



# Product Data Sheet

W 'Tungsten inert gas arc welding'

# OK Tigrod 309L

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## REASON FOR ISSUE

CWB approval now valid for all item numbers.

## GENERAL

Bare corrosion resisting chromium-nickel welding rod for welding of similar steels of 24% Cr, 13% Ni types. The alloy is also used for welding of buffer layers on CMn steels and welding of dissimilar joints. When using the wire for buffer layers and dissimilar joints it is necessary to control the dilution of the weld.

OK Tigrod 309L has a good general corrosion resistance. When used for joining dissimilar materials the corrosion resistance is of secondary importance.

**Shielding Gas:** I1 (EN ISO 14175)

**Alloy Type:** Austenitic (with approx. 10 % ferrite) 24 % Cr - 13 % Ni - Low C

## CLASSIFICATIONS Wire Electrode

EN ISO 14343-A W 23 12 L  
SFA/AWS A5.9 ER309L  
Werkstoffnummer ~1.4332

## APPROVALS

CE EN 13479  
CWB AWS A5.9  
VdTÜV 10021

## CHEMICAL COMPOSITION

	All Weld Metal (%)	Wire/Strip (%)	
	Nom	Min	Max
C	0.015		0.03
Si	0.4	0.30	0.65
Mn	1.7	1.4	2.2
P	0.020		0.030
S	0.015		0.020
Cr	24.0	23.0	25.0
Ni	13.0	12.0	14.0
Mo	0.1		0.3
Cu	0.1		0.3
N			0.11
Others tot			0.50

## MECHANICAL PROPERTIES OF WELD METAL

Properties	All Weld Metal	
	Min	Typ
	As welded	
Rp0.2 (MPa)	320	430
Rm (MPa)	510	590
A4-A5 (%)	25	40
Charpy V at 20°C (J)		160
Charpy V at -60°C (J)		130
Charpy V at -110°C (J)		90

**Comments:**