## Prince & Izant Company

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



## CDA 521

TECHNICAL DATA

NOMINAL COMPOSITION	Copper Tin Phosphorus	Remaining 8.0% ± 1.0 0.19% ± 0.16
PHYSICAL PROPERTIES	Color Solidus Liquidus Recommended Brazing Temperature Density (Ibs./in <sup>3</sup> ) Specific Gravity Electrical Conductivity (%IACS) Electrical Resistivity (Microhm-cm)	Copper-Yellow 1620°F (882°C) 1880°F (1027°C) 1880-1980°F (1027-1082°C) 0.32 8.80 13.0 13.3
USES	CDA 521 is a copper-tin filler metal used for brazing ferrous alloys, such as steel. This alloy is typically used in furnace brazing of steels where use of pure copper is no permissible.	
BRAZING CHARACTERISTICS	CDA 521 has good wetting characteristics on ferrous based materials, particular steel in furnace brazing applications. Maximum strength and joint integrity are obtained where joint clearance falls within the range of 0.003in. – 0.005in. per side.	
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	CDA 521 alloy conforms to: Unified Numbering System (UNS) C52100	
AVAILABLE FORMS	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 <a href="http://www.sae.org/">http://www.sae.org/</a> (SAE AMS) or The American Welding Society (AWS) <a href="http://aws.org/">http://aws.org/</a>

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