

Physical Properties

Property	Value
Atomic Weight	42
Atomic Weight	95.94
Atomic Volume	9.41
Lattice Type	Body Centered Cube
Natural Isotopes	92, 94, 95, 96, 97, 98, 100
Density at 20 °C	10.22 gr/cc
Melting Point	2610 °C
Boiling Point	5560 °C
Linear Coefficient of Thermal Expansion	4.9 x 10 ⁻⁶ /°C
Thermal Conductivity	.35 cal/cm ² /cm °C/sec
Specific Heat	.061 cal/g/ °C
Electrical Conductivity	30% IACS
Electrical Resistivity at 20 °C	5.7 microhms-cm
Temperature Coefficient of Electrical Resistivity	.0046 per °C (0 - 100 °C)
Tensile Strength (20 °C)	120,000 - 200,000 psi
Tensile Strength (500 °C)	35,000 - 65,000 psi
Tensile Strength (1000 °C)	20,000 - 30,000 psi
Modulus of Elasticity (20 °C)	46 x 10 ⁶ psi
Modulus of Elasticity (500 °C)	41 x 10 ⁶ psi
Modulus of Elasticity (1000 °C)	39 x 10 ⁶ psi
Poisson's Ratio	0.321
Spectral Emissivity (0.65μ wavelength)	0.37 (1000 °C)
Total Emissivity (at 1500 °C)	0.19
Total Emissivity (at 2000 °C)	0.24
Working Temperature	1600 °C and less
Recrystallization Temperature	900 °C - 1200 °C
Stress Relieving Temperature	800 °C