Celanese
The chemistry inside innovation™

ZENITE® 6244L

Liquid Crystal Polymer

Zenite 6244L is a lubricated, 40% glass fiber and mineral reinforced liquid crystal polymer resin. It is well suited for use in the automotive, electrical/electronic, telecommunications, and aerospace industries.

Product information

Resin Identification	LCP-(GF+MD)40	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	0.4	%	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	13100	MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	112	MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	1.5	%	ISO 527-1/-2
Flexural modulus	13200	MPa	ISO 178
Flexural strength	160	MPa	ISO 178
Izod notched impact strength, 23°C	7	kJ/m²	ISO 180/1A
Izod notched impact strength, -30°C	5.0	kJ/m²	ISO 180/1A
Izod impact strength, 23°C	20	kJ/m²	ISO 180/1U
Izod impact strength, -30°C	15	kJ/m²	ISO 180/1U
Poisson's ratio	0.33[C]		

[C]: Calculated

Thermal properties

Temperature of deflection under load, 1.8 MPa	269	°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	50	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

Electrical properties

Relative permittivity, 100Hz	4.4		IEC 62631-2-1
Relative permittivity, 1MHz	3.6		IEC 62631-2-1
Dissipation factor, 100Hz	130	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	230	E-4	IEC 62631-2-1
Volume resistivity	1E14	Ohm.m	IEC 62631-3-1
Surface resistivity	>1E15	Ohm	IEC 62631-3-2
Electric strength	34	kV/mm	IEC 60243-1

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Physical/Other properties

Water absorption, 2mm	0.02	%	Sim. to ISO 62
Density	1730	kg/m³	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	355	°C
Min. melt temperature	350	°C
Max. melt temperature	360	°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

Characteristics

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