

Technical Data Sheet

SILVALOY[®] 560 (BRAZE TM 560, SILVALOY[®] A56T)

NOMINAL COMPOSITION

Silver	$56.0\% \pm 1.0\%$
Copper	$22.0\% \pm 1.0\%$
Zinc	$17.0\% \pm 2.0\%$
Tin	$5.0\%\pm0.5\%$
Other Elements (Total)	0.15% Max

PHYSICAL PROPERTIES

Color	White
Melting Point (Solidus)	1145°F (618°C)
Flow Point (Liquidus)	1205°F (652°C)
Brazing Temperature Range	1205°F - 1400°F (652°C - 760°C)
Specific Gravity	9.21
Density (Troy oz/in ³)	4.85
Electrical Conductivity (%IACS) ⁽¹⁾	8.32
Electrical Resistivity (Microhm-cm)	20.8
⁽¹⁾ IACS = International Annealed Copper Standard	

PRODUCT USES

Silvaloy 560 is a silver-based brazing alloy used for ferrous and non-ferrous alloys in joints requiring a low temperature, cadmium-free alloy, as in food handling equipment. For improved corrosion resistance in joints on stainless steel, use alloys containing small amounts of nickel, such as Silvaloy 630 or Silvaloy 505.

BRAZING CHARACTERISTICS

Silvaloy 560 is a low temperature, free-flowing brazing filler metal with a slight tendency to liquate (i.e. separate into low and high melting constituents) if heated slowly through its melting range.

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.

	Tensile Strength (lbs/in ²)
Low Carbon Steel	40,000 - 50,000
Copper	25,000 - 30,000
Brass	30,000 - 40,000
Cold-Rolled Steel	55,000 - 65,000



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AVAILABLE FORMS

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

SPECIFICATIONS

Silvaloy 560 alloy conforms to the following specifications:

- American Welding Society (AWS) A5.8/A5.8M BAg-7
- ASME Boiler & Pressure Vessel Code, Sec II-C, SFA-5.8 BAg-7
- $_{\odot}$ Society of Automotive Engineers (SAE) / AMS 4763
- Federal Specification QQ-B-654 BAg-7
- o International Organization for Standardization (ISO) 17672 Ag 156
- British Standard (BS) EN 1044 Ag 102
- o JIS Z 3261 BAg-7

APPLICABLE PRODUCT CODE(S)

The applicable Lucas-Milhaupt product code(s) for this technical data sheet: A00000015, Legacy Codes: 32-560,

3558, 35554.

Distribution P/N: 98060, 98061, 98062, 98064, 98065, 98066, 98067.

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 Silvaloy 560.

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