

Select 18CrCb-C

Stainless Steel / Gas Shielded / Metal Cored

PRODUCT DATA SHEET

FEATURES

- Dual stabilized with columbium (Cb), also known as niobium (Nb), and titanium (Ti) improves sensitization resistance and weld metal mechanical properties vs only Ti or Nb stabilized weldments.
- Finer grained ferritic microstructure compared to solid wire of similar classification
- Metal cored construction inherently provides better welding performance compared to solid wires.
- Designed to weld exhaust system components of similar composition, ~18 wt% chromium (Cr), with increased oxidation resistance at high operating temperatures.

CONFORMANCES

AWS A5.22	EC439Nb
ASME SFA 5.22	EC439Nb

DIAMETERS (in [mm])

0.045 (1.2), 0.052 (1.3), 1/16 (1.6)

POSITIONS



SHIELDING GAS

Ar + 0.5-5% CO₂, Ar + 0.5-3% O₂

Flow Rate: 40 - 50 CFH

POLARITY

Direct Current Electrode Positive (DCEP)

TYPICAL WELD DEPOSIT CHEMISTRY (WT%)

Shielding Gas	C	Cr	Cu	Mn	Mo	Nb	Ni	P	S	Si	Ti
Argon	0.03	17.9	0.02	0.35	<0.01	0.40	0.03	0.015	0.010	0.65	0.30



Revision: 1/17/2025

Notice: Be sure to follow all your employers safety practices, policies and procedures when using this product. Refer to CSA W117.2 and ANSI Z49.1 Safety in Welding, Cutting and Allied Processes for further information and the manufactures SDS sheet. The results reported are based upon testing of the product under controlled laboratory conditions in accordance with American Welding Society Standards. Actual use of the product may produce different results due to varying conditions. An example of such conditions would be electrode size, plate chemistry, environment, weldment design, fabrication methods, welding procedure and service requirements. Thus the results are not guarantees for use in the field. The manufacturer disclaims any warranty of merchantability or fitness for any particular purpose with respect to its products.

600 Enterprise Drive, P.O. Box 259, Fort Loramie, Ohio 45845-0259 • 800-341-5215 • www.Select-Arc.com

RECOMMENDED WELDING PARAMETERS **

Diameter in (mm)	Shielding Gas	Position	WFS* in/min (m/min)	Amps	Volts	CTWD* in (mm)
0.045 (1.2 mm)	98% Ar/2% O ₂	Flat & Horizontal	280 (7.1)	200	20	1/2 - 5/8 (13 - 16)
		Flat & Horizontal	350 (8.9)	220	21	1/2 - 5/8 (13 - 16)
		Flat & Horizontal	400 (10.2)	250	23	5/8 (16)
		Flat & Horizontal	475 (12.1)	275	25	5/8 (16)
0.052 (1.3 mm)	98% Ar/2% O ₂	Flat & Horizontal	225 (5.7)	215	20	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	290 (7.4)	250	21	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	350 (8.9)	280	23	3/4 (19)
		Flat & Horizontal	425 (10.8)	300	25	3/4 (19)
1/16 (1.6 mm)	98% Ar/2% O ₂	Flat & Horizontal	225 (5.7)	260	21	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	265 (6.7)	285	22	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	300 (7.6)	310	23	3/4 - 1 (19 - 25)
		Flat & Horizontal	350 (8.9)	335	25	3/4 - 1 (19 - 25)

* WFS = Wire Feed Speed, CTWD = Contact Tip To Work Distance

**The parameters listed are recommended starting points of operation and the ranges for amperage, wfs, and voltage could be extended based on fitness for application. For products with "all-position" capability, as determined and listed in classification, the position recommendation can be determined based on operator skill and material thickness and isn't limited to the listing.

PACKAGING (lbs (kgs))

33 (15) Spools, 60 (27.2) Coils, 500 (226.8) Round Drum, 800 (362.9) Hex Drum, 900 (408.2) Hex Drum

*Some packaging options may not be available depending on diameter and product. Special package options may be available upon request.

STORAGE AND HANDLING

All products should be stored in original packaging, in dry conditions and handled with care. For more information refer to our website.



Notice: Be sure to follow all your employers safety practices, policies and procedures when using this product. Refer to CSA W117.2 and ANSI Z49.1 Safety in Welding, Cutting and Allied Processes for further information and the manufactures SDS sheet. The results reported are based upon testing of the product under controlled laboratory conditions in accordance with American Welding Society Standards. Actual use of the product may produce different results due to varying conditions. An example of such conditions would be electrode size, plate chemistry, environment, weldment design, fabrication methods, welding procedure and service requirements. Thus the results are not guarantees for use in the field. The manufacturer disclaims any warranty of merchantability or fitness for any particular purpose with respect to its products.