Celanese
The chemistry inside innovation™

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

Rheological properties

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

Typical mechanical properties

Tensile modulus	2.57E6	psi	ISO 527-1/-2
Tensile stress at break, 5mm/min	14500	psi	ISO 527-1/-2
Tensile strain at break, 5mm/min	0.7	%	ISO 527-1/-2
Flexural modulus	2.68E6	psi	ISO 178
Flexural strength	23400	psi	ISO 178
Charpy notched impact strength, 23°C	2.38	ftlb/in²	ISO 179/1eA

Thermal properties

Melting temperature, 10°C/min	662	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	563	°F	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	0.05	E-4/°F	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	0.217	E-4/°F	ISO 11359-1/-2

Flammability

Burning Behav. at 1.5mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	0.0591	in	IEC 60695-11-10
UL recognition	yes		UL 94

Physical/Other properties

Humidity absorption, 2mm	1.1	%	Sim. to ISO 62
Density	0.0682	lb/in³	ISO 1183

Injection

Drying Recommended	yes	
Drying Temperature	302	°F
Drying Time, Dehumidified Dryer	4 - 6	h
Processing Moisture Content	≤0.01	%
Melt Temperature Optimum	698	°F
Min. melt temperature	689	°F
Max. melt temperature	707	°F
Max. screw tangential speed	0.2 - 0.3	m/s
Mold Temperature Optimum	212	°F

Revised: 2025-03-20 Source: Celanese Materials Database

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Min. mold temperature	176 °F
Max. mold temperature	248 °F
Back pressure	435 psi

Characteristics

Processing	Injection Molding
Special characteristics	Flame retardant, Heat stabilized or stable to heat, High Flow, Lead-free soldering resistant

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