

Industeel UREA 316L Modified 316L Mod Low Si, High Mo Stainless Steel for Urea Plants

Category : Metal , Ferrous Metal , Stainless Steel , T 300 Series Stainless Steel

Material Notes:

Description: UREA 316L Modified grade has been specially developed for Urea plant applications. It is a 316L modified stainless steel with extra-low silicon content and substantial higher molybdenum contents. The low carbon content, combined with a well balanced chemistry (low silicon and nickel content close to 14%) makes the alloy fully austenitic, free of intermetallic phase precipitations. The ferrite level is kept under 0.5% in the solution annealing and water quenched conditions. The alloy is designed for improved corrosion resistance properties in Ureacarbonate environments. Information provided by manufacturer.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Industeel-UREA-316L-Modified-316L-Mod-Low-Si-High-Mo-Stainless-Steel-for-Urea-Plants.php

Physical Properties	Metric	English	Comments
Density	7.90 g/cc	0.285 lb/in ³	

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	>= 490 MPa	>= 71100 psi	Minimum Guaranteed
	530 MPa	76900 psi	Typical after Solution Annealing
Tensile Strength, Yield	>= 190 MPa	>= 27600 psi	Minimum Guaranteed
	250 MPa	36300 psi	Typical after Solution Annealing
	@Strain 0.200 %	@Strain 0.200 %	
	280 MPa	40600 psi	Typical after Solution Annealing
	@Strain 1.00 %	@Strain 1.00 %	
Elongation at Break	55 %	55 %	Typical
Modulus of Elasticity	200 GPa	29000 ksi	
Poissons Ratio	0.333	0.333	Calculated
Shear Modulus	75.0 GPa	10900 ksi	
	@Temperature 20.0 °C	@Temperature 68.0 °F	
Charpy Impact	>= 120 J	>= 88.5 ft-lb	

Thermal Properties	Metric	English	Comments
CTE, linear	16.0 µm/m-°C	8.89 µin/in-°F	
	@Temperature 20.0 - 100 °C	@Temperature 68.0 - 212 °F	

Thermal Properties	Metric	English	Comments
	@Temperature 20.0 - 300 °C	@Temperature 68.0 - 572 °F	
	17.5 μm/m-°C	9.72 μin/in-°F	
	@Temperature 20.0 - 500 °C	@Temperature 68.0 - 932 °F	
Specific Heat Capacity	0.500 J/g-°C	0.120 BTU/lb-°F	
	@Temperature 20.0 °C	@Temperature 68.0 °F	
Thermal Conductivity	15.0 W/m-K	104 BTU-in/hr-ft²-°F	
	@Temperature 20.0 °C	@Temperature 68.0 °F	

Component Elements Properties	Metric	English	Comments
Carbon, C	<= 0.030 %	<= 0.030 %	
Chromium, Cr	18 %	18 %	
Iron, Fe	63.37 - 64.9 %	63.37 - 64.9 %	As remainder
Manganese, Mn	1.0 - 2.0 %	1.0 - 2.0 %	
Molybdenum, Mo	2.6 %	2.6 %	
Nickel, Ni	13.5 %	13.5 %	
Silicon, Si	<= 0.50 %	<= 0.50 %	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	0.0000740 ohm-cm	0.0000740 ohm-cm	
	@Temperature 20.0 °C	@Temperature 68.0 °F	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China