Aluminium Alloys (Filler Rods & Wires)

SM 2319






SENOR®

One Stop Solution for Welding & Brazing Consumables

SENOR®

SM 2319 | Aluminium Copper | Al Filler Metal

Classifications:

AWS / SFA5.10	: ER 2319
UNS No.	: A92319
ISO 18273 Numerical	: Al2319
ISO 18273 Chemical	: AlCu6MnZrTi

Description:

Senor SM 2319 is aluminium copper alloy which is heat treatable and has good flow ability. Primarily used as the filler metal for alloy 2219.This Provides higher strength and better ductility than 4XXX filler alloys when welding on 2XXX base materials. This is used where better resistance to stress corrosion cracking and excellent elevated temperature properties are desired.

Technical Data:

UTS	: 20-24 Kgf/mm^2
YS	: 15-18 Kgf/mm^2
Elongation (L=D)	: 17%
Melting Point	: 540-640°C
Resistance to Corrosion	: D (Gen) C (SCC)
Anodize Color	: Golden
Electrical Conductivity	: 44% IACS
Density	: 2.76 gms/cc
Shielding Gas	: 100% Argon , Argon/Helium Mixtures , Flow Rate: 30 - 50 CFH (14.2 - 23.6 L/Min)

Chemical Composition (%):

Si	Fe	Cu	Mn	Mg	Zn	Ti	Be	V	Zr	Al	Other Total
0.20	0.30	5.80-6.80	0.20-0.40	0.02	0.10	0.10-0.20	0.0003	0.05-0.15	0.10-0.25	Rem.	0.15

Flame Adjustment:

1-1 ½ X Carburizing flame to be used for brazing use flux.

Typical Applications:

- Suitable for high strength structural, aircraft and truck body.
- Suitable for applications where good resistance to stress corrosion cracking and excellent elevated properties are desired.
- Suitable for Naval 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.