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Alclad Aluminum 6061-T6, T651

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Component	Wt. %	Component	Wt. %	Component	Wt. %
Al	95.8 - 98.6	Mg	0.8 - 1.2	Si	0.4 - 0.8
Cr	0.04 - 0.35	Mn	Max 0.15	Ti	Max 0.15
Cu	0.15 - 0.4	Other, each	Max 0.05	Zn	Max 0.25
Fe	Max 0.7	Other, total	Max 0.15		

Material Notes:

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

[Click here to view available vendors for this material.](#)**Physical Properties** **Metric** **English****Comments**

Density [2.7 g/cc](#) 0.0975 lb/in³

For AA6061 (Not Alclad)

Mechanical Properties

Ultimate Tensile Strength	290 MPa	42000 psi	AA; Typical
Tensile Yield Strength	255 MPa	37000 psi	AA; Typical
Elongation at Break	12 %	12 %	AA; Typical; 1/16 in. (1.6 mm) Thickness
Modulus of Elasticity	68.9 GPa	10000 ksi	AA; Typical; Average of tension and compression. Compression modulus is about 2% greater than tensile modulus.
Shear Strength	186 MPa	27000 psi	AA; Typical

Processing Properties

Solution Temperature	529 °C	985 °F	
Aging Temperature	160 °C	320 °F	Rolled or drawn products; hold at temperature for 18 hr
Aging Temperature	177 °C	350 °F	Extrusions or forgings; hold at temperature for 8 hr

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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 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 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.

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