

SPECIFICATIONS

Commercial	5052
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A medium strength alloy

CHEMICAL COMPOSITION

SAE AMS QQ A 250/8
Alloy QQ A 250/8

Element	% Present
Magnesium (Mg)	2.2 - 2.8
Iron (Fe)	0.4 max
Chromium (Cr)	0.15 - 0.35
Silicon (Si)	0.25 max
Others (Total)	0.15 max
Copper (Cu)	0.1 max
Manganese (Mn)	0.1 max
Zinc (Zn)	0.1 max
Other (Each)	0.05 max
Aluminium (Al)	Balance

ALLOY DESIGNATIONS

Aluminium alloy QQ-A-250/8 has similarities to the following standard designations and specifications **but may not be a direct equivalent:**

Alloy 5052, UNS A95052, AA5052

TEMPER TYPES

Alloy QQ-A-250/8 is supplied in a wide range of tempers

- O - Soft
- H34 - Stabilised - A low temperature thermal treatment or heat introduced during manufacture which stabilises the mechanical properties and relieves residual internal stress, plus usually improves ductility
- H112 - Alloys that have some tempering from shaping but do not have special control over the amount of work-hardening or thermal treatment.
- H24 - Work hardened by rolling then annealed to half hard
- H26 - Work hardened by rolling then annealed to three-quarter hard
- H32 - Work hardened by rolling then stabilised by low-temperature heat treatment to quarter hard
- T36 - Solution heat treated then cold worked by a reduction of 6%

SUPPLIED FORMS

Alloy QQ-A-250/8 is supplied in plate and sheet

- Plate
- Sheet

GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.63 g/cm ³
Melting Point	650 °C
Thermal Expansion	23.7 x10 ⁻⁶ /K
Modulus of Elasticity	70 GPa
Thermal Conductivity	138 W/m.K
Electrical Resistivity	35 % IACS

MECHANICAL PROPERTIES

Mechanical Properties shown are for H34 temper

Thickness (mm)	Proof Strength (Min)	Tensile Strength (MAX)	Elongation % (Min)
Over 0.2 up to & incl. 0.5	234	283	3
Over 0.5 up to & incl. 1.2	234	283	4
Over 1.2 up to & incl. 2.9	234	283	6
Over 2.9 up to & incl. 6.3	234	283	7

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REVISION HISTORY

Datasheet Updated 17 January 2014

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