

## Aluminum 6082-T6

**Categories:** [Metal](#); [Nonferrous Metal](#); [Aluminum Alloy](#); [6000 Series Aluminum Alloy](#)

**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.

**Composition Notes:**

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

**Vendors:** No vendors are listed for this material. Please [click here](#) if you are a supplier and would like information on how to add your listing to this material.

Physical Properties	Metric	English	Comments
Density	2.70 g/cc	0.0975 lb/in <sup>3</sup>	AA; Typical

Mechanical Properties	Metric	English	Comments
Hardness, Vickers	95	95	
Tensile Strength, Ultimate	290 MPa	42100 psi	wall thickness < 5 mm
	310 MPa	45000 psi	wall thickness > 5 mm
Tensile Strength, Yield	250 MPa	36300 psi	wall thickness < 5 mm
	260 MPa	37700 psi	wall thickness > 5 mm
Elongation at Break	10 %	10 %	

Thermal Properties	Metric	English	Comments
Thermal Conductivity	170 W/m-K	1180 BTU-in/hr-ft <sup>2</sup> -°F	

Component Elements Properties	Metric	English	Comments
Aluminum, Al	95.2 - 98.3 %	95.2 - 98.3 %	As remainder
Chromium, Cr	<= 0.25 %	<= 0.25 %	
Copper, Cu	<= 0.10 %	<= 0.10 %	
Iron, Fe	<= 0.50 %	<= 0.50 %	
Magnesium, Mg	0.60 - 1.2 %	0.60 - 1.2 %	
Manganese, Mn	0.40 - 1.0 %	0.40 - 1.0 %	
Other, each	<= 0.050 %	<= 0.050 %	
Other, total	<= 0.15 %	<= 0.15 %	
Silicon, Si	0.70 - 1.3 %	0.70 - 1.3 %	
Titanium, Ti	<= 0.10 %	<= 0.10 %	
Zinc, Zn	<= 0.20 %	<= 0.20 %	

[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 consistent 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 [terms of use](#) regarding this information. [Click here](#) to view all the property values for this datasheet as they were originally entered into MatWeb.