

ZENITE® 6140L

40% glass reinforced, lubricated

Zenite® 6140L is a 40% glass fiber reinforced and lubricated liquid crystal polymer for injection molding. It has excellent impact resistance and excellent heat deflection temperature.

Rheological properties

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

Typical mechanical properties

Tensile Modulus	17000 MPa	ISO 527-1/-2
Stress at break, 5mm/min	130 MPa	ISO 527-1/-2
Strain at break, 5mm/min	1.1 %	ISO 527-1/-2
Flexural Modulus	16500 MPa	ISO 178
Flexural Strength	190 MPa	ISO 178
Charpy impact strength, 23°C	23 kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	20 kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	15 kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	15 kJ/m ²	ISO 179/1eA
Izod notched impact strength, 23°C	12 kJ/m ²	ISO 180/1A

Thermal properties

Melting temperature, 10°C/min	335 °C	ISO 11357-1/-3
Temp. of deflection under load, 1.8 MPa	280 °C	ISO 75-1/-2
Ball pressure test	260 °C	IEC 60695-10-2
Coeff. of linear therm. expansion, parallel	4 E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	64 E-6/K	ISO 11359-1/-2

Flammability

Burning Behav. at 1.5mm nom. thickn.	V-0 class	UL 94
Thickness tested	1.5 mm	UL 94
Burning Behav. at thickness h	V-0 class	UL 94
Thickness tested	0.40 mm	UL 94
UL recognition	yes	UL 94

Electrical properties

Volume resistivity	>1E13 Ohm.m	IEC 62631-3-1
Surface resistivity	>1E15 Ohm	IEC 62631-3-2
Electric strength	45 kV/mm	IEC 60243-1
Comparative tracking index	PLC 3 PLC	UL 746A



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Other properties

Density	1710 kg/m ³	ISO 1183
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Injection

Drying Temperature	≥150 °C
Drying Time, Dehumidified Dryer	6 h
Processing Moisture Content	0.01 %
Max. mould temperature	80 - 120 °C

Additional information

Injection molding	Melt Temperature Optimum = 355°C Melt Temperature Range = 350-360°C Mold Temperature Optimum = 100°C Mold Temperature Range = 80-120°C
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Processing Texts

Injection molding	Melt Temperature Optimum = 355°C Melt Temperature Range = 350-360°C Mold Temperature Optimum = 100°C Mold Temperature Range = 80-120°C
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Injection molding Preprocessing	Drying Recommended = Yes Drying Temperature = 130°C Drying Time, Dehumidified Dryer = 4h Processing Moisture Content = <0.01 %
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