



235 Kilvert Street
Warwick, RI 02886

A World-Class Quality Partner
ISO 9001:2008
Registered

PRODUCT: **SILVALOY® 25**
(AWS BAg-27)

COMPOSITION:

Silver	25.0 wt%
Copper	35.0 wt%
Zinc	26.5 wt%
Cadmium	13.5 wt%
Total Other Elements	0.15 wt% Max.

MATERIAL PROPERTIES:

Solidus	1125°F (605°C)
Liquidus	1375°F (745°C)
Brazing Range	1375-1575°F (745-860°C)
Specific Gravity	8.645
Density (toz/cu. in.)	4.556
Electrical Conductivity (% IACS)	29.7
Electrical Resistivity (Michroh-m-cm)	5.7
Color	Light Yellow

DESCRIPTION:

SILVALOY 25 is historically a modification of **SILVALOY® 30** with a further reduction in silver content resulting in a higher melting point and a longer melting range (250°F). It is similar to **SILVALOY 30** in performance although it contains less silver. Its broader melting range is helpful where clearances are not uniform. During melting, **SILVALOY 25** passes from the solid state to a mushy or plastic state and progressively to a liquid. If heated slowly through this plastic state (1125-1375°F) the liquid portion may flow from the solid portion. This causes a separation of the alloy into a low temperature melting (fluid) portion and a high temperature melting (solid) portion. This phenomenon is called liquation. The high temperature melting portion will melt only above the liquidus temperature of **SILVALOY 25**. For this reason, **SILVALOY 25** should be heated rapidly through the melting range.

APPLICATIONS:

Typical applications are the joining of ferrous, nonferrous and dissimilar metals and alloys with close joint clearances. **SILVALOY 25** is used for brazing steel, stainless steel, copper, copper alloys, nickel, nickel alloys or combinations of these metals.

