

Product Texts

Good wear characteristics. 25% graphite filled. Chemical abbreviation according to ISO 1043-1 : LCP Inherently flame retardant UL-Listing V-0 at 0.45mm thickness per UL 94 flame testing. Relative-Temperature-Index (RTI) according to UL 746B: electrical 130°C, mechanical 130°C.. UL = Underwriters Laboratories (USA)

Flammability at thickness h V-0 -

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.1	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.5	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	9000	MPa	ISO 527
^[C] Stress at break	140	MPa	ISO 527
^[C] Strain at break	5.7	%	ISO 527
^[C] Charpy impact strength, +23°C	67	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	11	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	280	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 1.80 MPa	185	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	225	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	159	°C	ISO 306
^[C] Coeff. of linear therm. expansion, parallel	9	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	30	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at thickness h	V-0	class	IEC 60695-11-10

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 100Hz	30	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	13	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	400	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	1500	E-4	IEC 62631-2-1
^[C] Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	1E11	Ohm	IEC 62631-3-2

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Humidity absorption	0.03	%	Sim. to ISO 62
^[C] Density	1540	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Special Characteristics

Flame retardant, Light stabilized or stable to light

Delivery form

Pellets

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Other text information**Injection molding**

Vectra resins are well known for their excellent thermal and hydrolytic stability. In order to ensure these properties are optimum, the resin should be dried correctly prior to processing. Vectra A-grades should be dried at 150 C for a minimum of 4 hours in a desiccant dryer.

A three-zone screw evenly divided into feed, compression, and metering zones is preferred. A higher percentage of feed flights may be needed for smaller machines: 1/2 feed, 1/4 compression, 1/4 metering.

Vectra LCPs are shear thinning, their melt viscosity decreases quickly as shear rate increases. For parts that are difficult to fill, the molder can increase the injection velocity to improve melt flow.