

**Product Texts**

Provides easier flow than A130. Slightly tougher, but may warp slightly more than A130 in some parts. 15% glass reinforced. Chemical abbreviation according to ISO 1043-1 : LCP Inherently flame retardant FDA compliant UL-Listing V-0 in natural and black at 0.44mm thickness per UL 94 flame testing. 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
<b>ISO Data</b>			
<sup>[C]</sup> Molding shrinkage, parallel	0.1	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	0.4	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	12000	MPa	ISO 527
<sup>[C]</sup> Stress at break	200	MPa	ISO 527
<sup>[C]</sup> Strain at break	3.1	%	ISO 527
<sup>[C]</sup> Charpy notched impact strength, +23°C	70	kJ/m <sup>2</sup>	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melting temperature, 10°C/min	280	°C	ISO 11357-1/-3
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	230	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	250	°C	ISO 75-1/-2
<sup>[C]</sup> Vicat softening temperature, B	162	°C	ISO 306
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	10	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	18	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Burning Behav. at thickness h	V-0	class	IEC 60695-11-10

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Relative permittivity, 100Hz	3.5	-	IEC 62631-2-1
<sup>[C]</sup> Relative permittivity, 1MHz	3	-	IEC 62631-2-1
<sup>[C]</sup> Dissipation factor, 100Hz	200	E-4	IEC 62631-2-1
<sup>[C]</sup> Dissipation factor, 1MHz	180	E-4	IEC 62631-2-1
<sup>[C]</sup> Volume resistivity	1E13	Ohm*m	IEC 62631-3-1
<sup>[C]</sup> Surface resistivity	>1E15	Ohm	IEC 62631-3-2
<sup>[C]</sup> Electric strength	34	kV/mm	IEC 60243-1

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
<sup>[C]</sup> Water absorption	0.006	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	0.003	%	Sim. to ISO 62
<sup>[C]</sup> Density	1500	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

**Characteristics**

**Processing**

Injection Molding

**Certifications**

Food contact, Food approval FDA 21 CFR

**Delivery form**

Pellets, Black, Natural Color

**Regional Availability**

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

**Special Characteristics**

Flame retardant, Light stabilized or stable to light, U.V. stabilized or stable to weather, Heat stabilized or stable to heat

**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.