



235 Kilvert Street
Warwick, RI 02886

A World-Class Quality Partner
ISO 9001:2000
Certified

PRODUCT: **SILVALOY[®] A56T**
(AWS BAg-7)

COMPOSITION:

Silver	56.0 wt%
Copper	22.0 wt%
Zinc	17.0 wt%
Tin	5.0 wt%
Total other elements	0.15 wt% Max.

MATERIAL PROPERTIES:

Solidus	1145°F (618°C)
Liquidus	1205°F (652°C)
Brazing Range	1205°F-1400°F (652-760°C)
Specific Gravity	9.203
Density (toz/cu. in.)	4.850
Electrical Conductivity (% IACS)	11.9
Electrical Resistivity (Michroh-m-cm)	14.5
Color	White

DESCRIPTION:

SILVALOY A56T has the lowest brazing temperature, best wetting, and best flow of all the cadmium-free alloys. It has a slight plastic range which may be noticed during melting on some applications. Its low zinc content minimizes problems due to longer heating cycles (as in furnace brazing) or due to excessive heating (as by less skilled operators). For this reason, it is often preferred over **SILVALOY[®] 35**, **SILVALOY[®] 45**, or **SILVALOY[®] 50** for furnace brazing, or any brazing operation where the alloy is molten for an extended period of time.

APPLICATIONS:

Typical applications are the joining of ferrous, nonferrous, and dissimilar metals, with close joint clearances. It is often selected for use on silver or stainless steel due to its excellent color match. **SILVALOY A56T** is often used on nickel, nickel alloys, or stainless steel because it does not cause stress cracking as readily as the other low melting brazing filler metals. The fact that **SILVALOY A56T** contains no cadmium has led to its use on food handling equipment where cadmium may be considered a hazard and its use is prohibited by law.

SPECIFICATIONS:

AWS A5.8	BAg-7
ASME	BAg-7



QQ-B-654

BAG-7

PRODUCT: **SILVALOY[®] A56T – CONTINUED**
(AWS BAG-7)

AVAILABLE FORMS:

Standard forms of **SILVALOY A56T** are wire, strip, and preforms.

PROPERTIES OF BRAZED JOINTS:

Generally, the joint strength using **SILVALOY A56T** 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 A56T** 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 A56T**.

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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