



## SilverAlloy BV-65

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**AUFHAUSER SilverAlloy BV-65** is a special alloy (very low level of volatile impurities) for vacuum brazing.

### APPLICATIONS

Brazing stainless steel, carbon steel, copper, nickel, Kovar, metallized ceramics, tungsten carbide in vacuum applications.

### NOMINAL COMPOSITION, wt.%

Ag	Cu	Pd
65	20	15

Zn	Cd	Pb	P	C	Other volatile elements each*	Total non-volatile elements**
<0.001	<0.001	<0.002	<0.002	<0.010	<0.002	<0.075

\*) All other metallic impurities having a vapor pressure higher than  $10^{-7}$  torr at 500°C are limited to 0.002 wt.% each.

\*\*) Impurities having a vapor pressure lower than  $10^{-7}$  torr at 500°C are limited to a total of 0.075 wt.% This applies to all forms except powder and extrudable paste.

### PHYSICAL PROPERTIES

<b>Solidus (melting point)</b>	1562°F (850°C)
<b>Liquidus (flow point)</b>	1652°F (900°C)
<b>Recommended brazing atmospheres</b>	$10^{-5}$ mm Hg vacuum, H <sub>2</sub> or inert gas
<b>Thermal conductivity</b>	98 W/m · K (57 BTU/ft · h · °F)
<b>Density</b>	10.3 g/cm <sup>3</sup> (0.372 lb/in <sup>3</sup> )
<b>Yield strength (0.2% offset)</b>	379 MPa (55 x 10 <sup>3</sup> lb/in <sup>2</sup> )
<b>Tensile strength</b>	448 MPa (65 x 10 <sup>3</sup> lb/in <sup>2</sup> )
<b>Elongation (2in/5mm gage section)</b>	23%
<b>Electrical resistivity</b>	$78 \times 10^{-9}$ ohm · m
<b>Electrical conductivity</b>	$13 \times 10^6$ /ohm · m

### AVAILABLE FORMS

Foil, Wire  
Powder, Paste  
Preforms