SUPERGLAZE™ SiBR

Copper Alloys ▪ AWS ERCuSi-A / ISO Cu 6560

KEY FEATURES

- Silicon Bronze is designed for MIG brazing galvanized steel and other applications where a high quality finish is demanded
- High corrosion resistance
- Suitable for GMAW, laser and plasma brazing
- Available in the Gem-Pak, a tangle-free system that allows for optimal feeding and braze quality
- Optimized chemistry for high quality applications that work for MIG Braze and Laser Braze at the same time.

SHIELDING GAS

100% Argon
Flow Rate: 30 - 50 CFH

CONFORMANCES

AWS A5.7/A5.7M	ERCuSI-A
ISO 24373	S Cu 6560 (CuSi3Mn1)

TYPICAL APPLICATIONS

- Automotive components
- Galvanized steel
- Dissimilar metals
- Copper alloys with similar composition and brass
- Car body construction

WELDING POSITIONS

All positions

DIAMETERS / PACKAGING

Diameter in (mm)	33 lb (15 kg) Plastic Spool	500 lb (227 kg) Gem-Pak® Box
0.035 (0.9)	ED036805	ED036802
0.040 (1.0)	ED704014	ED704016
0.045 (1.1)	ED036807	ED036804
0.047 (1.2)	ED704015	ED704017

MECHANICAL PROPERTIES[1]

	Yield Strength[2] MPa (ksi)	Tensile Strength MPa (ksi)	Elongation %	Hardness HB
Requirements - AWS ERCuSi-A	-	-	-	-
Typical Results[3] - As-Welded	180 (26)	375 (55)	60	90

WIRE CHEMICAL COMPOSITION (wt%) – *As Required per ISO 24373*

wt%	Al	Mn	Si	Sn	P
Requirements - Cu 6560	0.01	1.5	2.8-4.0	1.0	-
Typical Results[3]	0.002	0.65	2.97	0.005	0.0007
	Pb	**Fe**	**Zn**	**Other**	**Cu**
Requirements - Cu 6560	0.02	0.50	1.0	0.50	Reminder
Typical Results[3]	0.003	0.01	0.02	<0.50	Reminder

TYPICAL OPERATING PROCEDURES[4]

Diameter in (mm)	Wire Feed Speed in/min (m/min)	Voltage (volts)	Current (Amps)	Argon Gas Flow (CFH)
0.035 (0.9)	400-440 (10-11)	23-25	145-185	30 - 50 CFH
0.040 (1.0)	340-375 (8-9)	24-26	170-200	
0.045 (1.1)	280-310 (7-8)	26-28	195-215	

[1] Typical all weld metal [2] Measured with 0.2% offset [3] See test results disclaimer [4] Suggested parameters are basic guidelines that will vary according to joint design, number of passes and other aspects.

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

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 Lincoln Electric Company is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information 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. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

Lincoln Electric is a responsive manufacturer, but the selection and use of specific products sold by Lincoln Electric is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric affect the results obtained in applying these types of fabrication methods and service requirements.

Subject to Change – This information is accurate to the best of our knowledge at the time of printing. Please refer to www.lincolnelectric.com for any updated information.

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