Aluminium Alloy
QQ-A-250/11 'T6' Sheet

SPECIFICATIONS

Commercial	6061

A medium strength aerospace aluminium alloy with, depending upon temper, Yield Strength of up to 35 ksi (240 MPa) and Tensile Strength of 42 ksi (290 MPa)

CHEMICAL COMPOSITION

SAE AMS QQ-A-250/11
Alloy QQ A 250/11

Element	% Present
Magnesium (Mg)	0.8 - 1.2
Silicon (Si)	0.4 - 0.8
Iron (Fe)	0.7 max
Copper (Cu)	0.15 - 0.4
Chromium (Cr)	0.04 - 0.35
Zinc (Zn)	0.25 max
Manganese (Mn)	0.15 max
Titanium (Ti)	0.15 max
Others (Total)	0.15 max
Other (Each)	0.05 max
Aluminium (Al)	Balance

ALLOY DESIGNATIONS

Aluminium alloy QQ-A-250/11 has similarities to the following standard designations and specifications **but may not be a direct equivalent:**
Alloy 6061, UNS A96061, ASTM B209, AMS 4026, AMS 4027

TEMPER TYPES

Alloy QQ-A-250/11 is supplied in a wide range of tempers:

- O - Soft
- T4 - Solution heat treated and naturally aged to a substantially stable condition
- T42 - Solution heat treated and naturaly aged to a substantially stable condition
- T451 - Solution heat treated then stress relieved by stretching. Equivalent to T4.
- T6 - Solution heat treated and artificially aged
- T62 - Solution heat treated then artificially aged by the user
- T651 - Solution heat treated, stress relieved by stretching then artificially aged

SUPPLIED FORMS

Alloy QQ-A-250/11 is supplied in plate and sheet

- Plate
- Sheet

GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.63 g/cm³
Melting Point	650 °C
Thermal Expansion	23.3 x10^{-6} /K
Modulus of Elasticity	70 GPa
Thermal Conductivity	166 W/m.K
Electrical Resistivity	43 % IACS
Electrical Resistivity	0.04 x10^{-6} Ω .m

'Typical' Physical Properties are shown

MECHANICAL PROPERTIES

Mechanical Properties shown are for T6 temper

Thickness (mm)	Over 0.2 up to & incl. 0.5	Over 0.5 up to & incl. 6.3	Proof Strength (Min)
Over 0.2 up to & incl. 0.5	Over 0.5 up to & incl. 6.3	241	290
8	241	290	10

[1 OF 2] CONTINUED

CONTACT

Address: (incorporated in the USA)
Tel: +44 (0)1371 811 642
Email: info@aerometalsalliance.com

REVISION HISTORY

Datasheet Updated	03 January 2014

DISCLAIMER

This Data is indicative only and as such is not to be relied upon in place of the full specification. In particular, mechanical property requirements vary widely with temper, product and product dimensions. All information is based on our present knowledge and is given in good faith. No liability will be accepted by the Company in respect of any action taken by any third party in reliance thereon.

Please note that the 'Datasheet Update' date shown above is no guarantee of accuracy or whether the datasheet is up to date.

The information provided in this datasheet has been drawn from various recognised sources, including EN Standards, recognised industry references (printed & online) and manufacturers' data. No guarantee is given that the information is from the latest issue of those sources or about the accuracy of those sources.

Material supplied by the Company may vary significantly from this data, but will conform to all relevant and applicable standards.

As the products detailed may be used for a wide variety of purposes and as the Company has no control over their use; the Company specifically excludes all conditions or warranties expressed or implied by statute or otherwise as to dimensions, properties and/or fitness for any particular purpose, whether expressed or implied.

Advice given by the Company to any third party is given for that party's assistance only and without liability on the part of the Company. All transactions are subject to the Company's current Conditions of Sale. The extent of the Company's liabilities to any customer is clearly set out in those Conditions; a copy of which is available on request.