

ZENITE® 7755

Liquid Crystal Polymer

Zenite 7755 is a 55% glass/mineral-reinforced liquid crystal polymer resin for injection molding. It has good impact resistance, excellent temperature resistance, and is suitable for applications in diverse industries.

Product information

Resin Identification	LCP-(GF+MD)5 5	ISO 1043
Part Marking Code	>LCP-(GF+MD)55<	ISO 11469

Rheological properties

Moulding shrinkage, parallel	0 %	ISO 294-4, 2577
Moulding shrinkage, normal	0.1 %	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	17700 MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	100 MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	0.7 %	ISO 527-1/-2
Flexural modulus	18500 MPa	ISO 178
Flexural strength	160 MPa	ISO 178
Charpy notched impact strength, 23°C	5 kJ/m ²	ISO 179/1eA
Poisson's ratio	0.33 ^[C]	

[C]: Calculated

Thermal properties

Melting temperature, 10°C/min	350 °C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	295 °C	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	9 E-6/K	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	39 E-6/K	ISO 11359-1/-2

Flammability

Burning Behav. at 1.5mm nom. thickn.	V-0 class	IEC 60695-11-10
Thickness tested	1.5 mm	IEC 60695-11-10
UL recognition	yes	UL 94

Physical/Other properties

Humidity absorption, 2mm	1.1 %	Sim. to ISO 62
Density	1890 kg/m ³	ISO 1183

Injection

Drying Recommended	yes
Drying Temperature	150 °C
Drying Time, Dehumidified Dryer	4 - 6 h
Processing Moisture Content	≤0.01 %
Melt Temperature Optimum	370 °C
Min. melt temperature	365 °C
Max. melt temperature	375 °C

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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

Characteristics

Processing

Injection Moulding

Special characteristics

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