

**Specifications:**

AWS A5.9  
AWS Class ER409Nb  
ASME SFA 5.9  
UNS S40940

**Properties:**

**Tensile Strength:** 67,000 psi  
**Yield Strength:** 50,500 psi  
**Elongation:** 26%

**Description:**

ER409Nb is a filler wire that has a ferritic microstructure and is used to join similar base metals. This alloy has the addition of niobium, which creates niobium carbides and prevents chromium carbides, therefore giving ER409Nb a better resistance to corrosion. ER409Nb is typically used in the production of exhaust system parts such as mufflers and catalytic converters.

Available in multiple sizes and diameters

**Chemical Composition (Wt%)**

Si	Mn	Cu	Mo	S	Ni	Cr	P	C	Nb + Ta
1.0	0.80	0.75	0.50	0.03	0.60	10.5-13.5	0.04	0.08	(10 x C) min - 0.75 max

Note: Single values are maximum unless otherwise noted.

Maintaining a proper welding procedure, including pre-heat and interpass temperatures, may be critical depending on the type and thickness of material being welded.

**CAUTION:** Consumers should be thoroughly familiar with the safety precautions on the warning label posted in each shipment and in the American National Standards A49.1, "Safety in Welding and Cutting," published by the American Welding Society, 8669 NW 36 Street, #130, Miami, FL 33126: OSHA Safety and Health Standards 29 CFR 1910 is available from the U.S. Department of Labor, Washington, D.C. 20210.