



235 Kilvert Street  
Warwick, RI 02886

A World-Class Quality Partner  
ISO 9001:2000  
Certified

**PRODUCT: SILVALOY<sup>®</sup> 45 FLUX COATED ROD  
(AWS BAg-1)**

**COMPOSITION:**

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Silver	28.0 wt%
Copper	9.33 wt%
Zinc	9.96±2.0%
Cadmium	14.93±1.0%
Flux	37.78 wt%
Total Other Elements	0.15 wt% Max

**Flux Composition:**

Potassium Tetraborate	0-40 %
Boric Acid	0-30 %
Potassium Bifluoride	0-30 %
Potassium Fluoroborate	0-30 %
Potassium Pentaborate	1-5 %
Sodium Dodecyl Sulfate	0-0.5 %
Colored Pigments	0-0.05 %

**MATERIAL PROPERTIES:**

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Solidus	1125°F(607°C)
Liquidus	1145°F(618°C)
Brazing Range	1145-1400°F(618-760°C)
Specific Gravity	9.104
Density (T.oz./cu.in.)	4.798
Electrical Conductivity (% IACS)	27.6
Electrical Resistivity (Michroh-m-cm)	6.06
Color	Light Yellow

**DESCRIPTION:**

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**SILVALOY 45 FC** is the lowest melting brazing alloy available composed of silver, copper, zinc and cadmium. It is suitable for use on most metals except aluminum and magnesium. It is used for joining steel, stainless steel, copper, copper alloys, nickel, nickel alloys or combinations of these metals. It has wide acceptance by industrial users, as well as being included in Federal and military specifications on brazing filler metals or alloys. It has a narrow melting range which is not apparent in most brazing operations, making it flow freely through a capillary.



## **PRODUCT: SILVALOY® 45 FLUX COATED ROD - CONTINUED**

### **ALLOY SPECIFICATIONS:**

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AWS A5.8	BAG-1
ASME	BAG-1
QQ-B-654	Grade VII
AMS	4769

### **AVAILABLE FORMS:**

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Standard form of **SILVALOY 45 FC** is rod.

### **SAFETY INFORMATION:**

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**SILVALOY 45 FC** contains cadmium and therefore upon heating may produce toxic fumes. It is essential that adequate ventilation be provided so that personnel will not inhale gases and fumes while brazing. 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 45 FC**.

### **LIABILITY-DISCLAIMER:**

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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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