

LM 69-025

NOMINAL COMPOSITION

| | |
|------------------------|--------------|
| Copper | 80.0% ± 1.0% |
| Tin | 20.0% ± 1.0% |
| Other Elements (Total) | 0.15% Max |

PHYSICAL PROPERTIES

| | |
|--|--------------------------------|
| Color | Light Copper |
| Melting Point (Solidus) | 1475°F (801°C) |
| Flow Point (Liquidus) | 1665°F (907°C) |
| Brazing Temperature Range | 1665°F- 1765°F (907°C - 963°C) |
| Specific Gravity | 8.56 |
| Density (Troy oz/in ³) | .309 |
| Electrical Conductivity (%IACS) ⁽¹⁾ | N/A |
| Electrical Resistivity (Microhm-cm) | N/A |

⁽¹⁾ IACS = International Annealed Copper Standard

PRODUCT USES

LM 69-025 is a low cost brazing filler metal suitable for joining copper to ferrous and ferrous to ferrous alloys where lower brazing temperature is required. Due its wide plastic range LM 69-025 offers better gap filling capabilities in comparison to standard pure copper alloy(s).

BRAZING CHARACTERISTICS

LM 69-025 is a copper rich, low temperature, brazing filler metal that exhibits more of a sluggish flow characteristics due to its higher tin content.

PROPERTIES OF BRAZED JOINTS

The properties of a brazed joint are dependent upon numerous factors including base metal properties, joint design, metallurgical interaction between the base metal and the filler metal. The properties of a brazed joint are dependent upon the base metal, joint design and brazing technique. With proper joint clearance and joint depth, the joints should surpass the strength of one of the weaker base materials in annealed condition. Due to its higher tin content, joints brazed with LM 69-025 may exhibit lower ductility.

AVAILABLE FORMS

Powder and paste.

SPECIFICATIONS

LM 69-025 alloy conforms to the following specifications: N/A

APPLICABLE PRODUCT CODE(S)

The applicable Lucas-Milhaupt product code(s) for this technical data sheet: 69-025.

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 LM 69-025.

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