

## Prince & Izant Company

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## Pt90/Ni10

### TECHNICAL DATA

<b>NOMINAL COMPOSITION</b>	<b>Platinum</b>	90.0% ± 1.0
	<b>Nickel</b>	10.0% ± 1.0
	<b><u>Vacuum Grade Trace Elements</u></b>	
	<b>Cadmium</b>	0.001% max.
	<b>Zinc</b>	0.001% max.
	<b>Phosphorus</b>	0.002% max.
	<b>Lead</b>	0.002% max.
	<b>Carbon</b>	0.005% max.
	<b>Other volatile elements each*</b>	0.002% max.
	<b>Volatile elements total</b>	0.010% max.
	<b>Total non-volatile elements (Grade 1)</b>	0.01% max.
<b>Total non-volatile elements (Grade 2)</b>	0.05% max.	
<b>PHYSICAL PROPERTIES</b>	<b>Color</b>	Silver Grey
	<b>Melting Point</b>	3002°F (1650°C)
	<b>Density (g/cm<sup>3</sup>)</b>	18.63
	<b>Electrical Resistivity (µhm•cm)</b>	29.8
	<b>Tensile Strength (KSI)</b>	
	<b>As Drawn:</b>	240
	<b>Stress Relieved:</b>	180-200
	<b>Fully Annealed:</b>	110-130
	<b>Elongation (%)</b>	
	<b>As Drawn:</b>	<2%
<b>Stress Relieved:</b>	>2%	
<b>Fully Annealed:</b>	>20%	
<b>USES</b>	Pt90/Ni10 is typically found in a fine wire application as guidewires used for positioning balloon catheters in the correct location.	
<b>SPECIFICATIONS</b>	Pt90/Ni10 alloy conforms to: N/A	
<b>AVAILABLE FORMS</b>	Wire, rod, engineered preforms and specialty preforms per customer specification, powder and paste.	
<b>SAFETY INFORMATION</b>	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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