

7075 aluminium alloy is a very high strength aerospace aluminium and is commonly used in applications where the strength of the material is critical and where the need for good corrosion resistance is not important. Offering superior stress corrosion resistance, 7075 provides very high yield and tensile strengths which is dictated by the particular chosen temper.

Chemical Composition

Element	Maximum Unless Range is Specified
Silicon	.40
Iron	.5
Copper	1.2-2.0
Manganese	0.3
Chromium	.18-.28
Zinc	5.1-6.1
Titanium	.2
Others Each	.30
Others Total	.15
Aluminum	Balance

Physical Properties

Property	Maximum Unless Range is Specified
Density g/cm3	2.81
Thermal Conductivity ,W/m.K	134-160
Electrical Resistivity	40% IACS
Melting Point (Deg C)	635
Modules of Elasticity GPa	72

Mechanical Properties

Property	Maximum Unless Range is Specified
Ultimate Tensile Strength	40,000-78,000
Tensile Yield Strength	24,000-68,000

The material properties in this datasheet are provided by one of the manufacturers collaborating with Naxtry. Please note that material properties may slightly vary among different manufacturers. Naxtry can accommodate customer requests for specific materials or brands.