



Zenite® 7130

Celanese Corporation - Liquid Crystal Polymer

Sunday, November 3, 2019

General Information

Product Description

Zenite® 7130 is a 30% glass fiber reinforced 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, 30% Filler by Weight
Features	• Good Impact Resistance
RoHS Compliance	• Contact Manufacturer
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.62	g/cm ³	ISO 1183
Molding Shrinkage			ISO 294-4
Across Flow	0.60	%	
Flow	0.0	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2.47E+6	psi	ISO 527-2/1A
Tensile Stress (Break)	21800	psi	ISO 527-2/1A/5
Tensile Strain (Break)	1.5	%	ISO 527-2/1A/5
Flexural Modulus (73°F)	1.89E+6	psi	ISO 178
Flexural Stress (73°F)	30500	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	9.5	ft·lb/in ²	
73°F	9.5	ft·lb/in ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	10	ft·lb/in ²	
73°F	14	ft·lb/in ²	
Notched Izod Impact Strength (73°F)	8.6	ft·lb/in ²	ISO 180/1A
Unnotched Izod Impact Strength (73°F)	14	ft·lb/in ²	ISO 180/1U
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Unannealed)	590	°F	ISO 75-2/A
Glass Transition Temperature ²	248	°F	ISO 11357-2
Melting Temperature ²	666	°F	ISO 11357-3
CLTE - Flow	1.7E-6	in/in/°F	ISO 11359-2
CLTE - Transverse	3.4E-5	in/in/°F	ISO 11359-2

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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
Relative Permittivity			IEC 60250
100 Hz	4.10		
1 MHz	3.70		
Dissipation Factor			IEC 60250
100 Hz	0.014		
1 MHz	0.030		
Comparative Tracking Index	175	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.016 in)	V-0		UL 94
Oxygen Index	45	%	ISO 4589-2

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	302	°F
Drying Time	3.0	hr
Suggested Max Moisture	0.010	%
Hopper Temperature	68 to 86	°F
Rear Temperature	671 to 689	°F
Middle Temperature	680 to 698	°F
Front Temperature	680 to 698	°F
Nozzle Temperature	680 to 698	°F
Processing (Melt) Temp	680 to 698	°F
Mold Temperature	176 to 248	°F
Back Pressure	< 435	psi

Injection Notes

Feeding zone temperature: 40 to 60°C
Zone4 temperature: 360 to 370°C

Notes

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

² 10°C/min