

METALS AND PLASTICS

Titanium

BS TA11 (6AL4V) Bar

Datasheet Updated 05 August 2021

SPECIFICATIONS Commercial

6AL4V

Ideal for lightweight, high strength applications.

CHEMICAL COMPOSITION

6AL4V	
Element	% Present
Carbon (C)	0.00 - 0.08
Iron (Fe)	0.00 - 0.25
Aluminium (Al)	5.50 - 6.75
Hydrogen (H)	0.00 - 0.01
Nitrogen (N)	0.00 - 0.05
Oxygen (O)	0.00 - 0.20
Vanadium (V)	3.50 - 4.50
Yttrium (Y)	0.00 - 0.01
Titanium (Ti)	Balance

ALLOY DESIGNATIONS

- AMS 4928
- AMS 4967 (Capable of AMS 4965)
- MIL T 9047 G
- AMS T 9047
- ASTM B 348
- EN10204

SUPPLIED FORMS

• Bar

APPLICATIONS

- Auto and boat racing
- Medical & surgical devices. A variant 6AI-4V ELI (Extra Low Interstitial) is often used for these applications
- Recreational equipment

• Other uses needing a high strength to weight ratio

- Jet engine compressor blades, discs and rings
- Airframe components
- Military hardware
- Pressure vessels
- Space craft components, including rocket engine

MECHANICAL PROPERTIES	
Property	Value
Tensile Strength	900 MPa
Elongation A50 mm	10 %
Proof Stress	862 MPa
Hardness Rockwell C	36 HRC

DISCLAIMER

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