

7075 O Aluminum Sheet

Properties

[Request Fatigue Data \(S-N Curve\)](#)

General

Property	Temperature	Value	Comment
Density	23.0 °C	2.7 - 2.85 g/cm³	Typical for Wrought 7000 Series Aluminium

Mechanical

Property	Temperature	Value	Comment
Elastic modulus	23.0 °C	69 - 72 GPa	Typical for Wrought 7000 Series Aluminium
Elongation	23.0 °C	9 %	
Elongation A50	23.0 °C	10 %	
Plane-Strain Fracture Toughness	23.0 °C	22 - 35 MPa·√m	Typical for Wrought 7000 Series Aluminium
Poisson's ratio	23.0 °C	0.33 [-]	Typical for Wrought 7000 Series Aluminium
Shear modulus	23.0 °C	26.4 - 27.1 GPa	Typical for Wrought 7000 Series Aluminium
Tensile strength	23.0 °C	275 MPa	

Yield strength 23.0 °C [165 MPa](#)
Rp0.2

Thermal

Property	Temperature	Value	Comment
Coefficient of thermal expansion	23.0 °C	2.1E-5 - 2.4E-5 1/K	Typical for Wrought 7000 Series Aluminium
Melting point		465 - 655 °C	Typical for Wrought 7000 Series Aluminium
Specific heat capacity	23.0 °C	795 - 1050 J/(kg·K)	Typical for Wrought 7000 Series Aluminium
Thermal conductivity	23.0 °C	121 - 170 W/(m·K)	Typical for Wrought 7000 Series Aluminium

Electrical

Property	Temperature	Value	Comment
Electrical conductivity	23.0 °C	1.80E+7 - 3.40E+7 S/m	Typical for Wrought 7000 Series Aluminium
Electrical resistivity	23.0 °C	2.9E-8 - 5.6E-8 Ω·m	Typical for Wrought 7000 Series Aluminium

Chemical properties

Property	Value
Chromium	0.18 - 0.28 %
Copper	1.2 - 2 %
Iron	0.5 %
Magnesium	2.1 - 2.9 %

Manganese [0.3 %](#)

Silicon [0.4 %](#)

Titanium [0.2 %](#)

Zinc [5.1 - 6.1 %](#)

Technological properties

Property

Brazing Excellent
