Hobart[®] Maxal[®] 4047



AWS A5.10: ER4047, R4047

WELDING POSITIONS:



FEATURES:

- Moderate/high strength (37 ksi typical)
- Excellent wetting action for joint sealing applications
- Low welding smut and discoloration
- · Very low ductility, formability, and toughness
- Moderate electrical conductivity and thermal conductivity

BENEFITS:

- Excellent corrosion resistance
- · Very lowest shrinkage rate/reduced distortion
- · Low hot cracking sensitivity in most applications
- · Low melting temperature/high fluidity

APPLICATIONS:

- Welding 6xxx allovs
- · Radiators and air conditioning components
- · General repair and maintenance
- · Water and gas tight applications

SHIELDING GAS: 100% Argon (Ar) or Argon/Helium mixtures, typical: GMAW - 35-50 cfh (14-24 l/min) GTAW - 20-30 cfh (10-14 l/min)

TYPE OF CURRENT: Direct Current Electrode Positive (DCEP) for GMAW, AC for GTAW

STANDARD DIAMETERS: 0.035" (0.9 mm), 3/64" (1.2 mm)

STORAGE: Product should be stored in a dry, enclosed environment, and in its original intact packaging

TYPICAL CHEMICAL VALUES*:

Weld Metal Analysis (%)	ER & R 4047			
Silicon (Si)	11.0-13.0			
Iron (Fe)	0.8			
Copper (Cu)	0.30			
Manganese (Mn)	0.15			
Magnesium (Mg)	0.10			
Zinc (Zn)	0.20			
Titanium (Ti)	_			
Beryllium (Be)	<0.0003			
Others Each	0.05			
Others Total	0.15			
Aluminum (AI)	Remainder			

^{*}Unless noted-single values are maximums.

TYPICAL MECHANICAL PROPERTIES:

Mechanical Tests	ER & R 4047	AWS Spec
Tensile Strength	37,000 (225 MPa)	25,000 psi (170 MPa)

TYPICAL PHYSICAL PROPERTIES:

Melting Range	Density	Electrical/Thermal Conductivity	Anodized Color	Elevated Temp. Applications +150°F (+66°C)
1070-1080°F (575-580°C)	0.096 lbs/in ³ (2.657 g/cm ³)	40% IACS/1040 EU	Dark Gray	YES

^{*}The information contained or otherwise referenced herein is presented only as "typical" without guarantee or warranty, and Hobart Brothers LLC expressly disclaims any liability incurred from any reliance thereon. Typical data are those obtained when welded and tested in accordance with AWS A5.10 specification. Other tests and procedures may produce different results. No data is to be construed as a recommendation for any welding condition or technique not controlled by Hobart Brothers LLC.

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Diameter	Weld Position	tion Amps Volts Wire Fo		Wire Fe	ed Speed Deposition Rate		CTWD		
Inches (mm)	770.07	7	VOILS	in/min	(m/min)	lbs/hr	(kg/hr)	Inches	(mm)
0.035" (0.9 mm)	All Position	135	20.7	400	(10.2)	6.4	(2.9)	1/2	(13)
0.035" (0.9 mm)	All Position	145	21.3	450	(11.4)	7.2	(3.3)	1/2	(13)
0.035" (0.9 mm)	All Position	160	21.8	500	(12.7)	8.0	(3.6)	1/2	(13)
0.035" (0.9 mm)	All Position	165	22.0	550	(14.0)	8.8	(4.0)	1/2	(13)
0.035" (0.9 mm)	All Position	185	22.3	600	(15.2)	9.6	(4.3)	1/2	(13)
3/64" (1.2 mm)	All Position	180	21.4	300	(7.6)	7.9	(3.6)	1/2	(13)
3/64" (1.2 mm)	All Position	210	21.8	350	(8.9)	9.2	(4.2)	1/2	(13)
3/64" (1.2 mm)	All Position	225	22.4	400	(10.2)	10.5	(4.8)	1/2	(13)
3/64" (1.2 mm)	All Position	260	24.0	450	(11.4)	11.9	(5.4)	5/8	(16)
3/64" (1.2 mm)	All Position	270	24.3	500	(12.7)	13.2	(6.0)	5/8	(16)

Maintaining a proper welding procedure - including cleaning, oxide removal, pre-heat and interpass temperatures - may be critical depending on the type and thickness of aluminum being welded. **See Above:** This information was determined by welding using 100% Argon shielding gas with a flow rate between 35-50 cfh (14-24 l/min).

AVAILABLE DIAMETERS AND PACKAGES: For a complete list of diameters and packaging, please contact Hobart Brothers at (800) 424-1543 or (937) 332-5188 for International Customer Service.

Diameter Inches (mm)		16-lb. (7.3 kg) Wire Basket	300-lb. (136 kg) Drum		
Net Pallet Weight		1296-lb (588 kg)	600-lb. (272 kg)		
0.035	(0.9)	404703512	_		
3/64	(1.2)	404704712	404704723		

300 lb drum dimensions: diameter = 23-1/2"; height = 36"

CONFORMANCES AND APPROVALS:

- AWS A5.10, ER4047, R4047
- ASME SFA 5.10, ER4047, R4047
- CE Marked per CPR 305/2011 (0.035" 0.047")
- BD, EN ISO 18273-S AL 4047 (AlSi12)

TECHNICAL QUESTIONS? For technical support of Hobart Filler Metals products, contact the Applications Engineering department by phone toll-free at 1-800-532-2618 or by e-mail at Applications.Engineering@hobartbrothers.com

CAUTION:

Consumers should be thoroughly familiar with the safety precautions on the warning label posted in each shipment and in the American National Standard Z49.1, "Safety in Welding and Cutting," published by the American Welding Society, 8669 NW 36th St., Miami, FL 33166 (can also be downloaded online at www.aws.org); OSHA Safety and Health Standards 29 CFR 1910 is available from the U.S. Department of Labor, Washington, D.C. 20210

Safety Data Sheets on any Hobart Brothers LLC product may be obtained from Hobart Customer Service or at www.hobartbrothers.com. Because Hobart Brothers LLC is constantly improving products, Hobart reserves the right to change design and/or

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