brazing alloy. It is not a commonly used or specified alloy. However, it was originally developed by Johnson Matthey in research to find a low silver content filler metal alloy that is resistant to dezincification in marine environments. As such this alloy is suitable for seawater applications, and is still used in some naval or marine work where written specifications call for it.

Silver-flo™ 43 has a brazing temperature that is above the annealing or stress relieving temperature of many copper-nickel alloys. Consequently Silver-flo™ 43 has been used on cupro-nickel and high nickel content copper alloys where stress cracking / intergranular penetration may otherwise be a problem.

Silver-flo™ 43 has a relatively long melting range, is not free flowing and will fill joint gaps at brazing temperature of of between 0.075-0.2mm. It can therefore be used for filling joints that cannot be tightly controlled.

**Composition:** 43%Ag, 37%Cu, 20%Zn

**Conforms to:** BS1845 1984 AG5

**Melting range:** 690-775°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 steel (including, mild, carbon, tool steel, stainless steels and low alloy steel).

### 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™ 43. However, flux selection is application dependent. Please refer to JM technical department or flux product datasheets before selecting a flux.

### Product Availability

Rod	On request
Flux Coated Rod	On request
Wire	On request
Strip	On request
Foil	On request
Brazing-pastes	On request
Other	Rings, preformed shapes

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**Johnson Matthey**

Metal Joining York Way, Royston, Hertfordshire, SG8 5HJ, UK

Telephone: +44 (0) 1763 253200

Fax: +44 (0) 1763 253168

email: [mj@matthey.com](mailto:mj@matthey.com)

[www: jm-metaljoining.com](http://www.jm-metaljoining.com)