Aluminium Alloys (Filler Rods & Wires)

SM 4047






SENOR®

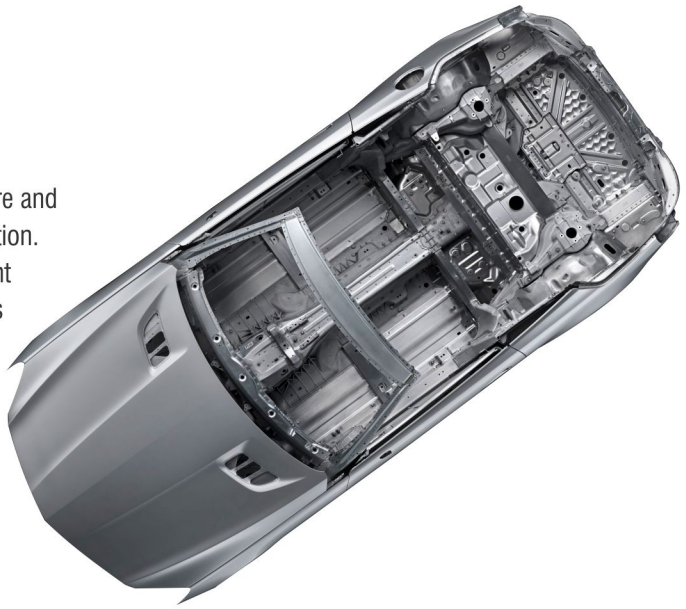
One Stop Solution for Welding & Brazing Consumables

SENOR®

SM 4047 | Aluminium Silicon | Al Filler Metal

Classifications:

AWS / SFA5.10	: ER 4047
UNS No.	: A94047
DIN 1732	: S-Al Si 12
B.S.	: NG2
ISO 18273 Numerical	: Al4047
ISO 18273 Chemical	: AlSi12



Description:

Senor SM 4047 is Al-Si alloy having low melting point with good structure and colour match.Low melting point ensures reduction in parent metal distortion. This has increased fluidity and reduced shrinkage due to higher Si content than SM 4043.Not suitable for anodizing.This can be used in applications of sustained elevated temperatures.

Technical Data:

UTS	: 13-15 Kgf/mm^2
YS	: 5-8 Kgf/mm^2
Elongation (L=D)	: 4%
Melting Range	: 573-585°C
Resistance to Corrosion	: B (Gen) A (SCC)
Anodize Color	: Gray-Black
Electrical Conductivity	: 41% IACS (-0)
Density	: 2.66 gms/cc
Shielding Gas	: 100% Argon , Argon/Helium Mixtures , Flow Rate: 30 - 50 CFH (14.2 - 23.6 L/Min)

Chemical Composition (%):

Si	Mg	Fe	Cu	Mn	Be	Zn	Al
11.0-13.0	0.10	0.80	0.30	0.15	0.0003	0.20	Rem.

Typical Applications:

- Automotive Components.
- Tank Construction
- Body Panels
- Repairs and filling up cavities on Al-Si castings with more than 7% Si content

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.