

SILVALOY® 180S **(BRAZE™ 180, SILVALOY® A18S)**

NOMINAL COMPOSITION

Silver	18.0% ± 1.0%
Copper	45.75% ± 1.0%
Zinc	36.0% ± 2.0%
Silicon	0.25% ± 0.05%
Other Elements (Total)	0.15% Max

PHYSICAL PROPERTIES

Color	Brass Yellow
Melting Point (Solidus)	1443°F (784°C)
Flow Point (Liquidus)	1501°F (816°C)
Brazing Temperature Range	1501°F - 1600°F (816°C - 871°C)
Specific Gravity	8.34
Density (Troy oz/in ³)	4.39
Electrical Conductivity (%IACS) ⁽¹⁾	N/A
Electrical Resistivity (Microhm-cm)	N/A

⁽¹⁾ IACS = International Annealed Copper Standard

PRODUCT USES

Silvaloy 180S is a high temperature, low cost brazing alloy for joining a variety of ferrous and non-ferrous alloys. It provides a good color match on yellow brasses. Silvaloy 180S is preferred for brazing steel where heat-treating will be combined with brazing in a single operation.

BRAZING CHARACTERISTICS

Silvaloy 180S is a braze filler metal with rather high melting temperature. Therefore, it is preferable to use this alloy where the assemblies can be heated rapidly through solidus-liquidus range. Handy® Flux/Ultra® Flux or Handy® Flux Type B-1/Ultra® Black Flux can be used with Silvaloy 180S.

AVAILABLE FORMS

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

SPECIFICATIONS

Silvaloy 180S alloy conforms to the following specifications: N/A

APPLICABLE PRODUCT CODE(S)

The applicable Lucas-Milhaupt product code(s) for this technical data sheet: 32-180, 35545.

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 180S.

WARRANTY CLAUSE

Lucas-Milhaupt, Inc. believes the information contained herein to be reliable. However, the information is given by Lucas-Milhaupt, Inc. without charge and the user shall use such information at its own discretion and risk. This information is provided on an "AS IS" AND "AS AVAILABLE" basis and Lucas-Milhaupt, Inc. specifically disclaims warranties of any kind, either express or implied, including, but not limited to, warranties of title or implied warranties of merchantability or fitness for a particular purpose. No oral advice or written or electronically delivered information given by Lucas-Milhaupt, Inc. or any of its officers, directors, employees, or agents shall create any warranty. Lucas-Milhaupt, Inc. assumes no responsibility for results obtained or damages incurred from the use of such information in whole or in part.