



235 Kilvert Street  
Warwick, RI 02886

*A World-Class Quality Partner*  
**ISO 9001:2008**  
Registered

**PRODUCT:** **SILVALOY<sup>®</sup>A38T**  
**(AWS BAg-34)**

**COMPOSITION:**

---

Silver	38.0 wt%
Copper	32.0 wt%
Zinc	28.0 wt%
Tin	2.0 wt%
Total Other Elements	0.15 wt% Max

**MATERIAL PROPERTIES:**

---

Solidus	1200°F (649°C)
Liquidus	1330°F (721°C)
Brazing Range	1330-1550°F (721-843°C)
Specific Gravity	8.774
Density (toz/cu in)	4.624
Electrical Conductivity (% IACS)	18.0
Electrical Resistivity (Michroh-m-cm)	9.50
Color	Pale Yellow

**DESCRIPTION:**

---

The tin content provides good wetting on many difficult to wet metals such as stainless steel and tungsten carbide. This alloy, being free of Pb or Cd is preferred for long heating cycles and is suitable for use in controlled atmosphere brazing without flux.

**APPLICATIONS:**

---

Typical applications are the joining of ferrous, nonferrous and dissimilar metals and alloys with close joint clearances. **SILVALOY A38T** is used for joining ferrous metals (stainless steel, Tungsten or molybdenum carbide), and nonferrous (copper, copper alloys, nickel, nickel alloys). The largest use of this alloy is for furnace brazing although it is also suitable for other brazing procedures.



**PRODUCT:** **SILVALOY<sup>®</sup> A38T - CONTINUED**  
**(AWS BAg-34)**

**SPECIFICATIONS:**

---

AWS A5.8

BAg-34

**AVAILABLE FORMS:**

---

Standard forms of **SILVALOY A38T** are wire, strip and preforms.

**PROPERTIES OF BRAZED JOINTS:**

---

Generally, the joint strength when using **SILVALOY A38T** 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 A38T** is up to 400°F in continuous service and up to 600°F in intermittent service. Where improved corrosion resistance is needed **SILVALOY<sup>®</sup> 50N** and **SILVALOY<sup>®</sup> 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, Cutting). For more complete information, refer to the Material Safety Data Sheet for **SILVALOY A38T**.

**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](http://www.silvaloy.com)