

5083 F

Chemical Properties

Element	Chemical Composition %
Manganese (Mn)	0.40 - 1.00
Iron (Fe)	0.40 typical
Copper (Cu)	0.10 typical
Magnesium (Mg)	4.0 - 4.90
Silicon (Si)	0.40 typical
Zinc (Zn)	0.25 typical
Chromium (Cr)	0.05 - 0.25
Titanium (Ti)	0.15 typical
Aluminium (Al)	Balance

Mechanical Properties

Property	Value
Proof stress	145 MPa
Tensile strength	300 MPa
Elongation	23%
Shear strength	175 MPa
Hardness Vickers	75 HV

Physical Properties

Property	Value
Density	2.65 g/cm ³
Melting point	570°C
Thermal expansion	25 x 10 ⁻⁶ /K
Modulus of elasticity	72 GPa
Thermal conductivity	121 W/m.k
Electrical resistivity	0.058 x 10 ⁻⁶ Ω.m

Product Forms

Channel

Equal Angle

Flat Bar

Round Bar

Disclaimer

This data is indicative only and as such is not to be relied upon in place of the full specification. In particular, mechanical property requirements vary widely with temper, product and product dimensions. All information is based on our present knowledge and is given in good faith. No liability will be accepted by the Company in respect of any action taken by any third party in reliance thereon.

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