



4047 – PRODUCT DATA SHEET

Nexalloy 4047 is 12% silicon all position aluminum weld wire used to weld heat treatable alloys such as the 6XXX base metals and cast alloys. Found in many common welding applications such as bicycles, trucks, trailers, automotive parts and equipment. The higher silicon with this alloy give improved wetting action yielding a less crack sensitive bright weld bead and also a narrow melting range which will reduce the shrinkage during cooling.

NEXAL WELDING PRODUCTS APPROVALS AND SPECIFICATIONS

AWS A5.10 classification ER4047, R4047 AWS A5.8 classification BAISI-4 Canadian Bureau of Welding – CWB

Chemical Composition (weight %)

Aluminum	Remainder	Silicon	11.0-13.0
Manganese	0.15 Max	Magnesium	0.10 Max
Iron	0.80 Max	Zinc	0.20 Max
Copper	0.30 Max		
Beryllium	0.0008 Max		
Other Elements	0.05 Max & Total 0.15 Max		

Typical Properties

Melting Range	1065 – 1075 F 574 – 580 C
Tensile Strength	21-33,000 PSI / 144-227 MPa
Yield Strength	10-27,500 PSI / 69-190 MPa
Elongation in 2"	5 – 12%
Density	.096 lbs/cu in.
Post Anodize Color	Gray

Wire and Rod Diameters Available

0.030 0.035 3/64" 1/16" 3/32" 1/8" 5/32" 3/16" 1/4" 5/16"

Packaging Available

Plastic Spools – 1LB/0.4KG, 5LB/2.2KG, 10LB/4.5KG, 16LB/7.2KG, 20LB/9KG

Metal Spools – 10LB/4.5KG, 15LB /6.8KG **TIG Rods** – 5LB/2.2KG, 10LB/4.5KG, 50LB/22.6KG

Drums – 150LB/68KG, 300LB/136KG

MIG Welding Procedures: DCEP

Wire Diameter	WFS ipm	Amps	Volts	Consumption LB/100FT	Argon(cfh)
0.030	480-625	60-175	15-24	0.65-1.25	25-30
0.035	450-750	70-185	15-27	1.00-4.25	30-35
3/64"	330-500	125-260	20-29	1.00-4.25	35-45
1/16"	250-450	170-300	24-30	3.8-66	45-75
3/32"	160-200	275-400	25-31	35-66	60-85

TIG Welding Procedures: ACHF- with Pure or Ziconiated Hemisphere shape tungsten tip

Base Thickness	Filler Wire Size	Tungsten	Amps	Consumption LB/100FT	Gas Cup Size	Argon(cfh)
1/16"	1/16"	1/16"	60-80	0.75	3/8"	20
3/32"	3/32"	3/32"	85-120	1.00	3/8"	20
1/8"	3/32"	3/32"	125-160	1.50	3/8"	20
3/16"	1/8"	1/8"	190-220	4.5-6.0	7/16"	25
1/4"	5/32"	5/32"	200-300	8-10	1/2"	30
3/8"	3/16"	3/16"	330-380	15-20	5/8"	35
1/2"	1/4"	1/4"	400-500	25-40	5/8"	40

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