Handy Flux® HPB

GENERAL DESCRIPTION
Handy Flux HPB is a high purity, boron modified, water based active fluoride/borate-type flux in paste form, which has been specially formulated to give excellent adhesion when dipped or brushed on parts. It is recommended to use with filler metals that flow between 1100°F (600°C) - 1700°F (926°C). The flux provides excellent protection of parts up to 1700°F (926°C). Handy Flux HPB is visibly different than Handy Flux Type B-1 because the high purity boron makes this product appear brown in color instead of black.

PRODUCT APPLICATION
Handy Flux HPB is primarily used as a general purpose brazing flux in brazing applications involving brazing of tungsten carbides as well as tungsten carbide alloys with additions of tantalum carbide or titanium carbide, and chromium carbides. This product is also commonly used for brazing refractory metals such as molybdenum and tungsten alloys, as well as high chromium stainless steel alloys. It is not recommended to use in aluminum bronze or other aluminum alloy brazing applications. Handy Flux HPB is suitable for use with most heating methods including torch, induction or furnace. This product exhibits excellent adhesion, less spattering and oxide removal capabilities during brazing process. Handy Flux HPB may be thinned with water to a smooth uniform consistency for brushing or dipping. The product exhibits excellent shelf life if stored in a dry place between 65°F (18°C) - 75°F (24°C). If stored for a long period of time some separation within the flux may occur. In such case stir the flux up until proper consistency is restored.

POST CLEANING
This product is corrosive and a post braze cleaning or rinsing operation is required. The flux residue is easily dissolved in hot water at temperatures of 120°F (50°C) or higher.

WARRANTY & STORAGE
Lucas-Milhaupt, Inc. warrants their Water Based Fluxes for twelve months 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), cool and dry.

 Twelve months should not be interpreted as the shelf or useful life of the product unless actual test results indicate unsatisfactory performance for the intended application. Flux beyond the warranty may be reconstituted to a working consistency by warming in a water bath and or by additions of distilled or de-ionized warm water.

Flux may require mixing, dilution or warming to regain its normal consistency prior to use. Flux, when placed on a U.S. standard 40 mesh (425 micron) sieve conforming to ASTM E11 and worked lightly with a brush shall pass completely through the sieve. If the flux has partially coagulated in the container, the flux may, before conducting the test, be warmed in a water bath until it has returned to its normal consistency.

AVAILABLE PACKAGING
Handy Flux HPB is available in a variety of packaging options including 1 lb, 5 lb, 25 lb and 50 lb containers.

SPECIFICATIONS
Handy Flux HPB conforms to the following specifications: N/A
APPLICABLE PRODUCT CODE(S)

The applicable Lucas-Milhaupt product code(s) for this technical data sheet: 82-095.

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 Flux HPB.

WARRANTY CLAUSE

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