



Aluminium Alloy 5754 H22 H24 H26

Material Data Sheet

Scope

Aluminium 5754 has excellent corrosion resistance especially to seawater and industrially polluted atmospheres. It has higher strength than 5251. This high strength makes 5754 highly suited to flooring applications..

Application

This material is used for food processing, rivets, fishing industry equipment, welded chemical and nuclear structures, shipbuilding, vehicle bodies and treadplate.

Supplied Forms

- Sheet
- Plate

Alloy Designations

Alloy 5754 also corresponds to: A95754, Al Mg3, Al 3.1Mg Mn Cr and AW-5754.

Temper Types

The most common tempers for 5754 aluminium are H111 - Some work hardening imparted by shaping processes, H22 - Work hardened by rolling then annealed to quarter hard, H24 - Work hardened by rolling then annealed to half hard, H26 - Work hardened by rolling then annealed to three quarter hard and 0 - Soft.

Fabrication

- Weldability - Gas: Excellent
- Weldability - Arc: Excellent
- Weldability - Resistance: Excellent
- Brazability: Poor
- Workability - Cold: Very Good
- Machinability: Average

Chemical Composition

Element	% Present
Manganese (Mn)	0.50 Typical
Iron (Fe)	0.40 Typical
Magnesium (Mg)	2.60 - 3.20
Silicon (Si)	0.40 Typical
Aluminium (Al)	Balance



Mechanical properties at room temperature

Property	Value
Proof Strength	185 - 245 MPa
Tensile Strength	245 - 290 MPa
Elongation	10 - 15 %

Properties above are for material in the H22 , H24 and H26 condition.

Reference data for some physical properties (for guidance only)

Property	Value
Density	2.66 Kg/m ³
Melting Point	600 °C
Thermal Expansion	24 x 10 ⁻⁶ /K
Modulus of Elasticity	68 GPa
Thermal Conductivity	147 W/m.K
Electrical Resistivity	0.049 x 10 ⁻⁶ Ω .m

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Important Note

Information given in this data sheet about the condition or usability of materials respectively products are no warranty for their properties, but act as a description.

The information, we give on for advice, comply to the experiences of the manufacturer as well as our own. We cannot give warranty for the results of processing and application of the products.