

Aluminium Alloy

QQ-A-225/9 T651 Bar

SPECIFICATIONS

Aerospace	QQ-A-225/9 T651
Commercial	7075

A high strength aerospace aluminium alloy offering good corrosion resistance.

CHEMICAL COMPOSITION

SAE AMS QQ-A-225/9 Alloy QQ A 225/9	
Element	% Present
Zinc (Zn)	5.1 - 6.1
Magnesium (Mg)	2.1 - 2.9
Copper (Cu)	1.2 - 2
Iron (Fe)	0.5 max
Silicon (Si)	0.4 max
Manganese (Mn)	0.3 max
Chromium (Cr)	0.18 - 0.28
Titanium (Ti)	0.2 max
Others (Total)	0.15 max
Other (Each)	0.05 max
Aluminium (Al)	Balance

TEMPER TYPES

Alloy QQ-A-225/9 is supplied in a range of tempers:

- T651 - Solution heat treated, stress relieved by stretching then artificially aged
- T7351 - Solution heat treatment then specially artificially aged for resistance to stress corrosion.

SUPPLIED FORMS

Alloy QQ-A-225/9 T6511 is supplied in bar/rod

- Bar

GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.81 g/cm ³
Melting Point	635 °C
Thermal Expansion	23.5 x10 ⁻⁶ /K
Modulus of Elasticity	72 GPa
Thermal Conductivity	134-160 W/m.K
Electrical Resistivity	40 % IACS

'Typical' Physical Properties are given

MECHANICAL PROPERTIES

SAE AMS QQ-A-225/9 Bar 12.7mm to 101.6mm	
Property	Value
Proof Stress	455 Min MPa
Tensile Strength	531 Min MPa
Elongation A50 mm	7 Min %

Mechanical Properties are for T651 temper Bar in diameters 12.7mm to 101mm

CONTACT

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REVISION HISTORY

Datasheet Updated	14 January 2019
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