

Technical data

Silver brazing filler metal

Argo-braze™ 60/60V – Silver brazing filler metal

Product description

Argo-braze™ 60 is a specialised cadmium free and zinc free silver brazing filler metal which makes it suitable for flux-less brazing in reducing or inert gas atmospheres as well as vacuum.

This filler metal is also available as vacuum tube grade material with low and controlled levels of volatile impurities in which case it is designated Argo-braze™ 60V.

Being zinc free the alloy is suitable for the brazing of components in applications where dezincification of zinc containing filler metals might occur, such as exposure to salt water.

The tin content of this filler metal depresses the melting temperature and improves its wetting on ferrous parent metals over the silver-copper filler metal Argo-brazeTM 72V. It is, however, prone to liquate (separate into low and high melting constituents) if it is heated slowly through its melting range. For this reason rapid heating methods should be employed wherever possible.

Joint gaps should be between 0.075mm and 0.2mm at brazing temperature.

This filler metal was formerly called RTSN™.

Composition: 60%Aq, 30%Cu, 10%Sn

Conforms to: ISO 17672:2010 Ag 160, AWS A5.8 BAg-18 / BVAg-18, SAE AMS 4773,

ASME Boiler and Pressure Vessel Code SFA5.8 BAg-18

Melting range: 600-730°C

Uses for this product

This alloy is not widely used in Europe. It has been used for a variety of special 'niche' applications such as brazing of seals on vacuum tube components.

Conditions for use

Can be used under suitable conditions for brazing a wide range of parent materials under atmosphere (reducing or inter gas) or vacuum. When vacuum brazing a partial pressure brazing technique should be used to prevent vaporisation of the silver within the alloy. It can also be used for brazing in air in conjunction with a suitable flux. A rapid heating method such as induction or fixed burner heating is recommended to avoid the problems of liquation.

Product availability

Special order only.

Johnson Matthey Plc cannot anticipate all conditions under which this informatiRings, preformed shapes, braze-pastes, on requestother manufacturers in combination with our products will be used. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is given in good faith, being based on the latest information available to Johnson Matthey Plc and is, to the best of Johnson Matthey Plc's knowledge and belief, accurate and reliable at the time of preparation. However, no representation, warranty or guarantee is made as to the accuracy or completeness of the information and Johnson Matthey Plc assumes no responsibility therefore and disclaims any liability for any loss, damage or injury howsoever arising (including in respect of any claim brought by any third party) incurred using this information.

The product is supplied on the condition that the user accepts responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. Freedom from patent or any other proprietary rights of any third party must not be assumed. The text and images on this document are Copyright and property of Johnson Matthey. This datasheet may only be reproduced as information, for use with or for resale of Johnson Matthey products. The JM logo©, Johnson Matthey name© and product names referred to in this document are trademarks of Johnson Matthey. Easy-flo® and Silver-flo® are registered to JM in the EU. Sil-fos[™] is registered to JM in the UK and certain other countries but is marketed as Mattiphos[™] in Germany and the USA.

