

DESCRIPTION

Aluminium Alloy 5005 is a marine grade aluminium suitable for anodizing and architectural facades. AA 5005 is a medium strength alloy with very good resistance to atmospheric corrosion and very good weldability that is highly suitable for decorative anodizing. PLEASE NOTE THAT WHILST ALLOY 5005 IS SUITABLE FOR ANODIZING, STREAKS CAN OCCUR - IF THE FINISH YOU ARE SEEKING IS CRITICAL PLEASE SPECIFY 'SPECIAL ANODIZING QUALITY' AT TIME OF ORDER.

APPLICATIONS

AA-5005 is typically used in:

- ▶ Manufacture of appliances, small boats
- ▶ Signage, Road Signs & Name Plates
- ▶ Food & Chemical Equipment
- ▶ Anodized Parts
- ▶ Packaging
- ▶ Architectural facade panels
- ▶ Furniture

CHEMICAL COMPOSITION

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

SUPPLIED FORMS

At **Almaxco** we stock Aluminium Alloy 5005 in the form of coils and sheets.

MECHANICAL PROPERTIES

| Property | Value |
|---------------------|---------------|
| Proof Stress | 110 Min MPa |
| Tensile Strength | 120 - 230 MPa |
| Elongation at 50 mm | 5 Min % |
| Hardness Brinell | 28 - 64 HB |

WELDABILITY

| | |
|---------------------------|-----------|
| Weldability - Gas: | Very good |
| Weldability - Arc: | Very good |
| Brazeability: | Good |
| Weldability - Resistance: | Very Good |

WELDABILITY

| | |
|---------------------|-----------|
| Machinability: | Excellent |
| Workability - Cold: | Very good |

GENERIC PHYSICAL PROPERTIES

| Property | Value |
|------------------------|------------------------------|
| Density | 2.70 g/cm 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 |