

Handy Flo® 460

GENERAL DESCRIPTION

Handy Flo 460 is a clean burning fluxless binder systems used in controlled atmosphere furnace brazing of steel/stainless steel assemblies. This system is recommended for use in dry atmospheres such as nitrogen, hydrogen, dissociated ammonia and vacuum with minimum vacuum level of 10^{-4} Torr. Handy Flo 460 is recommended for use in dry atmosphere settings i.e. -40°F to -60°F. Handy Flo 460 has been formulated for dispensing applications using automated dispensing equipment.

PRODUCT APPLICATION

Handy Flo 460 is recommended for use with braze filler metals that flow above 1900°F (1038°C) and include: pure copper, bronze alloys, copper-nickel alloys and copper/cuprous oxide.

BRAZING CHARACTERISTICS

Handy Flo 460 will tend to exhibit moderate slump on vertical joints; however, it is a restrictive system with no flashing ability once in molten form which helps prevent unwanted alloy flow outside of the brazing area. The paste deposit will remain in place and will not spatter during the initial stages of the heating process. Handy Flo 460 dries relatively quickly and will not flake off the parts prior to heating operation; this allows pre-pasting of assemblies several hours prior to brazing operation. Handy Flo 460 is exceptionally clean burning. There is no residue following the brazing process.

WARRANTY & STORAGE

Lucas-Milhaupt, Inc. warrants their Brazing and Soldering Paste products for 90 days from the date of shipment if stored in the original unopened container. Optimal storage conditions would be 65°F (18°C) - 75°F (24°C), clean and dry. It is recommended that the paste products are stored away from direct heat. Paste may require mixing to regain a homogenous mixture before application.

The 90 day warranty should not be interpreted as the shelf or useful life of the product. The paste products may be used well beyond the 90 day warranty, unless customer testing or production results indicate unsatisfactory performance of the product.

AVAILABLE PACKAGING

Handy Flo and DF products are available in various size syringes, jars and cartridges. Paste may also be obtained in large containers prepackaged for immediate pneumatic dispensing operations.

SPECIFICATIONS

Handy Flo 460 conforms to the following specifications: N/A

APPLICABLE PRODUCT CODE(S)

The applicable Lucas-Milhaupt product code(s) for this technical data sheet: 83-460.

SAFETY INFORMATION

The operation and maintenance of brazing equipment or facility should conform to the provisions of American National Standard (ANSI) Z49.1, "Safety in Welding and Cutting". For more complete information, refer to the Material Safety Data Sheet for Handy Flo 460.

WARRANTY CLAUSE

Lucas-Milhaupt, Inc. believes the information contained herein to be reliable. However, the information is given by Lucas-Milhaupt, Inc. without charge and the user shall use such information at its own discretion and risk. This information is provided on an "AS IS" AND "AS AVAILABLE" basis and Lucas-Milhaupt, Inc. specifically disclaims warranties of any kind, either express or implied, including, but not limited to, warranties of title or implied warranties of merchantability or fitness for a particular purpose. No oral advice or written or electronically delivered information given by Lucas-Milhaupt, Inc. or any of its officers, directors, employees, or agents shall create any warranty. Lucas-Milhaupt, Inc. assumes no responsibility for results obtained or damages incurred from the use of such information in whole or in part.