

SUPERGLAZE® 5183

Aluminum · AWS ER5183

KEY FEATURES

- Designed for applications where higher strength is required
- Provides very high as-welded strength for high magnesium alloys such as 5083
- Excellent corrosion resistance ideal for shipbuilding and marine applications
- Q2 Lot® - Certificate showing actual wire composition

WELDING POSITIONS

All, except vertical down

SHIELDING GAS

100% Argon
Argon / Helium Mixtures
Flow Rate: 30 - 50 CFH

NOTE

- Typical Joint Designs and Operating Procedures on pg. J-14 - J-16
- Gem-Pak®: Use Accu-Pak® Payoff Kit (K2175-2) for payoff

CONFORMANCES

AWS A5.10:	ER5183
ASME SFA 5.10:	ER5183
ABS/AWS:	ER5183 Ar&Ar/He
LR: Lloyd's Register	WC/I-1 S & I-5 S
DNV-GL:	5183 I-1
BV Grade:	WC
CWB/CSA W48:	ER5183
KR:	WC G I-1 & I-5
CCS:	WC I-1
ISO 18273:	AlMg4.5Mn0.7(A)
TUV and DB:	AlMg4.5 Mn0.7(A)
RINA	WC I-1

TYPICAL APPLICATIONS

- Pressure Vessels
- Cryogenic tanks
- Shipbuilding

DIAMETERS / PACKAGING

Diameter in (mm)	1 lb (0.5 kg) Plastic Spool 20 lb (9.1 kg) Master Carton	16 lb (7.3 kg) Plastic Spool	16 lb (7.3 kg) Steel Spool	300 lb (136 kg) Gem-Pak® Box
0.035 (0.9)	EDS30322	EDS28435	ED034190	ED034789
3/64 (1.2)		EDS28437		ED034791
1/16 (1.6)		EDS28438		ED034792

WIRE COMPOSITION⁽¹⁾ – As Required per SFA/AWSA5.10

	%Al	%Si	%Fe	%Cu	%Mn
Requirements - AWS ER5183	Remainder	0.40 max	0.40 max	0.10 max	0.50 - 1.00
Typical Results ⁽²⁾	Remainder	0.03	0.13	0.001	0.65
	%Mg	%Cr	%Zn	%Ti	%Be
Requirements - AWS ER5183	4.30 - 5.20	0.05 - 0.25	0.25 max	0.15 max	0.0003 max
Typical Results ⁽²⁾	4.99	0.10	0.02	0.07	0.0002

⁽¹⁾Typical all weld metal. ⁽²⁾See test results disclaimer

Safety Data Sheets (SDS) and Certificates of Conformance are available on our website at www.lincolnelectric.com

FUMES AND GASES can be hazardous to your health.

- Fumes from the normal use of this product contain significant quantities of potentially hazardous compounds. See consumable product label/insert.
- Keep your head out of the fumes.
- Use enough ventilation and local exhaust to keep fumes and gases from your breathing zone and the general area.
- An approved respirator should be used unless exposure assessments are below applicable exposure limits.

TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application.

CUSTOMER ASSISTANCE POLICY

The business of Lincoln Electric is manufacturing and selling high quality welding equipment, automated welding systems, consumables, cutting equipment and EV charging systems. Our challenge is to meet the needs of our customers, who are experts in their fields, and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or technical information about their use of our products. Our employees respond to inquiries to the best of their ability based on information and specifications provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment, or to provide engineering advice in relation to a specific situation or application. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or communications. Moreover, the provision of such information or technical information does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or technical information, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose or any other equivalent or similar warranty is specifically disclaimed.

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