

### Key Features

- Good corrosion resistance
- Good weldability
- Good wear resistance
- Good machinability
- Poor bending

### Common Applications

- Automotive industry
- Marine fitting & hardware
- Electrical fitting
- Coupling & valves
- Aircraft fitting
- Camera lens mounts
- Brake pistons
- Bike frames

### Material Description

Aluminum 6061 is a versatile and widely used aluminum alloy known for its excellent mechanical properties and good weldability. This alloy offers a high strength-to-weight ratio, making it ideal for structural applications. It exhibits good corrosion resistance, particularly in marine and industrial environments, and maintains good formability and machinability. Commonly available in various forms, including sheet, plate, bar, and tubing, Aluminum 6061 is often used in automotive, aerospace, marine, and general construction industries. Additionally, it can undergo various surface treatments, such as anodizing and plating, to enhance its appearance and durability.

### Chemical Composition (%)

	Al	Cr	Cu	Fe	Mg	Mn	Si	Ti	Zn		
<b>Min.</b>	95.8	0.04	0.15		0.8		0.4				
<b>Max.</b>	98.6	0.35	0.4	0.7	1.2	0.15	0.8	0.15	0.25		

### Mechanical Properties

<b>Ultimate Tensile Strength</b>	18,000 PSI
<b>Tensile Yield Strength</b>	8,000 PSI
<b>Hardness</b>	Rockwell B60
<b>Elongation at Break</b>	25%

### Physical Properties

<b>Density</b>	0.095 lb/in <sup>3</sup> (2.63 g/cm <sup>3</sup> )
<b>Thermal Conductivity</b>	180W/m.K
<b>Modulus of elasticity</b>	10,000 KSI (68.9 GPa)
<b>Melting Point</b>	1080 - 1,205°F (582 - 651.7 °C)

### Technical Assistance

Our knowledgeable staff, supported by our in-house team of expert metallurgists and engineers, is ready to assist you with any technical inquiries.

### InstaVoxel™ - On-Demand Manufacturing Expert

859 Willard Street Suite 400, Quincy MA 02169 USA  
 +1 (617) 302-1629 | info@instavoxel.com  
 www.instavoxel.com



InstaVoxel's quality control system is ISO-9001 certified, and all our partners hold relevant certifications.



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