



Vectra® E845i LDS

Celanese Corporation - Liquid Crystal Polymer

Sunday, November 3, 2019

General Information

Product Description

LDS capable LCP with higher DTUL and impact Chemical abbreviation according to ISO 1043-1 : LCP Inherently flame retardant UL-Listing V-0 in black a 0.25mm thickness per UL 94 flame testing. UL = Underwriters Laboratories (USA)

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • Asia Pacific • Latin America • North America
Features	• Flame Retardant
Resin ID (ISO 1043)	• LCP

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.77	g/cm ³	ISO 1183
Molding Shrinkage			ISO 294-4
Across Flow	0.20	%	
Flow	0.0	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2.03E+6	psi	ISO 527-2/1A
Tensile Stress (Break)	18900	psi	ISO 527-2/1A/5
Tensile Strain (Break)	1.7	%	ISO 527-2/1A/5
Flexural Modulus (73°F)	2.03E+6	psi	ISO 178
Flexural Stress (73°F)	26100	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	9.5	ft·lb/in ²	ISO 179/1eA
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Unannealed)	491	°F	ISO 75-2/A
Melting Temperature ²	635	°F	ISO 11357-3
CLTE - Flow	4.4E-6	in/in/°F	ISO 11359-2
CLTE - Transverse	3.2E-5	in/in/°F	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Relative Permittivity (1 MHz)	3.87		IEC 60250
Dissipation Factor (1 MHz)	0.037		IEC 60250

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	302	°F
Drying Time	6.0	hr
Suggested Max Moisture	0.010	%
Hopper Temperature	68 to 86	°F
Rear Temperature	599 to 617	°F
Middle Temperature	608 to 626	°F
Front Temperature	617 to 635	°F
Nozzle Temperature	644 to 662	°F

Vectra® E845i LDS

Celanese Corporation - Liquid Crystal Polymer

Injection	Nominal Value	Unit
Processing (Melt) Temp	644 to 662	°F
Mold Temperature	176 to 248	°F
Injection Rate	Moderate	

Injection Notes

Feeding zone temperature: 60 to 80°C

Zone4 temperature: 335 to 345°C

Hot runner temperature: 340 to 350°C

Notes

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

² 10°C/min