LucasMilhaupt
A Handy & Harman Company
Global Brazing Solutions

Technical Data Sheet

SILVABRITE® 6

(Clean 'n Brite™ 6)

NOMINAL COMPOSITION

Tin	Remainder	Copper	0.08% Max	Arsenic	0.05% Max
Silver	5.4%-5.8%	Cadmium	0.005% Max	Iron	0.02% Max
Lead	0.1% Max	Aluminum	0.005% Max	Zinc	0.005% Max
Antimony	0.12% Max	Bismuth	0.15% Max		

PHYSICAL PROPERTIES

Color	White
Melting Point (Solidus)	430°F (221°C)
Flow Point (Liquidus)	536°F (280°C)
Specific Gravity	7.49
Density (lb /in^3)	.514
Electrical Conductivity (%IACS)	N/A

*IACS = International Annealed Copper Standard

SOLDERING CHARACTERISTICS

Silvabrite 6 is a high strength solder. The alloy exhibits higher creep strengths in comparison to standard tin-lead soft solders. Silvabrite S provides satisfactory color match for stainless steel assemblies

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 6 alloy will require Silvabrite Paste Soldering flux/Clean 'n Brite Flux when used with open air heating methods such as torch, induction or air atmosphere furnace. . When used with TEC flux or Liquid Solder Flux, Silvabrite alloys will readily wet stainless steel base metals.

PROPERTIES OF SOLDER JOINTS

The properties of a soldered joint are dependent upon the base metal, joint design and brazing technique. Typical tensile strength properties for a copper to copper sleeve joint have been reported at 15,000 PSI for Silvabrite S.

AVAILABLE FORMS

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

SPECIFICATIONS

Silvaloy 6 conforms to the following specifications:

- American Society for Testing and Materials (ASTM) B32 Sn94

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APPLICABLE PRODUCT CODE(S)

The applicable Lucas-Milhaupt product code(s) for this technical data sheet: 63-941, 28647.

Distribution P/N: 53113, 57938.

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 6.

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