

Bellman-Melcor

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#B56N (BAg-13a)

TECHNICAL DATA

NOMINAL COMPOSITION	Silver	56.0% ± 1.0
	Copper	42.0% ± 1.0
	Nickel	2.0% ± 0.5
	Other Elements Total	0.15% Max
PHYSICAL PROPERTIES	Color	White
	Solidus	1420°F (771°C)
	Liquidus	1640°F (893°C)
	Recommended Brazing Temperature	1690-1740°F (921-948°C)
	Density (Troy oz/in³)	5.14
	Specific Gravity	9.75
	Yield Strength (MPa)	339
	Tensile Strength (MPa)	366
	Elongation (%)	20
	Thermal Conductivity [W/(m•K)]	237
Electrical Conductivity (%IACS)	51.2	
Electrical Resistivity (Microhm-cm)	3.37	
USES	<p>#B-56N is a zinc free brazing alloy commonly used in flux free brazing of stainless steels in dry hydrogen atmosphere. #B-56N shows advantages in flux free furnace brazing applications where zinc volatilization is objectionable.</p>	
BRAZING CHARACTERISTICS	<p>#B-56N is an intermediate temperature silver brazing alloys. It has a rather long melting range (220F/125C) so that it will tend to liquate (separate high from low melting phases) if it is heated slowly through its melting range. However, the long melting range is useful when wide gap joints are brazed as it will bridge the gap and produce larger fillets than alloys with short melting ranges that are more fluid. #B-56N can be brazed by both torch and induction as well as under a protective atmosphere.</p>	
PROPERTIES OF BRAZED JOINTS	<p>The properties of a brazed joint are dependent upon numerous factors including base metal properties, joint design, metallurgical interaction between the base metal and filler metal.</p>	
SPECIFICATIONS	<p>#B-56N conforms to: Unified Numbering System (UNS) P07560, American Welding Society (AWS) A5.8/A5.8M BAg-13a and Society of Automotive Engineers (SAE) AMS 4765</p>	
AVAILABLE FORMS	<p>Wire, strip, engineered preforms, specialty preforms per customer specification, powder and paste.</p>	

Individuals requiring further information and Engineering Specification Documents may wish to contact the Engineering Society for Advanced Mobility, Land Sea Air and Space, The Society of Automotive Engineers <http://www.sae.org/> (SAE AMS) or The American Welding Society (AWS) <http://aws.org/>

NOTE:

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