Aluminium Alloys (Filler Rods & Wires)

SM 4043






SENOR®

One Stop Solution for Welding & Brazing Consumables

SENOR®

SM 4043 | Aluminium Silicon | Al Filler Metal

Classifications:

AWS / SFA5.10	: ER 4043
UNS No.	: A94043
DIN 1732	: SG-Al Si 5
B.S.	: NG21
ISO 18273 Numerical	: Al4043
ISO 18273 Chemical	: AlSi5

Description:

Senor SM 4043 is Al-Si alloy with good fluidity and is less sensitive to weld cracking and produces good weld. It has Moderate electrical conductivity, and thermal conductivity It has low welding smut and discoloration.This is non-heat treatable

Technical Data:

UTS	: 11-13 Kgf/mm^2
YS	: 2-5 Kgf/mm^2
Elongation (L=D)	: 17% Melting
Melting Point	: 573-625°C
Resistance to Corrosion	: A
Anodize Color	: Gray
Electrical Conductivity	: 42% IACS (-0)
Density	: 2.68 gms/cc
Shielding Gas	: 100% Argon , Argon/Helium Mixtures , Flow Rate: 30 - 50 CFH (14.2 - 23.6 L/Min)

Chemical Composition (%):

Si	Fe	Ti	Mg	Cu	Mn	Zn	Al	Be	Other Total
4.5-6.0	0.80	0.20	0.05	0.30	0.05	0.10	Rem.	0.0003	0.15

Typical Applications:

- Suitable for Al and Al alloys with less than 2% alloying elements, cast aluminium alloys with upto 7% Silicon content.
- Suitable for pistons and complex-shaped forgings.
- Spray and flame metallizing wire.
- General construction and automotive applications.

Availability :

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.