

SilverAlloy BV-71

◆ INTRODUCTION

Aufhauser **SilverAlloy BV-71** is a special alloy for **vacuum brazing**.

◆ APPLICATIONS & CHARACTERISTICS

SilverAlloy BV-71 is suitable for vacuum brazing applications at moderate temperatures, e.g. when assembling vacuum tube components.

BV-71 contains a small amount of nickel which improves the wetting of the surface of ferrous metals at the expense of a slightly more sluggish flow.

◆ CHEMICAL COMPOSITION (%)

Element	Vacuum Grade 1	Vacuum Grade 2
Ag	71.5 ±1.0	71.5 ±1.0
Cu	Reminder	Reminder
Ni	0.5 ±0.2	0.5 ±0.2
Cd	0.001 max	0.002 max
Zn	0.001 max	0.002 max
P	0.002 max	0.02 max
C	0.005 max	0.005 max
Pb	0.002 max	0.002 max
Other volatile elements *	0.001 max	0.002 max
Total volatile elements	0.01 max	0.01 max
Total non-volatile elements	0.05 max	0.05 max



*) Elements with a vapor pressure higher than 10^{-7} torr at 932°F (500°C) such as Mg, Sb, K, Na, Li, Ti, S, Cs, Rb, Se, Te, Sr, and Ca

◆ PHYSICAL and MECHANICAL PROPERTIES

Liquidus temperature	795°C (1463°F)
Solidus temperature	780°C (1436°F)
Brazing temperature range	795 - 900°C (1463 - 1650°F)
Density	10.0 g/cm ³ (5.27 troy oz/in ³)
Color	Silver white
Electrical resistivity, 10 ⁻⁹ microhm-cm	2.19
Electrical conductivity, % IACS (International Annealed Copper Standard)	78.8

◆ SUPPLIED FORMS

- Wire, Strip
- Powder, Paste
- Preforms per customer specification

Specifications:

AWS A5.8/A5.8M BVAg-8b
UNS P07728