



Aluminium Alloy 5005 - H34 Sheet

Material Data Sheet

Scope

Aluminium alloy 5005 is a medium strength alloy with very good resistance to atmospheric corrosion and very good weldability that is highly suitable for decorative anodising. Please note that whilst alloy 5005 is suitable for anodising, streaks can occur - if the finish you are seeking is critical please specify 'special anodising quality' at the time of order.

Application

Alloy 5005 is typically used for:

- Building - roofing, cladding & corrugated sheet
- Signage, road signs & name plates
- Food & chemical equipment
- Furniture
- Anodised Parts
- HVAC Equipment
- Packaging
- Pipe and Tube
- Can Bodies

Supplied Forms

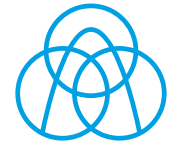
- Sheet

Temper Types

The most common tempers for 5005 aluminium are: H34 - Stabilised - A low temperature thermal treatment or heat introduced during manufacture which stabilises the mechanical properties and relieves residual internal stress, plus usually improves ductility.

Chemical Composition

Element	% Present
Magnesium (Mg)	0.50 - 1.10
Iron (Fe)	0.0 - 0.70
Silicon (Si)	0.0 - 0.30
Zinc (Zn)	0.0 - 0.25
Manganese (Mn)	0.0 - 0.20
Copper (Cu)	0.0 - 0.20
Others (Total)	0.0 - 0.15
Chromium (Cr)	0.0 - 0.10
Others (Each)	0.0 - 0.05
Aluminium (Al)	Balance



Mechanical Properties

Property	Value
Proof Stress	110 Min MPa
Tensile Strength	145 - 185 MPa
Hardness Brinell	47 HB

The above properties are for material in the H34 condition.

General Physical Properties

Property	Value
Density	2.70 Kg/m ³
Melting Point	655 °C
Thermal Expansion	23.5 x 10 ⁻⁶ /K
Modulus of Elasticity	69.5 GPa
Thermal Conductivity	201 W/m.K
Electrical Resistivity	0.033 x 10 ⁻⁶ Ω .m
Electrical Resistivity	52 % IACS

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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.