

# 3003 H18 Aluminum Sheet

## Properties

### General

Property	Temperature	Value	Comment
Density	23.0 °C	<a href="#">2.72 - 2.73 g/cm<sup>3</sup></a>	Typical for Wrought 3000 Series Aluminium

### Mechanical

Property	Temperature	Value	Comment
Elastic modulus	23.0 °C	<a href="#">69.5 - 70 GPa</a>	Typical for Wrought 3000 Series Aluminium
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="#">180 MPa</a>	
Yield strength Rp0.2	23.0 °C	<a href="#">160 MPa</a>	

### Thermal

Property	Temperature	Value	Comment
	23.0 °C	<a href="#">2.2E-5 - 2.4E-5 1/K</a>	Typical for Wrought 3000

<b>Coefficient of thermal expansion</b>			Series Aluminium
<b>Melting point</b>		<a href="#">629 - 654 °C</a>	Typical for Wrought 3000 Series Aluminium
<b>Specific heat capacity</b>	23.0 °C	<a href="#">893 - 920 J/(kg·K)</a>	Typical for Wrought 3000 Series Aluminium
<b>Thermal conductivity</b>	23.0 °C	<a href="#">154 - 193 W/(m·K)</a>	Typical for Wrought 3000 Series Aluminium

## Electrical

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

## Chemical properties

Property	Value
<b>Copper</b>	<a href="#">0.05 - 0.2 %</a>
<b>Iron</b>	<a href="#">0.7 %</a>
<b>Manganese</b>	<a href="#">1 - 1.5 %</a>
<b>Silicon</b>	<a href="#">0.6 %</a>
<b>Zinc</b>	<a href="#">0.1 %</a>

## Technological properties

Property	
<b>Workability</b>	Good workability.

