



Aluminum Wire

Unibraze 1100

Specification: AWS SFA A5.10

Classification: ER1100

UNS: A91100

Description: Unibraze 1100 is a 99% Aluminum wire that is highly resistant to chemical attack and weathering. It is recommended for welding 1100 and 3003 aluminum sheets, plates and shapes.

Typical Chemistry, %

Al	99.0 min
Be*	.0008 max
Cu	.05 - .20
Fe & Si	.95 max
Mn	.05 max
Zn	.10 max
Others	.15 max.

Tensile Strength (As Welded)

13,500 psi average

Unibraze 4043

Specification: AWS SFA A5.10

Classification: ER4043

UNS: A94043

Description: Unibraze 4043 is a 5% Silicon Aluminum filler metal recommended for welding 2014, 3003, 3004, 5052, 6061, and 6101 (in various conditions of heat treatment and 6063 sheets, plates and shapes).

Typical Chemistry, %

Al	Balance
Be*	.0008 max
Cu	.30 max
Fe	.80 max
Mg	.05 max
Mn	.05 max
Si	4.5 – 6.0
Ti	.20 max
Zn	.10 max
Others	.15 max.

Tensile Strength (As Welded)

29,000 psi average

Unibraze 4047 (718)

Specification: AWS SFA A5.10/A5.8

Classification: ER4047/BA1Si-4

UNS: A94047

Description: Unibraze 4047 is a 12% Silicon Aluminum brazing rod that is recommended for torch brazing and dip or furnace brazing of 1060, 1350, 3003, 5005, 6061, 6063, and 7005.

Typical Chemistry, %

Al	Balance
Be*	.0008 max
Cu	.30 max
Fe	.80 max
Mg	.10 max
Mn	.15 max
Zn	.20 max
Others	.15 max.

Tensile Strength (As Welded)

27,000 psi average

Unibraze 5183

Specification: AWS SFA A5.10

Classification: ER5183

UNS: A95183

Description: Unibraze 5183 is used in marine and structural applications where high strengths, high fracture toughness for impact resistance, and exposure to corrosive elements are important. It is used to weld 5083, 6061, 6063, 5086, 7005 and 7039 alloys.

Typical Chemistry, %

Al	Balance
Be*	.0008 max
Cr	.05 - .25
Cu	.10 max
Fe	.40 max
Mg	4.3 – 5.2
Mn	.5 – 1.0
Si	.40 max
Ti	.15 max
Zn	.25 max
Others	.15 max.

Tensile Strength (As Welded)

41,000 psi average

Unibraze 5356

Specification: AWS SFA A5.10

Classification: ER5356

UNS: A95356

Description: Unibraze 5356 is a 5% Magnesium Aluminum that offers corrosion resistance when exposed to salt water. It is used to weld 5050, 5052, 5083, 5356, 5454, and 5456 base metal.

Typical Chemistry, %

Al	Balance
Be*	.0008 max
Cr	.05 - .20
Cu	.10 max
Fe	.40 max
Mg	4.5 – 5.5
Mn	.05 - .20
Si	.25 max
Ti	.06 - .20
Zn	10 max
Others	.15 max.

Tensile Strength (As Welded)

38,000 psi average

Unibraze 5556

Specification: AWS SFA A5.10

Classification: ER5556

UNS: A95556

Description: Unibraze 5556 offers an excellent combination of corrosion resistance, strength, toughness, workability, and weldability. It is recommended for welding 5083, 5086 5154, 5254 and 5456 high tensile aluminum alloys.

Typical Chemistry, %

Al	Balance
Be*	.0008 max
Cr	.05 - .2
Cu	.10 max
Fe	.40 max
Mg	4.7 – 5.5
Mn	.5 – 1.0
Si	.25 max
Ti	.05 - .20
Zn	.25 max
Others	.15 max.

Tensile Strength (As Welded)

46,000 psi average

*included in others