

## NEXALLOY R-A356.0 – PRODUCT DATA SHEET

Nexalloy R-A356.0 is an Aluminum Silicon Copper with high-strength alloy which is used in various applications where castings are usually heat treated for maximum strength. It possesses moderate to high strength (37 ksi typical), low melting temperature and good weldability, formability. R-A356.0 may be used to weld alloy 356.0, A356.0, A357.0, 3003, 6005, or 6061. Common applications include aircraft parts and high strength casting structures in Automotive and Aerospace industries.

## NEXAL WELDING PRODUCTS APPROVALS AND SPECIFICATIONS

AWS A5.10/A5.10M/ASME SFA 5.10 Classification R-A356.0, AMS 4181, TUV, CE 0035-CPR-C809.

### Chemical Composition (weight %)

Aluminum	Remainder	Silicon	6.5-7.5
Manganese	0.10	Magnesium	0.25-0.45
Iron	0.20	Titanium	0.20 Max
Copper	0.20	Zinc	0.10 Max

Other Elements 0.05 Max each & Total 0.15 Max

### Typical Properties

Melting Range	1035 – 1140 F 555 – 615 C
Density	.097 lbs\cu in.
Post Anodize Color	Gray
UTS	37ksi – 255MPA
Elongation	H18 (2'') 5%

### Rod Diameters Available

1/16" 3/32" 1/8" 5/32" 3/16"

### Packaging Available

**TIG Rods** – 5LB/2.2KG, 10LB/4.5KG, 50LB/22.6KG

### 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



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**Aluminum Manufacturing since 1973**