



Vectra® J540

Celanese Corporation - Liquid Crystal Polymer

Sunday, November 3, 2019

General Information

Product Description

40% Mineral filled, high heat resistance. Chemical abbreviation according to ISO 1043-1 : LCP Inherently flame retardant FDA compliant

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Mineral, 40% Filler by Weight		
Features	• Flame Retardant	• High Heat Resistance	
Agency Ratings	• FDA Unspecified Rating		
RoHS Compliance	• Contact Manufacturer		
Resin ID (ISO 1043)	• LCP		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.74	g/cm ³	ISO 1183
Molding Shrinkage			ISO 294-4
Across Flow	0.40	%	
Flow	0.10	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.31E+6	psi	ISO 527-2/1A
Tensile Stress (Break)	15200	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.3	%	ISO 527-2/1A/5
Flexural Modulus (73°F)	1.45E+6	psi	ISO 178
Flexural Stress (73°F)	17400	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact Strength (73°F)	2.4	ft-lb/in ²	ISO 180/1A
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (66 psi, Unannealed)	541	°F	ISO 75-2/B
Heat Deflection Temperature (264 psi, Unannealed)	464	°F	ISO 75-2/A
Melting Temperature ²	662	°F	ISO 11357-3

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	302 to 338	°F
Drying Time	6.0	hr
Suggested Max Moisture	0.010	%
Hopper Temperature	68 to 140	°F
Rear Temperature	635 to 653	°F
Middle Temperature	644 to 662	°F
Front Temperature	653 to 671	°F
Nozzle Temperature	662 to 680	°F
Processing (Melt) Temp	653 to 680	°F
Mold Temperature	176 to 284	°F

Vectra® J540

Celanese Corporation - Liquid Crystal Polymer

Injection	Nominal Value	Unit
Injection Rate		Fast

Injection Notes

Feeding zone temperature: 80 to 120°C

Zone4 temperature: 350 to 360°C

Hot runner temperature: 365 to 375°C

Notes

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

² 10°C/min