

Product Texts

The Standard for the Industry. Excellent balance of properties, including easy flow, easy processing, thermal stability, chemical resistance, mechanical and electrical properties. Suitable for vapor phase surface mount electrical and electronic devices. 30% glass reinforced Chemical abbreviation according to ISO 1043-1 : LCP Inherently flame retardant FDA compliant UL-Listing V-0 in natural and black at 0.2mm thickness per UL 94 flame testing, and UL-5VA in natural at 1.5mm. Relative-Temperature-Index (RTI) according to UL 746B: electricals 240°C, mechanicals 220°C at 0.85mm. UL = Underwriters Laboratories (USA)

Flammability at thickness h V-0 -

Processing/Physical Characteristics

	Value	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.2	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.4	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties

	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	15000	MPa	ISO 527
^[C] Stress at break	190	MPa	ISO 527
^[C] Strain at break	2.1	%	ISO 527
^[C] Charpy notched impact strength, +23°C	44	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	235	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	250	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	160	°C	ISO 306
^[C] Coeff. of linear therm. expansion, parallel	6	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	23	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at thickness h	V-0	class	IEC 60695-11-10
^[C] Oxygen index	45	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties

	Value	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 100Hz	4.2	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	3.7	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	160	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	180	E-4	IEC 62631-2-1
^[C] Volume resistivity	1E13	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	>1E15	Ohm	IEC 62631-3-2
^[C] Electric strength	31	kV/mm	IEC 60243-1

[C]: CAMPUS

Other properties

	Value	Unit	Test Standard
^[C] Humidity absorption	0.04	%	Sim. to ISO 62
^[C] Density	1620	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Delivery form

Pellets, Black, Natural Color

Special Characteristics

Flame retardant, Light stabilized or stable to light

Features

Thermal Stability

Chemical Resistance

General Chemical Resistance

Certifications

Food contact, Food approval FDA 21 CFR

Applications

Electrical and Electronical

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.