Aluminum 6082-T6

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Subcategory: 6000 Series Aluminum Alloy; Aluminum Alloy; Metal; Nonferrous Metal

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Composition Notes:
Aluminum content reported is calculated as remainder.
Composition information provided by the Aluminum Association and is not for design.

Key Words: EU Numerical EN-AW-6082; EU Chemical AlSi1MgMn; AA6082; Sweden: SS-EN-AW-6082; Aluminium 6082-T6

Component	Wt. %	Component	Wt. %	Component	Wt. %
Al	95.2 - 98.3	Mg	0.6 - 1.2	Si	0.7 - 1.3
Cr	Max 0.25	Mn	0.4 - 1	Ti	Max 0.1
Cu	Max 0.1	Other, each	Max 0.05	Zn	Max 0.2
Fe	Max 0.5	Other, total	Max 0.15		

Material Notes:
Material specs taken from SAPA / Indalex manual on extrusions.

Data points with the AA note have been provided by the Aluminum Association, Inc. and are NOT FOR DESIGN.

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Physical Properties	Metric	English	Comments
Density	2.7 g/cc	0.0975 lb/in³	AA; Typical
Mechanical Properties			
Hardness, Vickers	95	95	
Tensile Strength, Ultimate	290 MPa	42100 psi	wall thickness < 5 mm
Tensile Strength, Ultimate	310 MPa	45000 psi	wall thickness > 5 mm
Tensile Strength, Yield	250 MPa	36300 psi	wall thickness < 5 mm
Tensile Strength, Yield	260 MPa	37700 psi	wall thickness > 5 mm
Elongation at Break	10 %	10 %	
Thermal Properties			
Thermal Conductivity	170 W/m-K	1180 BTU-in/hr-ft²-°F	

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References for this datasheet.

Some of the values displayed above may have been converted from their original units and/or rounded in order to display the information in a consistant format. Users requiring more precise data for scientific or engineering calculations can click on the property value to see the original value as well as raw conversions to equivalent units. We advise that you only use the original value or one of its raw conversions in your calculations to minimize rounding error. We also ask that you refer to MatWeb's disclaimer and terms of use regarding this information. Click here to view all the property values for this datasheet as they were originally entered into MatWeb.