materials.

Request more information

8006 H18 Aluminum Foil

Properties

General

Property	Temperature	Value
Density	23.0 °C	2.74 g/cm³

Mechanical

Property	Temperature	Value	Comment
Elastic modulus	23.0 °C	69 - 72 GPa	Typical for Wrought 8000 Series Aluminium
Elongation A100	20.0 °C	2 - 3 %	
Elongation A50	20.0 °C	2 - 3 %	
	23.0 °C	2 - 3 %	
Plane-Strain Fracture Toughnes	23.0 °C	22 - 35 MPa·√m	Typical for Wrought 8000 Series Aluminium
Poisson's ratio	23.0 °C	0.33 [-]	Typical for Wrought 8000 Series Aluminium
Tensile strength	20.0 °C	170 - 190 MPa	
	23.0 °C	190 MPa	

Yield strength Rp0.2	20.0 °C	170 MPa
	23.0 °C	170 MPa

Thermal

Property	Temperature	Value	Comment
Coefficient of thermal expansion	23.0 °C	1.9E-5 - 2.1E-5 1/K	Typical for Wrought 8000 Series Aluminium
Melting point		645 - 655 °C	Typical for Wrought 8000 Series Aluminium
Specific heat capacity	23.0 °C	920 J/(kg·K)	Typical for Wrought 8000 Series Aluminium
Thermal conductivity	23.0 °C	167 - 220 W/(m·K)	Typical for Wrought 8000 Series Aluminium

Electrical

Property	Temperature	Value	Comment
Electrical conductivity	23.0 °C	2.80E+7 - 3.50E+7 S/m	Typical for Wrought 8000 Series Aluminium
Electrical resistivity	23.0 °C	2.8E-8 - 3.5E-8 Ω·m	Typical for Wrought 8000 Series Aluminium

Chemical properties

Property	Value
Copper	0.3 %
Iron	1.2 - 2 %
Magnesium	0.1 %

Manganese	0.3 - 1 %
Other	each 0.05, total 0.15, Rest Al
Silicon	0.4 %
Zinc	0.1 %