



235 Kilvert Street  
Warwick, RI 02886

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

**PRODUCT: 95/5 Tin-Antimony  
LEAD-FREE SOLDER**

**NOMINAL COMPOSITION:**

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Tin	95%
Antimony	5%
Total Other Elements	0.15% Max.

**PHYSICAL CONSTANTS:**

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Solidus	430°F (221°C)
Liquidus	473°F (245°C)
Density (Toz./cu in)	3.8260
Soldering Range	473°F-500°F

**DESCRIPTION:**

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**95/5 Tin-Antimony** was developed to meet market demands for a less expensive, safe and easy to use solder for the electrical and electronic connections subject to peak temperatures under 465°F. It can also be used for sweating copper tubing in solar heating, drinking water systems, refrigeration systems, air conditioning, and other applications. **95/5 Tin-Antimony** is a lead-free non-toxic solder. It offers a low melting point and small melting range with excellent flow for tight fitting leak-tight joints.

**ADVANTAGES:**

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1. Lead-free composition
2. Easy to use
3. Excellent penetration and flow
4. Higher shear, creep and tensile strength than 50/50
5. Good appearance

**STANDARD FORMS:**

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- **Wire** – Solid, Acid Core, Rosin Core and Organic Core available in a variety of standard and custom diameters
- **Preforms** – Custom manufactured rings
- **Bars** – Bulk alloys



**PRODUCT: 95/5 Tin-Antimony - CONTINUED**

**APPLICATIONS:**

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**95/5 Tin-Antimony** is suitable for joining copper, and other metals alloys, with the exception of brass. It is most often applied by torch heating or soldering iron, but can be used with all conventional heating methods. **95/5 Tin-Antimony** should be used with Wolverine General Purpose Soldering Flux or SILVABRITE 100<sup>®</sup> Water Soluble Flux. Its flow and wetting action are excellent.

**Bulk Room Temperature Tensile Strength:**

SILVABRITE 100 <sup>®</sup>	6,900 psi
50/50 Tin-Lead	6,000 psi
95/5 Tin-Antimony	6,400 psi

**Pressure Rupture Test:**

Soldered joints using **95/5 Tin-Antimony** and L type copper tube (up to 1” diameter) at room temperature, 250°F and 300°F, should withstand pressure to the extent that failure occurs in the copper tube and not the soldered joint.

**Corrosion Test Data:**

Using **standard Tafel** electrochemical techniques and ASTM-Corrosive Water D1384, the following corrosion test data has been compiled.

SILVABRITE 100 <sup>®</sup>	0.31 mils/year
50/50 Tin-Lead	0.63 mils/year
95/5 Tin-Antimony	2.2 mils/year

**LIABILITY-DISCLAIMER:**

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