



T H E H A R R I S P R O D U C T S G R O U P
A L I N C O L N E L E C T R I C C O M P A N Y
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TECHNICAL SPECIFICATION SHEET

4047 (718) ALUMINUM WELDING AND BRAZING WIRE

STATEMENT OF LIABILITY - DISCLAIMER

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NOMINAL COMPOSITION:

Aluminum	Balance		
Magnesium	.10 % max.	Copper	.30 % max.
Manganese	.15 % max.	Zinc	.20 % max.
Silicon	11.0-13.0 %	Iron	0.8% max.
Beryllium	.0003 % max.		
Others	Each .05% max. Total 0.15% max		

Physical Properties:

Solidus	1065 °F (574 °C)	Density lbs/cu in	0.097
Liquidus	1170 °F (632 °C)	Post Anodize Color	Grey

RECOMMENDED WELDING PARAMETERS:

GMAW (MIG) Parameters (DC reverse polarity electrode positive) Spray transfer

Metal Thickness	Wire Diameter	Amps	Volts	Argon
1/16"	.030	70-110	15-20	25
1/8"	.030-3/64	120-150	20-24	30
3/16"	.030-3/64	130-210	22-26	30-35
1/4"	3/64-1/16	170-225	24-28	40
3/8"	1/16	225-300	26-29	50

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GTAW (TIG) Parameters (AC) Hemisphere tip shape tungsten electrode

Metal Thickness	Tungsten (pure or zirconiated)	Filler Wire Size	Amps	Volts ACHF	Gas Cup	Argon (cfh)
1/16"	1/16" - 3/32"	1/16"-3/32"	70-100	15	3/8	20
1/8"	1/8"-5/32"	1/8"-5/32	125-175	15	7/16	20
3/16"	5/32"-3/16"	5/32-3/16"	170-225	15	7/16-1/2	25
1/4"	3/16"-1/4"	3/16"	220-275	15	1/2	30
3/8"	1/4"	3/16"-1/4"	330-380	15	5/8	35
1/2"	1/4"	1/4"	400-450	25	5/8	35

* All parameters are suggested as basic guidelines and will vary depending on joint design, number of passes and other factors.

SPECIFICATION COMPLIANCE:

ANSI/AWS A5.10 Class R/ER 4047, ASME SFA 5.10,, QQ-R-566B CLASS R/ER4047, ANSI/AWS A5.8 class BAI-Si-4, AMS 4185 (Chemistry Only)

WARNING: PROTECT yourself and others. Read and understand this information.

FUMES AND GASES can be hazardous to your health.

ARC RAYS can injure eyes and burn skin.

ELECTRIC SHOCK can KILL.

- Before use, read and understand the manufacturer's instructions, Material Safety Data Sheets (MSDSs), and your employer's safety practices.
- Keep your head out of fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases from your breathing zone and the general area.
- Wear correct eye, ear, and body protection.
- Do not touch live electrical parts.
- See American National Standard Z49.1, *Safety in Welding, Cutting, and Allied Processes*, published by the American Welding Society, 550 N.W. LeJeune Road, Miami, Florida 33126; OSHA Safety and Health Standards, available from the U.S. Government Office, Washington, DC 20402

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