



235 Kilvert Street
Warwick, RI 02886

A World-Class Quality Partner
ISO 9001:2008
Registered

PRODUCT: **SILVALOY[®] 2**
(AWS BCuP-6)

COMPOSITION:

Silver	2.00 wt%
Phosphorus	7.00 wt%
Copper	91.0 wt%
Total Other Elements	0.15 wt% Max.

MATERIAL PROPERTIES:

Solidus	1190°F (643°C)
Liquidus	1450°F (788°C)
Brazing Range	1350-1500°F (732-816°C)
Specific Gravity	7.966
Density (toz/cu in)	4.198
Electrical Conductivity (% IACS)	5.5
Electrical Resistivity (Michroh-m-cm)	31.5
Color	Light Copper

DESCRIPTION:

SILVALOY 2 is extremely fluid at brazing temperatures and will penetrate joint with very little clearance. Best results are obtained with clearances of .001-.003". Melting of **SILVALOY 2** is virtually complete at 1350°F (732°C). Best results are obtained when brazing slightly above this temperature. The phosphorous content of **SILVALOY 2** acts as a fluxing agent and no flux is necessary when brazing copper to copper joints. However, when used with one of the other brazeable metals, a brazing flux must be used to promote wetting, bonding, and flow throughout the joint.

APPLICATIONS:

SILVALOY 2 is used for the brazing of copper and copper alloys, brass and bronze. It is primarily used for the joining of copper-to-copper on vibration free joints. It is very effective for joining tight fitting copper pipe and tubing. **SILVALOY 2** should not be used on ferrous metals or alloys containing more than 10% nickel due to the formation of brittle intermetallic phosphide compounds.

