

NEXALLOY ER4047 – PRODUCT DATA SHEET

Nexalloy ER4047 is 12% silicon all position aluminum weld wire used to weld heat treatable alloys such as the 6XXXbase 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 gives 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/A5.10M/ASME SFA 5.10 Classification ER4047, R4047, ISO 18273 Al 4047 A/AISI12(A),
AWS A5.8 Classification BAISI-4, EN AW-Al Si12, TUV, CE 0035-CPR-C809.

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	0.0001 Max		

Other Elements 0.05 Max & Total 0.15 Max

Typical Properties

Melting Range	1065 – 1075 F	574 – 580 C
Density	.096 lbs.\cu in.	
Post Anodize Color	Gray	
UTS	33ksi – 230MPA	
Elongation	(2") 4%	

Wire and Rod Diameters Available

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

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

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



Nexal Aluminum Inc.
www.nexalloy.com

5938 Ambler Drive Mississauga, ON L4W 2N3
An ISO 9001:2015 Certified Company

Phone: 1-905-629-8282
Fax: 1-905-629-8532

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