

Aluminium 6060 / 3.3206 / Al-MgSi

Alternative Designations

EN-AW6060 | Al-MgSi (ISO) | AA6060 (ANSI/AA) | H9 (BS) | AGS (AFNOR) | L-3442 (UNE) | A96060 (UNS) | 4140 (SIS)

Key Features

Low strength • Heat treatable • Good weldability • Good corrosion resistance

Description

Aluminium 6060 is an Al-Mg-Si series 6000 grade alloy with a moderate strength. It is commonly used in the manufacture of machined parts for various industries. This is a heat treatable alloy of aluminum with low strength. It has good resistance to corrosion, good weldability and very suitable for cold forming. It is applied in the production of lightings, furniture, flooring and other engineering applications with no special strength requirement.

Mechanical Properties

Yield strength	60 – 160 MPa
Tensile strength	120 – 215 MPa
Elongation at break	6 – 16%
Hardness	45 – 70
Module of elasticity	~ 70 GPa

Chemical Composition

Al	Rest is Al	N	-
Bi	-	Nb	-
C	-	Ni	-
Cd	-	O	-
Co	-	P	-
Cr	max 0.05%	Pb	-
Cu	0.1%	S	-
Fe	0.1 – 0.3%	Si	0.3 – 0.6%
H	-	Sn	-
Mg	0.35 – 0.6%	Ti	max 0.10%
Mn	0.1%	V	-
Mo	-	Zn	max 0.15%

Physical Properties

Density	2.7 g/cm ³
Electrical conductivity	28 – 34 m/Ω · mm ²
Coefficient of thermal expansion	23.4 K-1 · 10-6
Thermal conductivity	200 – 220 W/m · K
Specific heat capacity	900 J/kg · K

Reference

Datasheets provided by Xometry contain materials sourced through trusted OEMs, material distributors, and databases. Please visit Materialdatacenter.com for further information on this material.