



Zenite® 6140L

Celanese Corporation - Liquid Crystal Polymer

Sunday, November 3, 2019

General Information

Product Description

Zenite® 6140L is a 40% glass fiber reinforced and lubricated liquid crystal polymer for injection molding. It has excellent impact resistance and excellent heat deflection temperature.

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • Asia Pacific • Latin America • North America
Filler / Reinforcement	• Glass Fiber, 40% Filler by Weight
Additive	• Lubricant
Features	• Good Impact Resistance • Lubricated
RoHS Compliance	• Contact Manufacturer
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.71	g/cm ³	ISO 1183
Molding Shrinkage			ISO 294-4
Across Flow	0.50	%	
Flow	0.10	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2.47E+6	psi	ISO 527-2/1A
Tensile Stress (Break)	18900	psi	ISO 527-2/1A/5
Tensile Strain (Break)	1.1	%	ISO 527-2/1A/5
Flexural Modulus (73°F)	2.39E+6	psi	ISO 178
Flexural Stress (73°F)	27600	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	7.1	ft-lb/in ²	
73°F	7.1	ft-lb/in ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	9.5	ft-lb/in ²	
73°F	11	ft-lb/in ²	
Notched Izod Impact Strength (73°F)	5.7	ft-lb/in ²	ISO 180/1A
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Unannealed)	536	°F	ISO 75-2/A
Melting Temperature ²	635	°F	ISO 11357-3
CLTE - Flow	2.2E-6	in/in/°F	ISO 11359-2
CLTE - Transverse	3.6E-5	in/in/°F	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+15	ohms	IEC 60093
Volume Resistivity	> 1.0E+15	ohms·cm	IEC 60093
Electric Strength	1100	V/mil	IEC 60243-1
Comparative Tracking Index	175	V	IEC 60112

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Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.016 in		V-0	
0.06 in		V-0	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	302	°F
Drying Time	3.0	hr
Suggested Max Moisture	0.010	%
Processing (Melt) Temp	662 to 680	°F
Mold Temperature	104 to 302	°F

Notes

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

² 10°C/min