

PREMABRAZE[®] 030

NOMINAL COMPOSITION

Germanium	12.0% ±1.0%
Copper	Remainder
Nickel	0.15% - 0.30%
Zinc	0.001% Max
Cadmium	0.001% Max
Lead	0.002% Max
Phosphorous	0.002% Max
Carbon	0.005% Max
Other high vapor pressure elements each ⁽¹⁾	0.001% Max
Total all high vapor pressure elements (Including zinc, cadmium, and lead)	0.010% Max
Total all other impurity elements	0.01% Max

⁽¹⁾ Elements with a vapor pressure higher than 10⁻⁷ Torr (1.3 x 10⁻⁵ Pa) at 932°F (500°C)

PHYSICAL PROPERTIES

Color	Silver White
Melting Point (Solidus)	1620°F (882°C)
Flow Point (Liquidus)	1790°F (977°C)
Brazing Temperature Range	1790°F - 1900°F (977°C - 1038°C)
Specific Gravity	8.26
Density (Troy oz/in ³)	4.35
Electrical Conductivity (%IACS) ⁽²⁾	N/A
Electrical Resistivity (Microhm-cm)	N/A

⁽²⁾ IACS = International Annealed Copper Standard

PRODUCT USES

Premabraze 030 is a low cost, low vapor pressure alloy that offers good wetting characteristics on ferrous and non ferrous alloys such as steels, stainless steels, copper and copper alloys, nickel and nickel alloys.

BRAZING CHARACTERISTICS

Premabraze 030 is a modified pure copper alloy. The additions of germanium lower the melting point of the alloy. The small addition of nickel in Premabraze 030 renders improved wetability on ferrous substrates such as steel and stainless steel.

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.

AVAILABLE FORMS

Wire, strip, engineered preforms, specialty preforms per customer specification.

SPECIFICATIONS

Premabraz 030 alloy conforms to the following specifications: N/A

APPLICABLE PRODUCT CODE(S)

The applicable Lucas-Milhaupt product code(s) for Premabraz 030: 69-030.

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 Premabraz 030.

WARRANTY CLAUSE

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