

Aluminium

QQ-A-225/8 T651 (6061) Bar & Extrusion

Datasheet Updated
18 July 2022

SPECIFICATIONS

Commercial	6061
Aerospace	QQ-A-225/8 T651

Medium strength aerospace aluminium alloy.

CHEMICAL COMPOSITION

SAE AMS QQ-A-225/8
Alloy QQ A 225/8

Element	% Present
Silicon (Si)	0.40 - 0.80
Iron (Fe)	0.00 - 0.70
Copper (Cu)	0.15 - 0.40
Manganese (Mn)	0.00 - 0.15
Chromium (Cr)	0.04 - 0.35
Magnesium (Mg)	0.80 - 1.20
Zinc (Zn)	0.00 - 0.25
Titanium (Ti)	0.00 - 0.15
Other (Each)	0.00 - 0.05
Others (Total)	0.00 - 0.15
Aluminium (Al)	Balance

ALLOY DESIGNATIONS

Aluminium alloy QQ-A-225/8 has similarities to the following standard designations and specifications **but may not be a direct equivalent:**

- AMS 4113
- AMS 4115
- Alloy 6061
- UNS A96061

TEMPER TYPES

Alloy QQ-A-225/8 is supplied in a wide range of tempers:

- T42
- T451
- T62
- T4
- T651
- O
- T6

SUPPLIED FORMS

- Bar
- Wire
- Extrusions

APPLICATIONS

- Aerospace components
- Defence components
- High technology applications

CHARACTERISTICS

- Very good machinability
- Very good weldability using inert gas, resistance, spot or beam welding. Other welding methods are not recommended.
- Good resistance to atmospheric corrosion

MECHANICAL PROPERTIES

SAE AMS QQ-A-225/8 Bar 12.7mm to 203.2mm

Property	Value
Proof Stress	241 Min MPa
Tensile Strength	290 Min MPa
Elongation A50 mm	10 Min %

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.