

Prince & Izant Company

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



SILVER ALLOY 35 (BAg-2) TECHNICAL DATA

NOMINAL COMPOSITION	Silver	35.0% ± 1.0
	Copper	26.0% ± 1.0
	Zinc	21.0% ± 2.0
	Cadmium	18.0% ± 1.0
	Other Elements, Total	0.15% Max
PHYSICAL PROPERTIES	Color	Light Yellow
	Solidus	1125°F (607°C)
	Liquidus	1295°F (701°C)
	Recommended Brazing Temperature	1345-1395°F (729-757°C)
	Density (Troy oz/in³)	4.84
	Specific Gravity	9.18
	Electrical Conductivity (%IACS)	28.5
Electrical Resistivity (Microhm-cm)	6.02	
USES	<p>Silver Alloy 35 is a general purpose, low temperature silver base brazing filler metal used to join both ferrous and non-ferrous metals. Because of their fairly low cost, good fatigue strength and ability to make leak-tight joints where close clearances cannot be maintained, it has been widely used in the refrigeration and air-conditioning industry.</p>	
BRAZING CHARACTERISTICS	<p>Silver Alloy 35 is a low temperature, economical, brazing filler metal capable of bridging gaps where tight joints fit-up cannot be maintained. Silver Alloy 35 has a tendency to liquate (separate into low and high melting constituents) when heated slowly and therefore it is preferable to use it where the heat source is sufficient to raise the part temperature rapidly through the melting range of the brazing filler metal.</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 the filler metal.</p>	
SPECIFICATIONS	<p>Silver Alloy 35 conforms to: Unified Numbering System (UNS) P07350, American Welding Society (AWS) A5.8/A5.8M BAg-2, Society of Automotive Engineers (SAE)/AMS 4768</p>	
AVAILABLE FORMS	<p>Wire, strip, engineered preforms, specialty preforms per customer specification, powder and paste.</p>	
SAFETY INFORMATION	<p>The operation and maintenance of brazing equipment or facility should conform to the provisions of American National Standard (ANSI) Z49.1, "Safety in Welding and Cutting."</p>	

WARNING

Contains cadmium – poisonous fumes may be formed when heated.

Do not breathe fumes. Use only with adequate ventilation such as fume collectors, exhaust ventilators, or air supplied respirators. See American National Standard Z49.1. If chest pain, cough or fever develops after use, call a physician immediately! Keep children away when using!

The Prince & Izant Company recommends using **cadmium-free** alloys for brazing applications. If you are presently using cadmium bearing alloy and need assistance in identifying a suitable cadmium free substitute, please contact your Prince & Izant Company sales representative.

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:

DISCLAIMER

The information and recommendations contained in this publication have been provided without charge & compiled from sources believed to be reliable and to represent the best information available on the subject at the time of issue. No warranty, guarantee, or representation is made by the Prince and Izant Company, Inc. as to the absolute correctness or sufficiency of any representation contained in this and other publications; Prince and Izant Company, Inc. assumes no responsibility in connection therewith; nor can it be assumed that all acceptable safety measures are contained in this (and other publications, or that other or additional measures may not be required under particular or exceptional conditions or circumstances.