

BLUE MAX[®] MIG 2594

Stainless ▪ AWS ER2594

KEY FEATURES

- A super-duplex grade electrode that provides matching chemistry and mechanical property characteristics to wrought super-duplex alloys such as 2507 and Zeron100, as well as to super-duplex casting alloys (ATSM A890)
- The electrode is over-alloyed 2-3% in nickel to provide the optimum ferrite/austenite ratio in the finished weld resulting in high tensile and yield strength and superior resistance to stress corrosion, cracking (SCC) and pitting corrosion
- Q2 Lot[®] - Certificate showing actual wire composition and calculated ferrite number (FN) available online

CONFORMANCES

AWS A5.9/A5.9M: 2012	ER2594
ISO 14343:2009:	25 9 4 N L

TYPICAL APPLICATIONS

- Process Pipework
- Pumps and Valves
- Pressure Vessels
- Welding Zeron 100% and similar base metals

WELDING POSITIONS

All

DIAMETERS / PACKAGING

Diameter in (mm)	33 lb (15 kg) PLW Steel Spool
0.035 (0.9)	ED035029
0.045 (1.1)	ED035030

WIRE COMPOSITION⁽¹⁾ – As Required per AWS A5.9/A5.9M: 2012

	%C	%Cr	%Ni	%Mo	%Mn	%Si
Requirements AWS ER2594	0.03 max	24.0 - 27.0	8.0 - 10.5	2.5 - 4.5	2.5 max	1.0 max
Typical Performance⁽²⁾	0.02	24.6	8.6	3.8	0.8	0.3
	%P	%S	%N	%Cu	%W	FN
Requirements AWS ER2594	0.03 max	0.02 max	0.20 - 0.30	1.5 max	1.00 max	Not Required
Typical Performance⁽²⁾	0.02	0.01	0.25	0.01	0.01	30 - 60

TYPICAL OPERATING PROCEDURES

Diameter in (mm)	Voltage (volts)	Amperage	Gas Flow	Gas
0.035 (0.9)	26-29	160-210	30-50 CFH	Argon + 2-5% CO ₂
0.045 (1.1)	28-32	180-250		

⁽¹⁾Typical wire chemistry. ⁽²⁾See test results disclaimer

IMPORTANT: SPECIAL VENTILATION AND/OR EXHAUST REQUIRED

Fumes from the normal use of some welding products can contain significant quantities of components - such as chromium and manganese - which can lower the 5.0 mg/m³ maximum exposure guideline for general welding fume.

BEFORE USE, READ AND UNDERSTAND THE MATERIAL SAFETY DATA SHEET (MSDS) FOR THIS PRODUCT AND SPECIFIC INFORMATION PRINTED ON THE PRODUCT CONTAINER.

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.