



PALINEY 25 ALLOY PROPERTIES

(for age hardened temper)

Property	Nominal Values	
Solidus / Melting Point (°C) / (°F)	1090.0	1995.0
Liquidus (°C) / (°F)	1165.0	2130.0
Density (g/cm ³) / (dwt/in. ³)	10.5	110.7
Specific Heat Capacity (J/g/K) / (Btu/lb/°F)	0.28	0.067
Electrical Resistivity (micro-ohm-cm, 20°C / 70°F)	6.35	
Electrical Conductivity (%IACS)	27	
Temperature Coefficient of Resistance (1/K) / (1/°F)	1.32 x 10 ⁻³	7.33 x 10 ⁻⁴
Thermal Conductivity* (W/m/K) / (Btu/hr/ft/°F)	116.0	67.0
Coefficient of Linear Thermal Expansion (CTE) (1/K) / (1/°F)	12.7	7.1
Hardness (Knoop, HK50)	400.0	
Yield Strength (Mpa) / (ksi)	1035.0	150.0
Ultimate Tensile Strength (MPa) / (ksi)	1310.0	190.0
Total Elongation (%)	10	
Modulus of Elasticity (GPa) / (Msi)	135.0	19.6
Poisson's Ratio	0.36	

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

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