

SILVABRITE® 973

NOMINAL COMPOSITION

Copper	3.5% ± 0.5%	Antimony	0.05% Max	Arsenic	0.05% Max
Tin	Remainder	Cadmium	0.005% Max	Iron	0.04% Max
Silver	0.015 % Max	Aluminum	0.005% Max	Zinc	0.005% Max
Lead	0.1% Max	Bismuth	0.05% Max	Nickel	0.005% Max

PHYSICAL PROPERTIES

Color	White
Melting Point (Solidus)	440°F (226°C)
Flow Point (Liquidus)	572°F (300°C)
Specific Gravity	7.35
Density (lb /in ³)	.266
Electrical Conductivity (%IACS)*	N/A
Electrical Resistivity (Microhm-cm)	N/A

*IACS = International Annealed Copper Standard

SOLDERING CHARACTERISTICS

This alloy is considered to be a high strength solder. Joint clearances of 0.003 – 0.005 in. (0.076 – 0.13 mm) per side are optimum for achieving highest joint strength. Joints with increased clearances can still produce adequate joint strengths depending on final operating conditions. Silvabrite 973 requires the use of Clean 'n Brite Flux/Silvabrite Paste Soldering Flux when used with open air heating methods such as torch, induction or air atmosphere furnace.

PROPERTIES OF SOLDER 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. Silvabrite 973 was developed as a low-cost alternative to the standard Silvabrite (96.5% Sn-3.5% Ag) soft solder. This material can be used for potable water in copper plumbing systems where no lead is permitted.

AVAILABLE FORMS

Wire, engineered preforms, specialty preforms per customer specification, powder and paste.

SPECIFICATIONS

Silvabrite 973 conforms to the following specifications: N/A

APPLICABLE PRODUCT CODE(S)

The applicable Lucas-Milhaupt product code(s) for this technical data sheet: 35397, 35489 (Rosin Core).

Distribution P/N: 52154.

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 Silvabrite 973.

WARRANTY CLAUSE

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