## Prince & Izant Company

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



## SILVER ALLOY 30 (BAg-2a) TECHNICAL DATA

NOMINAL COMPOSITION	Silver Copper Zinc Cadmium Other Elements, Total	30.0% ± 1.0 27.0% ± 1.0 23.0% ± 2.0 20.0% ± 1.0 0.15% Max
PHYSICAL PROPERTIES	Color Solidus Liquidus Recommended Brazing Temperature Density (Troy oz/in <sup>3</sup> ) Specific Gravity Electrical Conductivity (%IACS) Electrical Resistivity (Microhm-cm)	Light Yellow 1125°F (607°C) 1310°F (710°C) 1360-1410°F (737-765°C) 4.79 9.09 31.0 5.50
USES	Silver Alloy 30 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.	
BRAZING CHARACTERISTICS	Silver Alloy 30 is a low temperature, economical, brazing filler metal capable of bridging gaps where tight joints fit-up cannot be maintained. Silver Alloy 30 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. Silver Alloy 30 tends to liquate slightly more than Silver Alloy 35.	
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.	
SPECIFICATIONS	Silver Alloy 30 conforms to: Unified Numbering System (UNS) P07300 and American Welding Society (AWS) A5.8/A5.8M BAg-2a	
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 American National Standard (ANSI) Z49.1, "Safety in Welding and Cutting."	

## 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 <a href="http://www.sae.org/">http://www.sae.org/</a> (SAE AMS) or The American Welding Society (AWS) <a href="http://www.sae.org/">http://www.sae.org/</a>

## NOTE:

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