

Prince & Izant Company

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ANA 1 TECHNICAL DATA

NOMINAL COMPOSITION	Titanium	67.0% ± 1.0
	Nickel	33.0% ± 1.0
	Cadmium	0.001% max.
	Zinc	0.001% max.
	Phosphorus	0.002% max.
	Lead	0.002% max.
	Carbon	0.005% max.
	Other volatile elements each*	0.002% max.
	Volatile elements total	0.010% max.
Total non-volatile elements	0.01% max.	
	*Elements with a vapor pressure higher than 10^{-7} torr at 932°F (such as Mg, Sb, K, Li, Ti, S, Cs, Rb, Se, Te, Sr, and Ca) are limited to 0.001% each for Grade 1 and 0.002% for Grade 2.	
PHYSICAL PROPERTIES	Solidus	1730°F (942°C)
	Liquidus	1796°F (980°C)
	Recommended Brazing Temperature	1896-1946°F (1036-1063°C)
	Density (Troy oz/in³)	2.84
USES	Suitable for brazing ceramics to metals as well as other non-metallic components without the need for prior metallization of the contact surface.	
	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 1 conforms to: TiNi-67	
AVAILABLE FORMS	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."	

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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