



235 Kilvert Street
Warwick, RI 02886

A World-Class Quality Partner
ISO 9001:2008
Registered

PRODUCT: **SILVALOY® A45**
(AWS BAg-5)

COMPOSITION:

Silver	45.0 wt%
Copper	30.0 wt%
Zinc	25.0 wt%
Total other elements	0.15 wt% Max.

MATERIAL PROPERTIES:

Solidus	1225°F (663°C)
Liquidus	1370°F (743°C)
Brazing Range	1370-1550°F (743-843°C)
Specific Gravity	8.972
Density (T.oz./cu.in.)	4.728
Electrical Conductivity (% IACS)	19.0
Electrical Resistivity (Michroh-m-cm)	9.08
Color	Yellow White

DESCRIPTION:

SILVALOY A45 is a good general purpose alloy often used when cadmium must be avoided such as in the dairy and food industries.

APPLICATIONS:

Typical applications are the joining of ferrous, nonferrous and dissimilar metals. It is used for brazing in the electrical industry and for brazing brass parts such as ships, piping, band instruments and lamps.

SPECIFICATIONS:

AWS A5.8	BAg-5
ASME	BAg-5
QQ-B-654	BAg-5



PRODUCT: **SILVALOY[®] A45 - CONTINUED**
(AWS BAg 5)

AVAILABLE FORMS:

Standard forms of **SILVALOY A45** are wire, strip, and preforms.

PROPERTIES OF BRAZED JOINTS:

Generally, the joint strength using **SILVALOY A45** 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 clearances and brazing procedures.

The recommended maximum operating temperature for **SILVALOY A45** is up to 400°F in continuous service and up to 600°F in intermittent service. Where improved corrosion resistance is needed, **SILVALOY[®] 50N** and **SILVALOY[®] A40N2** are recommended over silver base filler metals not containing nickel.

SAFETY INFORMATION:

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 A45**.

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.

Wolverine Joining Technologies, LLC
235 Kilvert Street
Warwick, RI 02886
401-739-9550/fax 401-739-9555
www.silvaloy.com