

LM 69-036

NOMINAL COMPOSITION

Titanium	Remainder
Nickel	25.0 % ± 1.0%
Copper	15.0% ± 1.0%
Iron	0.1% Max
Aluminum	0.05% Max
Silicon	0.02% Max
Oxygen	0.15% Max
Nitrogen	0.02% Max
Carbon	0.04% Max
Other Elements (Total)	0.30% Max

PHYSICAL PROPERTIES

Color	Gray
Melting Point (Solidus)	1653°F (901°C)
Flow Point (Liquidus)	1679°F (915°C)
Brazing Temperature Range	1705°F - 1760°F (930°C - 960°C)
Specific Gravity	5.62
Density (Troy oz/in ³)	2.96
Electrical Conductivity (%IACS) ⁽¹⁾	N/A
Electrical Resistivity (Microhm-cm)	N/A

⁽¹⁾ IACS = International Annealed Copper Standard

PRODUCT USES

LM 69-036 can be used on any of the common metallic and non-metallic substrates. This alloy will wet titanium, titanium base and super alloys as well. LM 69-036 exhibits good wetting characteristics on ceramic surfaces eliminating the metallization and plating processes. Typical applications include brazing of vacuum tubes, wave guides in electrical and electronic industry and titanium based rocket and engine components in the aerospace industry.

BRAZING CHARACTERISTICS

LM 69-036 is generally used in a high vacuum or dry argon gas environment. Due to its titanium content this alloy may exhibit better corrosion resistance.

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

Powder and paste.

SPECIFICATIONS

LM 69-036 alloy conforms to the following specifications:

- American Welding Society (AWS) A5.8/A5.8M BTi-2

APPLICABLE PRODUCT CODE(S)

The applicable Lucas-Milhaupt product code(s) for this technical data sheet: 69-036.

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 69-036.

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