



**PALINEY C ALLOY PROPERTIES**

(Values for age hardened temper)

Property	Nominal Values	
Solidus / Melting Point (°C) / (°F)	925.0	1697.0
Liquidus (°C) / (°F)	1015.0	1859.0
Density (g/cm <sup>3</sup> ) / (dwt/in. <sup>3</sup> )	10.4	109.6
Specific Heat Capacity (J/g/K) / (Btu/lb/°F)	<b>0.28</b>	<b>0.067</b>
Electrical Resistivity (micro-ohm-cm, 20°C / 70°F)	10.1	
Electrical Conductivity (% IACS)	17.0	
Temperature Coefficient of Resistance (1/K) / (1/°F)	5.88 x 10 <sup>-4</sup>	3.27 x 10 <sup>-4</sup>
Thermal Conductivity* (W/m/K) / (Btu/hr/ft/°F)	<b>72.0</b>	<b>41.0</b>
Coefficient of Linear Thermal Expansion (CTE) (1/K) / (1/°F)	14.4 x 10 <sup>-6</sup>	8.0 x 10 <sup>-6</sup>
Hardness (Knoop, HK)	350.0	
Yield Strength (Mpa) / (ksi)	1135.0	165.0
Ultimate Tensile Strength (MPa) / (ksi)	1240.0	180.0
Total Elongation (%)	2	
Modulus of Elasticity (GPa) / (Msi)	117.0	17.0
Poisson's Ratio	<b>0.36</b>	

**\*Estimated from Wiedemann-Franz Law**  
**Values in red are estimated**

The information contained in this Data Sheet is intended to assist you in the use of this product. It is not intended to and does not create any warranties, express or implied, including any warranty of merchantability or fitness for a particular application. The user should determine the suitability of this material for each application. Data is subject to change without notice.