

# 3004 H18 Aluminum Sheet

## Properties

### General

Property	Temperature	Value
Density	23.0 °C	<a href="#">2.8 g/cm<sup>3</sup></a>

### Mechanical

Property	Temperature	Value	Comment
Elastic modulus	23.0 °C	<a href="#">69 GPa</a>	
Elongation	23.0 °C	<a href="#">1.2 %</a>	
Plane-Strain Fracture Toughnes	23.0 °C	<a href="#">22 - 35 MPa·√m</a>	Typical for Wrought 3000 Series Aluminium
Poisson's ratio	23.0 °C	<a href="#">0.33 [-]</a>	Typical for Wrought 3000 Series Aluminium
Shear modulus	23.0 °C	<a href="#">25 - 26 GPa</a>	Typical for Wrought 3000 Series Aluminium
Tensile strength	23.0 °C	<a href="#">300 MPa</a>	
Yield strength	23.0 °C	<a href="#">260 MPa</a>	

### Thermal

Property	Temperature	Value
	23.0 °C	<a href="#">2.4E-5 1/K</a>

Coefficient of thermal expansion

Melting point

[630 °C](#)

Specific heat capacity

23.0 °C

[890 J/\(kg·K\)](#)

Thermal conductivity

23.0 °C

[160 W/\(m·K\)](#)

## Electrical

Property	Temperature	Value	Comment
Electrical conductivity	23.0 °C	<a href="#">2.30E+7 - 2.90E+7 S/m</a>	Typical for Wrought 3000 Series Aluminium
Electrical resistivity	23.0 °C	<a href="#">3.4E-8 - 4.2E-8 Ω·m</a>	Typical for Wrought 3000 Series Aluminium

## Chemical properties

Property	Value
Aluminium	<a href="#">95.6 - 98.2 %</a>
Copper	<a href="#">0 - 0.25 %</a>
Iron	<a href="#">0 - 0.7 %</a>
Magnesium	<a href="#">0.8 - 1.3 %</a>
Manganese	<a href="#">1 - 1.5 %</a>
Other	<a href="#">0 - 0.15 %</a>
Silicon	<a href="#">0 - 0.3 %</a>
Zinc	<a href="#">0 - 0.25 %</a>

# Technological properties

Property

**Workability**

Good workability.

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