



Luran® 388S

INEOS Styrolution - Styrene Acrylonitrile

Tuesday, November 5, 2019

General Information

Product Description

Luran® 388S is a specialty grade of SAN with enhanced chemical resistance and the highest mechanical strength. It is suitable for injection molding and extrusion applications.

FEATURES

- Very good chemical resistance
- Very good mechanical strength
- Good surface appearance
- Good heat resistance
- Excellent transparency
- Excellent dimensional stability

APPLICATIONS

- Battery housings
- Storage boxes
- Toilet seats
- Sanitary equipment
- Kitchen robot

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Chemical Resistant • Good Surface Finish	• High Clarity • High Dimensional Stability	• High Strength • Medium Heat Resistance
Uses	• Battery Cases • Housings	• Sanitary Products • Toilet Seats	
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.08	g/cm ³	ISO 1183
Apparent (Bulk) Density ²	0.65	g/cm ³	
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	7.00	cm ³ /10min	ISO 1133
Molding Shrinkage	0.30 to 0.70	%	ISO 294-4
Water Absorption (Equilibrium, 73°F, 50% RH)	0.30	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	551000	psi	ISO 527-2
Tensile Stress (Yield, 73°F)	11500	psi	ISO 527-2
Tensile Strain (Break, 73°F)	4.0	%	ISO 527-2
Tensile Creep Modulus (1 hr)	508000	psi	ISO 899-1
Tensile Creep Modulus (1000 hr)	406000	psi	ISO 899-1
Flexural Stress (73°F)	20300	psi	ISO 178

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Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	1.2	ft-lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	9.0	ft-lb/in ²	
73°F	10	ft-lb/in ²	
Notched Izod Impact Strength			ISO 180/A
-22°F	1.2	ft-lb/in ²	
73°F	1.2	ft-lb/in ²	
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	86		
Ball Indentation Hardness	25400	psi	ISO 2039-1
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature ³ (66 psi, Annealed)	216	°F	ISO 75-2/B
Heat Deflection Temperature ³ (264 psi, Annealed)	194	°F	ISO 75-2/A
Vicat Softening Temperature	225	°F	ISO 306/B50
CLTE - Flow	3.9E-5	in/in/°F	ISO 11359-2
Thermal Conductivity	1.2	Btu·in/hr/ft ² /°F	DIN 52612
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+15	ohms	IEC 60093
Volume Resistivity	1.0E+16	ohms·cm	IEC 60093
Dielectric Constant (100 Hz)	3.00		IEC 60250
Dissipation Factor			IEC 60250
100 Hz	5.0E-3		
1 MHz	8.0E-3		
Optical	Nominal Value	Unit	Test Method
Refractive Index	1.560		ISO 489
Transmittance (550 nm)	> 89.0	%	ASTM D1003
Haze	< 1.00	%	ASTM D1003

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	176	°F
Drying Time	2.0 to 4.0	hr
Processing (Melt) Temp	428 to 500	°F
Mold Temperature	104 to 176	°F
Injection Velocity	472	in/min

Notes

¹ Typical properties: these are not to be construed as specifications.

² With external lubricant

³ 4h/80°C