ZENITE® 17311 EFT

Liquid Crystal Polymer

ZENITE® 17311 EFT is a 35% glass and mineral reinforced grade. This grade offers excellent flowability, low warpage, excellent surface appearance, and excellent dimensional stability. Application for this grade is fine pitch connector with thin wall.

Product information

Resin Identification	LCP-(GF+MD)36		ISO 1043
Part Marking Code	>LCP-(GF+MD)36<		ISO 11469

Rheological properties

Molding shrinkage, parallel	0	%	ISO 294-4, 2577
Molding shrinkage, normal	0.6	%	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	1.6E6	psi	ISO 527-1/-2
Tensile stress at break, 5mm/min	16000	psi	ISO 527-1/-2
Tensile strain at break, 5mm/min	2	%	ISO 527-1/-2
Flexural modulus	1.6E6	psi	ISO 178
Flexural strength	23200	psi	ISO 178
Flexural strain at failure	2.4	%	ISO 178
Charpy notched impact strength, 23°C	2.38	ftlb/in^2	ISO 179/1eA

Thermal properties

Melting temperature, 10°C/min	655	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	568	°F	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	0.04	E-4/°F	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	0.372	E-4/°F	ISO 11359-1/-2

Electrical properties

Relative permittivity, 2GHz	4.02[OT, 1]		IEC 61189-2-721
Relative permittivity, 10GHz	3.94[OT]		IEC 61189-2-721
Dissipation factor, 2GHz	22[OT, 1]	E-4	IEC 61189-2-721
Dissipation factor, 10GHz	23[OT]	E-4	IEC 61189-2-721

[OT]: One time tested

[1]: Tested at 1.9GHz

Physical/Other properties

Density	0.0599	lb/in^3	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	689	°F

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Min. melt temperature	680	°F
Max. melt temperature	698	°F
Max. screw tangential speed	0.2 - 0.3	m/s
Mold Temperature Optimum	212	°F
Min. mold temperature	176	°F
Max. mold temperature	248	°F
Back pressure	435	psi
Ejection temperature	500	°F

Characteristics

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

Revised: 2025-10-13 Source: Celanese Materials Database

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