# Aluminium Alloys (Filler Rods & Wires)

# SM 5356






SENOR®

One Stop Solution for Welding & Brazing Consumables

# SENOR®

## SM 5356 | Aluminium Magnesium | Al Filler Metal

## Classifications:

| | |
|---|---|
| **AWS / SFA5.10** | : ER 5356 |
| **UNS No.** | : A95356 |
| **DIN 1732** | : SG-Al Mg5 |
| **ISO 18273 Designation** | : NG 6 |
| **ISO 18273 Numerical** | : Al5356 |
| **ISO 18273 Chemical** | : AlMg5Cr(A) |

## Description:

Senor SM 5356 is a general purpose alloy for welding 5000.It has high strength and high ductility. It gives good color match after anodizing with 5xxx/6xxx.It has Lower electrical conductivity and thermal conductivity

## Technical Data:

| | |
|---|---|
| **UTS** | : 24-27 Kgf/mm$^2$ |
| **YS** | : 11-12 Kgf/mm$^2$ |
| **Elongation (L=D)** | : 17% |
| **Melting Range** | : 595-630°C |
| **Density** | : 0.096/inch$^3$ (2.66 gms/cc) |
| **Resistance to Corrosion** | : A(Gen) C (SCC) |
| **Anodize Color** | : White |
| **Electrical Conductivity** | : 29% IACS (-0) , 27% IACS (-H18) |
| **Shielding Gas** | : 100% Argon , Argon/Helium Mixtures , Flow Rate: 30 - 50 CFH (14.2 - 23.6 L/Min) |

## Chemical Composition (%):

| Sl | Fe | Cu | Mn | Mg | Cr | Zn | Ti | Al | Be | Other Total |
|---|---|---|---|---|---|---|---|---|---|---|
| 0.25 | 0.40 | 0.10 | 0.05-0.20 | 4.50-5.50 | 0.05-0.20 | 0.10 | 0.06-0.20 | Rem. | 0.0003 | 0.15 |

## Typical Applications:

- Suitable for welding aluminum magnesium base metal alloys with a maximum of 5% Mg.
- General fabrication, automotive components, ship building and power industry.

## Availability :

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|---|---|
| **Standard Size** | : 1.6, 2.0, 2.5, 3.2 & 4.0 mm dia in 500 / 1000 mm length |
| **Packing** | : 500 mm in 2 kg. & 1000 mm in 5 kg. for TIG welding |
| **Spools** | : 0.8, 1.2 & 1.6 mm dia in 6.5 kg. spool for MIG welding |

**Note On Usage:**

1) Follow the recommended welding parameters to achieve good sound welds
2) Do not use excessive currents. Hold short arc. Use good fit-up on joints.

**Above are basic guidelines and will vary depending on joint design, number of passes and other factors.**

## ⚠WARNING

**Protect yourself and others. Read and understand this warning. Do not remove this warning.**

**Fumes and Gases can be hazardous to your health**

- Before use, read and understand the Material Safety Data Sheet (MSDS), the manufacturer's instructions, and your employer's safety practices.
- If MSDS is not enclosed. Obtain from your employer.
- Keep your head out of the fumes. See Section 5 of the MSDS for specific fume concentration limits.
- Use enough Ventilation, exhaust at the arc, or both, to keep fumes and gases from your breathing zone and the general area. If needed, use a proper respirator.
- No hazards exist before this product is used in arc welding.

**Electric Shock can kill**

- Always wear dry insulating gloves
- Insulate yourself from work and ground.
- Do not touch live electrical parts.

**ARC Rays can injure eyes and burn skin**

- Wear welding helmet with correct filter.
- Wear correct eye, ear, and body protection.

**Welding can cause fire or explosion**

- Do not weld near flammable material.
- Watch for fire, keep, extinguisher nearby.

**Read American National Standards Z49.1, "Safety In Welding, Cutting and Allied Process." from American Welding Society.**