

# Aluminium - 2011 T6

## Round Bar

## Properties

Stock		Chemical Properties	
Dia (in)	Weight/m (Kg)	Element	Chemical Composition (%)
2 5/8	9.88	Silicon (Si)	0.40 typical
2 3/4	10.86	Iron (Fe)	0.70 typical
3	12.95	Copper (Cu)	5.00 - 6.00
3 1/4	15.14	Lead (Pb)	0.20 - 0.60
3 1/2	17.54	Bismuth (Bi)	0.20 - 0.60
3 3/4	20.04	Zinc (Zn)	0.30 typical
4	23.18	Others (Total)	0.15 typical
4 1/4	26.00	Aluminium (Al)	Balance
4 1/2	29.02		
5	35.91		
5 1/2	43.33		
6	49.40		

  

Mechanical Properties	
Property	Value
Proof Stress 0.2%	300 MPa
Tensile Strength	395 MPa
Elongation	12%
Shear Strength	235 MPa
Hardness Vickers	115 HV

  

Physical Properties	
Property	Value
Density	2.82 g/cm <sup>3</sup>
Melting Point	535°C
Thermal Expansion	23 x 10 <sup>-6</sup> /K
Modulus of Elasticity	71 GPa
Thermal Conductivity	138 W/m.k
Electrical Resistivity	0.045 x 10 <sup>-6</sup> Ω.m

## 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.

The information provided in this datasheet has been drawn from various recognised sources, including EN Standards, recognised industry references (printed & online) and manufacturers' data. No guarantee is given that the information is from the latest issue of those sources or about the accuracy of those sources.

Material supplied by the Company may vary significantly from this data, but will conform to all relevant and applicable standards.

As the products detailed may be used for a wide variety of purposes and as the Company has no control over their use; the Company specifically excludes all conditions or warranties expressed or implied by statute or otherwise as to dimensions, properties and/or fitness for any particular purpose, whether expressed or implied.

Advice given by the Company to any third party is given for that party's assistance only and without liability on the part of the Company. All transactions are subject to the Company's current Conditions of Sale. The extent of the Company's liabilities to any customer is clearly set out in those Conditions; a copy of which is available on request.