



PRODUCT DATA SHEET

Nexalloy 4043 is a 5% 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 and automotive parts and equipment. Silicon with this alloys give improved wetting action yielding a less crack sensitive bright weld bead

NEXAL WELDING PRODUCTS APPROVALS AND SPECIFICATIONS:

AWS A5.10 classification ER4043, R4043

Canadian Welding Bureau –CWB

American Bureau of Shipping – ABS

Chemical Composition (weight %):

Aluminum	Remainder	Silicon	4.5-6.0
Manganese	0.05 maximum	Magnesium	0.05 maximum
Iron	0.80 maximum	Titanium	0.20 maximum
Copper	0.30 maximum		
Zinc	0.10 maximum		
Beryllium	0.0008 maximum		
Others elements	each 0.05 maximum & total	0.15 maximum	

Typical Properties:

Melting range	1065°– 1170°F 574°-632°C
Tensile Strength psi	21-33,000
Yield Strength psi	10-27,500
Elongation in 2"	5-12%
Density	.097 lbs\cu in
Post Anodize Color	Gray

Wire and Rod Diameters available:

.030, .035, 3/64", 1/16", 3/32", 1/8", 5/32", 3/16", 1/4", 5/16"

Packaging available:

Plastic Spools of 1lb, 5lb, 10lb, 16lb, 20lb
Tig rods of 5lb, 10lb, 50lb

Metal Spool of 10lb, 15lb,
Drums of 150lb & 300lb

MIG WELDING PROCEDURES; DCEP

Wire Diameter	WFS ipm	Amps	Volts	Consumption lb/100 ft	Argon (cfh)
0.030	480-625	60-175	15-24	0.65-1.25	25-30
0.035	450-750	70-185	15-27	1.0-4.25	30-35
3/64	330-500	125-260	20-29	1.0-4.25	35-45
1/16	250-450	170-300	24-30	3.8-66	45-75
3/32	160-200	275-400	26-31	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/100 ft	Gas Cup Size	Argon (cfh)
1/16"	1/16"	1/16"	60-80	.75	3/8"	20
3/32"	3/32"	3/32"	85-120	1.0	3/8"	20
1/8"	3/32"	3/32"	125-160	1.5	3/8"	20
3/16"	1/8"	1/8"	190-220	4.5-6	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"	400-450	25-40	5/8"	40

Nexal Aluminum Inc.
www.nexalloy.com

5938 Ambler Drive Mississauga, ON L4W 2N3 Canada
An ISO 9001:2008 Certified Company

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



American Welding Society

Sustaining Company Member

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