

## Prince & Izant Company

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## CDA 102 (BCu-3) TECHNICAL DATA

<b>NOMINAL COMPOSITION</b>	<b>Copper</b>	99.95% Min
	<b>Oxygen</b>	0.0010% Max
	<b>Other Elements, Total</b>	0.05% Max
<b>PHYSICAL PROPERTIES</b>	<b>Color</b>	Copper
	<b>Solidus</b>	1981°F (1083°C)
	<b>Liquidus</b>	1981°F (1083°C)
	<b>Recommended Brazing Temperature</b>	1981-2081°F (1082-1138°C)
	<b>Density (lbs./in<sup>3</sup>)</b>	0.32
	<b>Specific Gravity</b>	8.94
	<b>Electrical Conductivity (%IACS)</b>	101
	<b>Electrical Resistivity (Microhm-cm)</b>	1.71
<b>USES</b>	CDA 102 is a fluid filler metal used for brazing of ferrous and nickel-based alloys in particular steel, stainless steel and copper-nickel alloys. This alloy is typically used in furnace braze applications without the use of flux.	
<b>BRAZING CHARACTERISTICS</b>	CDA 102 is a free-flowing filler metal that exhibits good wetting characteristics on ferrous and nickel-based materials. Maximum strength and joint integrity are obtained where joint clearance falls within the range of 0.000in – 0.001in (0.000-0.025mm) per side.	
<b>PROPERTIES OF BRAZED JOINTS</b>	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.	
<b>SPECIFICATIONS</b>	CDA 102 alloy conforms to: American Welding Society (AWS) A5.8/A5.8M BCu-3, Unified Numbering System (UNS) C10200, Society of Automotive Engineers (SAE)/AMS 4501 (sheet chemistry only) & AMS 4701 (wire chemistry only)	
<b>AVAILABLE FORMS</b>	Wire, strip, engineered preforms, specialty preforms per customer specification, powder and paste.	

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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