



## 4043 – PRODUCT DATA SHEET

Nexalloy 4043 is 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, 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 Bureau of Welding – CWB

### Chemical Composition (weight %)

Aluminum	Remainder	Silicon	4.5-6.0
Manganese	0.05 Max	Magnesium	0.05 Max
Iron	0.80 Max	Titanium	0.20 Max
Copper	0.30 Max	Zinc	0.10 Max
Beryllium	0.0003 Max		

### Typical Properties

Melting Range	1065 – 1170 F 574 – 632 C
Density	.097 lbs\cu in. Other
Post Anodize Color	Gray

Elements 0.05 Max & Total 0.15 Max

### 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

Nexal Aluminum Inc.  
www.nexalloy.com

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

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

The data and information contained or referenced is presented as typical results without guarantee or warranty and Nexal expressly disclaims liability incurred of any kind with reliance thereon

**Aluminum Manufacturing since 1973**