

Prince & Izant Company

12999 Plaza Drive
Cleveland, Ohio 44130
T: 216-362-7000
F: 216-362-7456
princeizant.com



SILVERBRAZE 45T (BAg-36) TECHNICAL DATA

NOMINAL COMPOSITION	Silver	45.0% ± 1.0	
	Copper	27.0% ± 1.0	
	Zinc	25.0% ± 2.0	
	Tin	3.0% ± 0.5	
	Other Elements Total	0.15% Max	
PHYSICAL PROPERTIES	Color	Pale Yellow	
	Solidus	1195°F (646°C)	
	Liquidus	1251°F (677°C)	
	Recommended Brazing Temperature	1301-1351°F (705-732°C)	
	Density (Troy oz/in³)	4.85	
	Specific Gravity	9.20	
	Electrical Conductivity (%IACS)	18.0	
Electrical Resistivity (Microhm-cm)	9.60		
USES	Silver Braze 45T is a general purpose, low temperature filler metal used in cadmium-free brazing applications. It offers an excellent compromise between low melting point and moderate silver content. For improved corrosion resistance in stainless steel joints, use an alloy that contains a small amount of nickel.		
BRAZING CHARACTERISTICS	Silver Braze 45T is a free-flowing, low temperature filler metal commonly used as a replacement of cadmium-bearing filler metals of similar silver content. This alloy is best suited for narrow gap applications (0.001in. – 0.005in radial joint clearance). Flux should be used with this alloy.		
PROPERTIES OF BRAZED JOINTS	The properties of a brazed joint are dependent upon numerous factors including base metal properties, joint design, metallurgical interaction between the base metal and the filler metal. The results listed below were generated from brazed butt joints which were tested under standard room temperature conditions.		
		<u>Tensile Strength (lbs/in²)</u>	<u>Elongation (% , 2" gage length)</u>
	Copper	28,000-33,000	25-35
	Brass	35,000-45,000	15-30
	Low Carbon Steel	55,000-65,000	8-13
304 Stainless Steel	80,000-85,000	2-5	
SPECIFICATIONS	Silver Braze 45T alloy conforms to: Unified Numbering System (UNS) P07454 and American Welding Society (AWS) A5.8/A5.8M BAg-36		
AVAILABLE FORMS	Wire, strip, engineered preforms, specialty preforms per customer specification, powder and paste.		
SAFETY INFORMATION	The operation and maintenance of brazing equipment or facility should conform to the provisions of ANSI Z49.1, "Safety in Welding and Cutting."		

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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