



235 Kilvert Street
Warwick, RI 02886

A World-Class Quality Partner
ISO 9001:2008
Registered

PRODUCT: SILVALOY® 6

COMPOSITION:

Silver	6.00 wt%
Phosphorous	6.00 wt%
Copper	88.0 wt%
Total Other Elements	0.15 wt% Max

MATERIAL PROPERTIES:

Solidus	1190°F (645°C)
Liquidus	1440°F (780°C)
Brazing Range	1325-1500°F (720-815°C)
Specific Gravity	8.139
Density (toz/cu in)	4.289
Electrical Conductivity (% IACS)	8.8
Electrical Resistivity (Michroh-m-cm)	19.6
Color	Light Copper

DESCRIPTION:

SILVALOY 6 is a mid-range silver containing copper phosphorous alloy suitable for wider capillary joint fit up in the range of .003” to .006”. **SILVALOY 6** has been universally accepted by repair and installation contractors because of its moderate flow with good filleting and gap filling characteristic when the joint fit up dimensions are less than ideal. The phosphorous content of **SILVALOY 6** acts as a fluxing agent and no flux is necessary when brazing copper-to-copper joints. However, when used with other brazeable metals, a brazing flux must be used to promote wetting, bonding, and flow throughout the joint. The flow point of **SILVALOY 6** is 1325°F (720°C).

APPLICATIONS:

SILVALOY 6 is used for the brazing of copper and copper alloys, brass, and bronze. It should not be used on ferrous metals or alloys containing more than 10% nickel due to the formation of brittle intermetallic phosphide compounds.

AVAILABLE FORMS:

Standard forms of **SILVALOY 6** are wire, and preforms.



PRODUCT: SILVALOY[®] 6 - CONTINUED

PROPERTIES OF BRAZED JOINTS:

Generally, the joint strength using **SILVALOY 6** will surpass the strengths of the base metals. Strength is a function of the base metals being joined, type of joint, design of joint, joint clearance and brazing procedures. The recommended maximum operating temperatures for **SILVALOY 6** are 300°F (continuous service) and 400°F (short-time service). Corrosion-resistance is satisfactory except when the joint is in contact with sulfurous atmosphere (especially at elevated temperatures).

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 6**.

LIABILITY-DISCLAIMER:

Wolverine Joining Technologies, LLC, seeks to represent reliable information concerning the composition, properties and use of its products. The technical information provided in this publication is provided at no charge and is without guarantee, warranty or responsibility of any kind, expressed or implied.

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