

ZENITE® 7244

Liquid Crystal Polymer

Zenite' 7244 is a 40% glass mineral reinforced liquid crystal polymer resin with a high heat deflection temperature of 295C, high flow and good flatness.

Product information

Resin Identification	LCP-(GF+MD)4 0	ISO 1043
Part Marking Code	>LCP-(GF+MD)40<	ISO 11469

Rheological properties

Moulding shrinkage, parallel	0.1 %	ISO 294-4, 2577
Moulding shrinkage, normal	0.5 %	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	14000 MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	115 MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	1.4 %	ISO 527-1/-2
Flexural modulus	11300 MPa	ISO 178
Flexural strength	180 MPa	ISO 178
Charpy notched impact strength, 23°C	9 kJ/m ²	ISO 179/1eA
Poisson's ratio	0.33 ^[C]	

[C]: Calculated

Thermal properties

Temperature of deflection under load, 1.8 MPa	295 °C	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	6 E-6/K	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	41 E-6/K	ISO 11359-1/-2

Flammability

Burning Behav. at thickness h	V-0 class	IEC 60695-11-10
Thickness tested	0.35 mm	IEC 60695-11-10
UL recognition	yes	UL 94

Electrical properties

Comparative tracking index	200	IEC 60112
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Physical/Other properties

Density	1730 kg/m ³	ISO 1183
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Injection

Drying Recommended	yes
Drying Temperature	150 °C
Drying Time, Dehumidified Dryer	4 - 6 h
Processing Moisture Content	≤0.01 %
Melt Temperature Optimum	365 °C
Min. melt temperature	360 °C

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Max. melt temperature	370 °C
Screw tangential speed	0.2 - 0.3 m/s
Mold Temperature Optimum	100 °C
Min. mould temperature	80 °C
Max. mould temperature	120 °C
Back pressure	3 MPa
Ejection temperature	320 °C

Characteristics

Processing

Injection Moulding

Special characteristics

Flame retardant, Heat stabilised or stable to heat, High Flow, Low Warpage, Lead-free soldering resistant