

QQ-A-225/6 T351 - AMS 4120 - 2024 Alloy

Alloy Designations

Aluminium alloy QQ-A-225/6 has similarities to the following standard designations and specification

AMS 4120, Alloy 2024, UNS A92024

Chemical Properties

Element	Chemical Composition %
Copper (Cu)	3.80 - 4.90
Magnesium (Mg)	1.20 - 1.80
Manganese (Mn)	0.30 - 0.90
Silicon (Si)	0.0 - 0.50
Iron (Fe)	0.0 - 0.50
Zinc (Zn)	0.0 - 0.25
Titanium + Zirconium (Ti + Zr)	0.0 - 0.20
Titanium (Ti)	0.0 - 0.15
Others (Total)	0.0 - 0.15
Chromium (Cr)	0.0 - 0.10
Other (Each)	0.0 - 0.05
Aluminium (Al)	Balance

Mechanical Properties

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

Physical Properties

Property	Value
Density	2.79 g/cm ³
Melting Point	640°C
Thermal Expansion	23.1 x 10 ⁻⁶ /K
Modulus of Elasticity	73 GPa
Thermal Conductivity	121-150 W/m.K
Electrical Resistivity	30-40 % IACS

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%

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