

# 1060 H24 Aluminum Coil

## Properties

### General

Property	Temperature	Value
Density	23.0 °C	<a href="#">2.71 g/cm<sup>3</sup></a>

### Mechanical

Property	Temperature	Value	Comment
Elastic modulus	23.0 °C	<a href="#">69 GPa</a>	
Elongation A100	23.0 °C	<a href="#">9 %</a>	
Elongation A50	23.0 °C	<a href="#">1 - 10 %</a>	
Plane-Strain Fracture Toughnes	23.0 °C	<a href="#">22 - 35 MPa·√m</a>	Typical for Wrought 1000 Series Aluminium
Poisson's ratio	23.0 °C	<a href="#">0.33 [-]</a>	Typical for Wrought 1000 Series Aluminium
Shear modulus	23.0 °C	<a href="#">25.9 GPa</a>	Typical for Wrought 1000 Series Aluminium
Tensile strength	23.0 °C	<a href="#">85 - 120 MPa</a>	
Yield strength Rp0.2	23.0 °C	<a href="#">70 MPa</a>	

### Thermal

Property	Temperature	Value	Comment
Coefficient of thermal expansion	20.0 °C	<a href="#">2.36E-5 1/K</a>	
	100.0 °C	<a href="#">2.36E-5 1/K</a>	
Melting point		<a href="#">645 - 655 °C</a>	
Specific heat capacity	23.0 °C	<a href="#">900 - 963 J/(kg·K)</a>	Typical for Wrought 1000 Series Aluminium
Thermal conductivity	23.0 °C	<a href="#">230 - 234 W/(m·K)</a>	

## Electrical

Property	Temperature	Value
Electrical conductivity	23.0 °C	<a href="#">3.50E+7 - 3.60E+7 S/m</a>
Electrical resistivity	23.0 °C	<a href="#">2.78E-8 - 2.86E-8 Ω·m</a>

## Chemical properties

Property	Value
Aluminium	<a href="#">99.6 %</a>
Copper	<a href="#">0.05 %</a>
Iron	<a href="#">0.35 %</a>
Magnesium	<a href="#">0.03 %</a>
Manganese	<a href="#">0.03 %</a>
Other	each 0.03
Silicon	<a href="#">0.25 %</a>

Titanium [0.03 %](#)

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Vanadium [0.05 %](#)

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Zinc [0.05 %](#)

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## Technological properties

### Property

**Brazing** general: possible with commercial processes and methods

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**Corrosion properties** Stress corrosion cracking: no damage during operation and laboratory tests, general: very good, without protection in industrial or seawater atmosphere

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**General machinability** General: not suitable (O, H12), poor (H14, H16, H18)

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**Workability** general (condition): good (O, H12, H14), acceptable (H16, H18)

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