Xometry

Manufacturing On Demand

Data Sheet: Aluminium 3.4365

(Al-Zn6MgCu)

Alternative Designations

Standard	EN	ANSI/AA	UNS	JIS	AFNOR	UNE
Designation	EN-AW7075	AA7075	A97075	A7075	A-Z5GU	L-3710

Details

Zinc is the primary alloying element. It has high strength (57MPa), toughness and excellent resistance to fatigue. The surface can either be mill finished or brush finished. It has very good machinability. It is extensively used in the structural parts for aircrafts.

Key Features

High strength • Tough • Resistant to fatigue • Excellent machinability

Chemical Composition

Element	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	
Percentage	0.4	0.50	1.2 – 2.0	0.30	2.1 – 2.9	0.18 – 0.28	5.1 – 6.1	0.20	

Mechanical Properties

Property	Yield strength [MPa]	Ultimate tensile strength [MPa]	Elongation [%]	Hardness
Value	**500**	**570**	**11**	**87**

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Physical Properties

Property	Value
Density [g/cm³]	**2.81**
Module of elasticity [GPa]	**71.7**
Electrical conductivity [m/Ω · mm²]	**19 – 23**
Coefficient of thermal expansion [K-1 · 10-6]	**23.4**
Thermal conductivity [W/m · K]	**196**
Specific heat capacity [J/kg · K]	**714.8**

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.