

### SPECIFICATIONS

Aerospace	QQ-A-225/6 T351
Commercial	2024

A medium to high strength alloy with, dependent upon temper, minimum Proof Stress up to 58 ksi / 400 Mpa and minimum Tensile Strength up to 66 ksi / 455 MPa

### CHEMICAL COMPOSITION

SAE AMS QQ-A-225/6 Alloy QQ A 225/6	
Element	% Present
Copper (Cu)	3.8 - 4.9
Magnesium (Mg)	1.2 - 1.8
Manganese (Mn)	0.3 - 0.9
Silicon (Si)	0.5 max
Iron (Fe)	0.5 max
Zinc (Zn)	0.25 max
Titanium + Zirconium (Ti+Zr)	0.2 max
Titanium (Ti)	0.15 max
Others (Total)	0.15 max
Chromium (Cr)	0.1 max
Other (Each)	0.05 max
Aluminium (Al)	Balance

### ALLOY DESIGNATIONS

Aluminium alloy QQ-A-225/6 has similarities to the following standard designations and specifications **but may not be a direct equivalent:**  
AMS 4120, Alloy 2024, UNS A92024

### TEMPER TYPES

Alloy QQ-A-200/3 is supplied in a wide range of tempers:

- O - Soft
- T42 - Solution heat treated and naturally aged to a substantially stable condition
- T8510 - Solution heat treated, stress-relieved by stretching then artificially aged
- T8511 - Solution heat treated, stress-relieved by stretching then artificially aged
- T4 - Solution heat treated and naturally aged to a substantially stable condition
- T6 - Solution heat treated and artificially aged
- T62 - Solution heat treated then artificially aged by the user
- T351 - Solution heat treated then stress relieved by stretching. Equivalent to T4 condition.
- T36 - Solution heat treated then cold worked by a reduction of 6%
- T851 - Solution heat treated then stress relieved by stretching then artificially aged.

### SUPPLIED FORMS

Alloy QQ-A-200/3 is supplied in Bar, Rod and Wire

- Bar

### GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.79 g/cm <sup>3</sup>
Melting Point	640 °C
Thermal Expansion	23.1 x10 <sup>-6</sup> /K
Modulus of Elasticity	73 GPa
Thermal Conductivity	121-150 W/m.K
Electrical Resistivity	30-40 % IACS

*'Typical' Physical Properties are given*

## MECHANICAL PROPERTIES

SAE AMS QQ-A-225/6  
Bar  
12.7mm to 165.1mm

Property	Value
Proof Stress	310 MIN MPa
Tensile Strength	427 Min MPa
Elongation A50 mm	10 Min %

*These Mechanical Properties apply to Bar in the T351 temper in diameters 12.7mm to 165mm*

## CONTACT

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## REVISION HISTORY

Datasheet Updated 14 January 2019

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