

Prince & Izant Company

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ANA 5

TECHNICAL DATA

NOMINAL COMPOSITION	Copper	92.75% ± 1.0
	Silicon	3.0% ± 0.5
	Titanium	2.25% ± 0.5
	Aluminum	2.0% ± 0.5
	Zinc	0.001% max.
	Cadmium	0.001% max.
	Lead	0.002% max.
	Phosphorus	0.002% max.
	Carbon	0.01% max.
PHYSICAL PROPERTIES	Solidus	1756°F (958°C)
	Liquidus	1875°F (1024°C)
	Recommended Brazing Temperature	1925-2000°F (1052-1093°C)
	Thermal Conductivity W/(m•K)	38
	CTE, RT-700°C (x10⁻⁶/°C)	19.5
	Electrical Resistivity (x10⁻⁹ ohm•m)	198
	Electrical Conductivity (x10⁶ ohm/m)	5.05
	Young's Modulus (GPa)	96
	Yield Strength (MPa)	279
	Ultimate Tensile Strength (MPa)	529
	Elongation (%)	42
Hardness (KHN)	110	
USES	Suitable for brazing ceramics to metals as well as other non-metallic components without the need for prior metallization of the contact surface. Typical applications include mechanical assemblies and hermetically sealed components.	
	Suitable for use in all vacuum brazing applications as well as under partial pressure of argon gas. Brazing of active alloys under protective nitrogen atmosphere is not recommended. It is important to maintain a high purity, oxygen-free environment; any oxidation of reactive elements will limit alloy wettability across the non-metallic surface. For controlled atmosphere brazing or vacuum brazing the recommended radial joint clearance for silver-base alloys ranges between 0-0.002 in (0-0.05 mm).	
BRAZING CHARACTERISTICS		
PROPERTIES OF BRAZED JOINTS	The properties of a brazed joint are dependent upon the base metal, joint design and brazing technique.	
SPECIFICATIONS	ANA 5 conforms to: N/A	
AVAILABLE FORMS	Strip, wire engineered preforms, and specialty preforms per customer specification,	

**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."

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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