



ASM Aerospace Specification Metals Inc.



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## Allegheny Ludlum Titanium 6Al-4V ELI (UNS R56401)

**Subcategory:** Alpha/Beta Titanium Alloy; Metal; Nonferrous Metal; Titanium Alloy

**Key Words:** Ti 6-4; Titanium 6-4; ASTM B-265; ASTM F-136; ASME SB-265; AMS 4907-4; MIL-T-9046

Component	Wt. %
Al	Max 6.5
C	Max 0.08
Fe	Max 0.25
H	Max 0.015
N	Max 0.03
O	Max 0.13
Ti	90
V	4

### Material Notes:

Titanium content above calculated as remainder. The ELI grade has lower impurity limits than standard titanium 6-4.

Uses: applications requiring excellent fracture toughness and fatigue strength, aircraft, structural components, biomedical.

Mechanical property data below is typical of annealed samples at room temperature.

Information provided by Allegheny Ludlum.

Physical Properties	Metric	English	Comments
Density	<u>4.43 g/cc</u>	0.16 lb/in <sup>3</sup>	
<b>Mechanical Properties</b>			
Hardness, Rockwell C	30	30	
Tensile Strength, Ultimate	<u>828 MPa</u>	120000 psi	
Tensile Strength, Yield	<u>759 MPa</u>	110000 psi	0.2% YS
Elongation at Break	<u>10 %</u>	10 %	

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.