



Vectra® E130G

Celanese Corporation - Liquid Crystal Polymer

Sunday, November 3, 2019

General Information

Product Description

30% glass fiber filled / low injection pressure Chemical abbreviation according to ISO 1043-1 : LCP Inherently flame retardant UL-Listing V-0 in natural and black at 0.75mm thickness per UL 94 flame testing. Relative-Temperature-Index (RTI) according to UL 746B: electricals 130°C, mechanicals 130°C. UL = Underwriters Laboratories (USA)

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • Asia Pacific • Latin America • North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
RoHS Compliance	• Contact Manufacturer
Resin ID (ISO 1043)	• LCP

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.61	g/cm ³	ISO 1183
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.74E+6	psi	ISO 527-2/1A
Tensile Stress (Break)	20300	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.0	%	ISO 527-2/1A/5
Flexural Modulus (73°F)	1.74E+6	psi	ISO 178
Flexural Stress (73°F)	24700	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact Strength (73°F)	12	ft·lb/in ²	ISO 180/1A
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (66 psi, Unannealed)	523	°F	ISO 75-2/B
Heat Deflection Temperature (264 psi, Unannealed)	473	°F	ISO 75-2/A
Melting Temperature ²	635	°F	ISO 11357-3
CLTE - Flow	2.8E-6	in/in/°F	ISO 11359-2
CLTE - Transverse	3.7E-5	in/in/°F	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+14	ohms	IEC 60093
Volume Resistivity	> 1.0E+15	ohms·cm	IEC 60093
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.030 in)	V-0		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	302 to 338	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.010	%
Rear Temperature	599 to 635	°F
Middle Temperature	608 to 653	°F
Front Temperature	617 to 671	°F

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Injection	Nominal Value	Unit
Nozzle Temperature	635 to 662	°F
Processing (Melt) Temp	635 to 671	°F
Mold Temperature	176 to 248	°F
Injection Rate	Fast	

Injection Notes

Zone4 temperature: 330 to 360°C

Notes

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

² 10°C/min