

C95800

Chemical Properties

Element	Chemical Composition %
Copper (Cu)	79.00 min
Lead (Pb)	0.03
Iron (Fe)	3.50 - 4.50
Nickel (Ni)	4.00 - 5.00
Aluminium (Al)	8.50 - 9.50
Manganese (Mn)	0.80 - 1.50
Silicon (Si)	0.10

Mechanical Properties

Property	Value
Tensile Strength (MPa)	586
Yield Strength (MPa)	241
Elongation (%)	18

Physical Properties

Property	Value
Melting Point - Liquidus	1940 °F
Melting Point - Solidus	1910 °F
Density	0.276 lb/in ³ at 68°F
Specific Gravity	7.640
Electrical Resistivity	146.70 Ωs-cmil/ft @68°F
Electrical Conductivity	7% IACS @ 68 °F
Thermal Conductivity	20.80 Btu ft/(hr ft ² °F) at 68°F
Coefficient of Thermal Expansion	9 10 ⁻⁶ per °F (68-392 °F)
Specific Heat Capacity	0.105 Btu/lb/°F at 68 °F
Modulus of Elasticity in Tension	16500 ksi
Magnetic Permeability	1.050
Poisson's Ratio	0.320

Disclaimer

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