



Nicrobraz® Brazing Filler Metals in Paste form.

Nicrobraz® 'S' Binder™

A Gel Binder for Making Extrudable Brazing Filler Metal Pastes

Description:

Nicrobraz® 'S' Binder™ is a water-based gel suspending agent which can be mixed with any Brazing Filler Metal powder to produce a thixotropic paste. These pastes are suitable for filler metal application with commercially available hand- and air-powered pressure activated applicators. Nicrobraz® 'S' Binder™ acts as both a vehicle and a binder. When applied properly, it will hold the Brazing Filler Metal in place even after the Binder completely volatilizes at approximately 1000°F (540°C).

Nicrobraz® 'S' Binder™ does not adversely affect high-purity dry atmospheres or vacuum, even though some outgassing occurs. The amount of outgassing will increase in proportion to the amount of Nicrobraz® 'S' Binder™ used and the number of parts in the furnace. Outgassing can be reduced by air-baking prior to furnace processing. However, this is seldom necessary as air drying at room temperature is normally sufficient. (Allow 4-8 hours for complete drying.) A part should not be placed in the furnace immediately after filler metal is applied because the wet binder may expand too fast when heated very rapidly. This could cause the filler metal to spread over a wider area than desired.

Nicrobraz® 'S' Binder™ contains no solvents and ozone depletion contents. It is non-flammable, non-toxic, and odor-free.

Form Available:

Bulk liquid: 1 kg and 4 kg containers.

Mixing Procedure:

As a starting point, with standard -140 mesh Brazing Filler Metal powder, mix approximately 88% of powder with approximately 12% of Nicrobraz® 'S' Binder™ by weight. The ratio can be adjusted according to experience; operator preference; the mesh analysis of a particular filler metal powder; diameter and length of the applicator nozzle; desired applicator operating pressure; or amount of filler metal to be applied. Care should be taken to avoid entrapping air during mixing because air bubbles may cause "spitting" at the nozzle. Thorough mixing is required for uniform application.

Safety:

When handling metal powder alloys, avoid inhalation or contact with the skin or eyes. Conduct application operations in a properly ventilated area. For more information, consult, OSHA Safety and Health Standards available from U. S. Government Printing Office, Superintendent of Documents, P. O. Box 371054, Pittsburgh, PA 15250, and the manufacturer's Material Safety Data Sheet (MSDS). Read and understand the manufacturer's material safety data sheet before use.

No special ventilation is required in areas where this product is applied. However, normal ventilation is desirable.

The information provided herein is given as a guideline to follow. It is the responsibility of the end user to establish the process information most suitable for their specific application(s).

Wall Colmonoy Corporation (USA) and Wall Colmonoy Limited (UK) assume no responsibility for failure due to misuse or improper application of this product, or for any incidental damages arising out of the use of this material.

updated January 2024