

**Specifications:**

AWS A5.9  
AWS ER309/ER309L  
ASME SFA 5.9  
UNS S30983/ S30980

**Properties:**

**Yield Strength:** 58,000 psi  
**Tensile Strength:** 89,900 psi  
**Elongation:** 40%

**Description:**

ER309/ER309L is similar in composition to E309/309L, with the minor difference of the carbon being lower than 0.03% in ER309/ER309L. The lower carbon content allows for a reduction in the likelihood of intergranular carbide precipitation without having to use a stabilizer such as titanium. Filler metals of this classification are commonly used for welding similar alloys in the wrought or cast form. They are also used to weld Type 304 and similar base metals where severe corrosion conditions exist requiring higher alloy weld metal. They are used in dissimilar metal welds, such as joining Type 304 to carbon steel.

Available in multiple sizes and diameters.

**Chemical Composition (Wt%)**

Si	Mn	Cu	Mo	S	Ni	Cr	P	C
0.30-0.65	1.0 - 2.5	0.75	0.75	0.03	12.0-14.0	23.0-25.0	0.03	0.03

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.