Technical Data Sheet

460 and 470 Stop-Off

NOMINAL COMPOSITION

Al_2O_3	Proprietary

PHYSICAL PROPERTIES

	460	**470**
Color	Pink	White
Temperature Range °F	932°F -3632°F	932°F -3632°F
Temperature Range °C	500°C - 2000°C	500°C - 2000°C
Specific Gravity(1)	N/A	N/A
Density (grams/cm^3)(1)	1.90	1.98

(1) Approximate Calculation

PRODUCT APPLICATION

Stop-Off prevents braze alloy from flowing into regions that have tolerances or aesthetic requirements which the presence of braze alloy would damage and/or adhere to. It can also be used to guide excessive alloy into unorthodox joint designs. Stop-Off does not flow beyond where it is initially placed; making it ideal for preventing alloy from flowing into precise designs such as threads and holes. It also does not separate over time, and can be easily applied by brush, roller, or squeeze bottle. For the greatest adhesion of Stop-Off to base metal surface, it is recommended to slow heat or pre-dry to evaporate all the product solvent while avoiding blistering on the surface. Fast heating which can cause blistering and lifting between the Stop-Off and base material surface, may allow filer metal to adhere and or wetting to occur.

460 Stop-Off has been specially formulated for better adhesion to base metals. The applications where adhesion is of primary importance may include dip brazing, induction, resistance applications, and flame brazing especially with high velocity torches. 460 Stop-Off is not recommended for furnace brazing. Due to the increased adherence of the 460 Stop-Off product, mechanical cleaning methods may be required; such as scotch brite, wire brushing, or blasting. Removal in hot water with ultrasonic agitation may also be considered.

470 Stop-Off has been specifically formulated for furnace and vacuum furnace brazing. It can be used in torch, furnace, induction, and resistance brazing. The 470 Stop-Off is formulated to minimize post braze cleaning. After brazing, 470 Stop-Off is reduced to a powder and should flake and/or rinse off easily in hot water with minor agitation.

The viscosity of 460 and 470 Stop-Off can be adjusted by diluting to the desired consistency with distilled or deionized water, isopropyl alcohol, or ethanol. Excessive dilution may cause separation. If separation does occur, stir back to desired consistency.

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WARRANTY & STORAGE

Lucas-Milhaupt, Inc. warrants their Stop-Off 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 Stop-Off products are stored away from direct heat. Stop-Off 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. Stop-Off may be used well beyond the 90 day warranty, unless customer testing or production results indicate unsatisfactory performance of the product.

AVAILABLE FORMS

Lucas-Milhaupt, Inc. manufactures and supplies this brazing aid in four pound and ten pound polyethylene containers and two and 5 ounce syringes.

SPECIFICATIONS

460 and 470 Stop-Off conforms to the following specifications: N/A

APPLICABLE PRODUCT CODE(S)

The applicable Lucas-Milhaupt product code(s) for this technical data sheet: 83-920, 83-922, 83-926, 83-924, 83-925, 83-921, and 83-923

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 460 and 470 Stop-Off.

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.

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