

LM 63-999

(99.8% minimum tin)

NOMINAL COMPOSITION

Tin 99.8% Min.

PHYSICAL PROPERTIES

Color	Silver-White
Melting Point (Solidus)	449°F (232°C)
Flow Point (Liquidus)	449°F (232°C)
Brazing Temperature Range	449°F - 549°F (232°C - 287°C)
Specific Gravity	7.30
Density (Lbs/in ³)	0.26 (β phase)
Electrical Conductivity (%IACS) ⁽¹⁾	14.0
Electrical Resistivity (Microhm-cm)	11.0

⁽¹⁾ IACS = International Annealed Copper Standard

PRODUCT USES

LM 63-999 is widely used in production of low temperature soft solders i.e. tin-lead, tin-silvers. Pure tin is often used in coating applications as it shows improved corrosion resistance when exposed to water and/or air environment. Due to its low toxicity, tin is used in joining and lining of water carrying system.

SOLDERING CHARACTERISTICS

LM 63-999 is generally selected for its favorable corrosion resistance and low toxicity. It is malleable at room temperatures but the product exhibits low ductility at low temperatures. Pure tin will react with strong acids and strong bases.

PROPERTIES OF SOLDERED JOINTS

The properties of a soldered 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, powder and paste.

SPECIFICATIONS

LM 63-999 conforms to the following specifications: N/A

APPLICABLE PRODUCT CODE(S)

The applicable Lucas-Milhaupt product code(s) for this technical data sheet: 63-999.

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 63-999 Pure Tin.

WARRANTY CLAUSE

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