

## Bellman-Melcor

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## #35 (BAg-2)

### TECHNICAL DATA

<b>NOMINAL COMPOSITION</b>	<b>Silver</b>	35.0% ± 1.0
	<b>Copper</b>	26.0% ± 1.0
	<b>Zinc</b>	21.0% ± 2.0
	<b>Cadmium</b>	18.0% ± 1.0
	<b>Other Elements, Total</b>	0.15% Max
<b>PHYSICAL PROPERTIES</b>	<b>Color</b>	Light Yellow
	<b>Solidus</b>	1125°F (607°C)
	<b>Liquidus</b>	1295°F (701°C)
	<b>Recommended Brazing Temperature</b>	1345-1395°F (729-757°C)
	<b>Density (Troy oz/in<sup>3</sup>)</b>	4.84
	<b>Specific Gravity</b>	9.18
	<b>Electrical Conductivity (%IACS)</b>	28.5
	<b>Electrical Resistivity (Microhm-cm)</b>	6.02
<b>USES</b>	<p>#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>	
<b>BRAZING CHARACTERISTICS</b>	<p>#35 is a low temperature, economical, brazing filler metal capable of bridging gaps where tight joints fit-up cannot be maintained. #35 tends to liquefy (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>	
<b>PROPERTIES OF BRAZED JOINTS</b>	<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>	
<b>SPECIFICATIONS</b>	<p>#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, QQ-B-654 Grade VIII, MIL-B-15345 Grade VIII</p>	
<b>AVAILABLE FORMS</b>	<p>Wire, strip, engineered preforms, specialty preforms per customer specification, powder and paste.</p>	
<b>SAFETY INFORMATION</b>	<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!

Bellman-Melcor (A 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 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**

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