



NEXALLOY ER5554 – PRODUCT DATA SHEET

Nexalloy ER5554 is an aluminum filler typically used on 5454 and similar base metal that may be used in transportation applications such as over-the-road trailers and rail tank cars chemical tanks and other storage where temperatures above 150F may be found.

NEXAL WELDING PRODUCTS APPROVALS AND SPECIFICATIONS

AWS A5.10/A5.10M/ASME SFA 5.10 Classification ER5554, R5554, ISO 18273 Al 5554 / AlMg2,7Mn, EN AW-5554/ Al Mg3Mn, TUV, CE 0035-CPR-C809.

Chemical Composition (weight %)

Aluminum	Remainder	Silicon	0.25 Max
Manganese	0.50-1.00	Magnesium	2.4-3.0
Iron	0.40 Max	Chromium	0.05-0.20
Copper	0.10 Max	Titanium	0.05-0.20
Beryllium	0.0001 Max	Zinc	0.25 Max

Typical Properties

Melting Range	1155 – 1195 F	640 – 646 C
Density	.097 lbs\cu in.	
Post Anodize Color	White	
UTS	62ksi – 425MPA	
Elongation	(2") 6%	

Other 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" 5/64"

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	26-31	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
1/2"	1/4"	1/4"	400-450	25-40	5/8"	40



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