Aluminium Alloy
QQ-A-250/4 '0' Sheet

SPECIFICATIONS

Commercial	2024 BARE

A medium to high strength alloy with, dependent upon temper, minimum Proof Stress up to 57 ksi / 390 Mpa and minimum Tensile Strength up to 66 ksi / 455 MPa

CHEMICAL COMPOSITION

SAE AMS QQ-A-250/4
Alloy QQ-A-250/4

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-250/4 has similarities to the following standard designations and specifications:
AMS 4035, Alloy 2024, UNS A92024

TEMPER TYPES

Alloy QQ-A-250/4 is supplied in a wide range of tempers:

- O - Soft
- T3 - Solution heat treated, cold worked and naturally aged
- T42 - Solution heat treated and naturaly aged to a substantially stable condition
- T81 - Solution heat treated, cold worked then artificially aged
- T351 - Solution heat treated then stress relieved by stretching. Equivalent to T4 condition.
- T4 - Solution heat treated and naturally aged to a substantially stable condition
- T62 - Solution heat treated then artificially aged by the user
- T851 - Solution heat treated then stress relieved by stretching then artificially aged.
- T361 - Solution heat treated then stress relieved by stretching.
- T72 - Solution heat treated then specially artificially aged for resistance to stress corrosion
- T861

SUPPLIED FORMS

Alloy QQ-A-250/4 is supplied in plate and sheet

- Plate
- Sheet

GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.74 g/cm³
Melting Point	640 °C
Thermal Expansion	23.1 x10^{-6} /K
Modulus of Elasticity	73 GPa
Thermal Conductivity	193 W/m.K
Electrical Resistivity	50.5 % IACS

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MECHANICAL PROPERTIES

SAE AMS QQ-A-250/4 Sheet	
Property	Value
Proof Stress	97 Min MPa
Tensile Strength	221 Min MPa
Elongation A50 mm	12 Min %

Mechanical Properties shown are for '0' temper in thicknesses over 0.2mm up to and including 12.6mm

CONTACT

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REVISION HISTORY

Datasheet Updated 05 December 2013

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