

ZENITE® 6130

30% glass reinforced

Zenite® 6130 is a 30% glass fiber reinforced 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	0.8 %	ISO 294-4, 2577

Typical mechanical properties

Tensile Modulus	13000 MPa	ISO 527-1/2
Stress at break, 5mm/min	130 MPa	ISO 527-1/2
Strain at break, 5mm/min	2 %	ISO 527-1/2
Flexural Modulus	11000 MPa	ISO 178
Flexural Strength	190 MPa	ISO 178
Charpy impact strength, 23 °C	40 kJ/m²	ISO 179/1eU
Charpy impact strength, -30 °C	30 kJ/m²	ISO 179/1eU
Charpy notched impact strength, 23 °C	35 kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30 °C	30 kJ/m²	ISO 179/1eA

Thermal properties

Melting temperature, 10 °C/min	335 °C	ISO 11357-1/3
Glass transition temperature, 10 °C/min	120 °C	ISO 11357-1/3
Temp. of deflection under load, 1.8 MPa	268 °C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	300 °C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	3 E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	70 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	0.20 mm	UL 94
UL recognition	yes	UL 94
Oxygen index	41 %	ISO 4589-1/-2

Electrical properties

Relative permittivity, 100Hz	4.5	IEC 62631-2-1
Relative permittivity, 1MHz	4	IEC 62631-2-1
Dissipation factor, 100Hz	150 E-4	IEC 62631-2-1
Dissipation factor, 1MHz	310 E-4	IEC 62631-2-1
Volume resistivity	>1E13 Ohm.m	IEC 62631-3-1
Surface resistivity	>1E15 Ohm	IEC 62631-3-2
Electric strength	36 kV/mm	IEC 60243-1



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Comparative tracking index

PLC 3 PLC

UL 746A

Other properties

Density 1620 kg/m³ ISO 1183

Injection

Drying Temperature	150 °C
Drying Time, Dehumidified Dryer	3 h
Processing Moisture Content	0.01 %
Max. mould temperature	40 - 150 °C

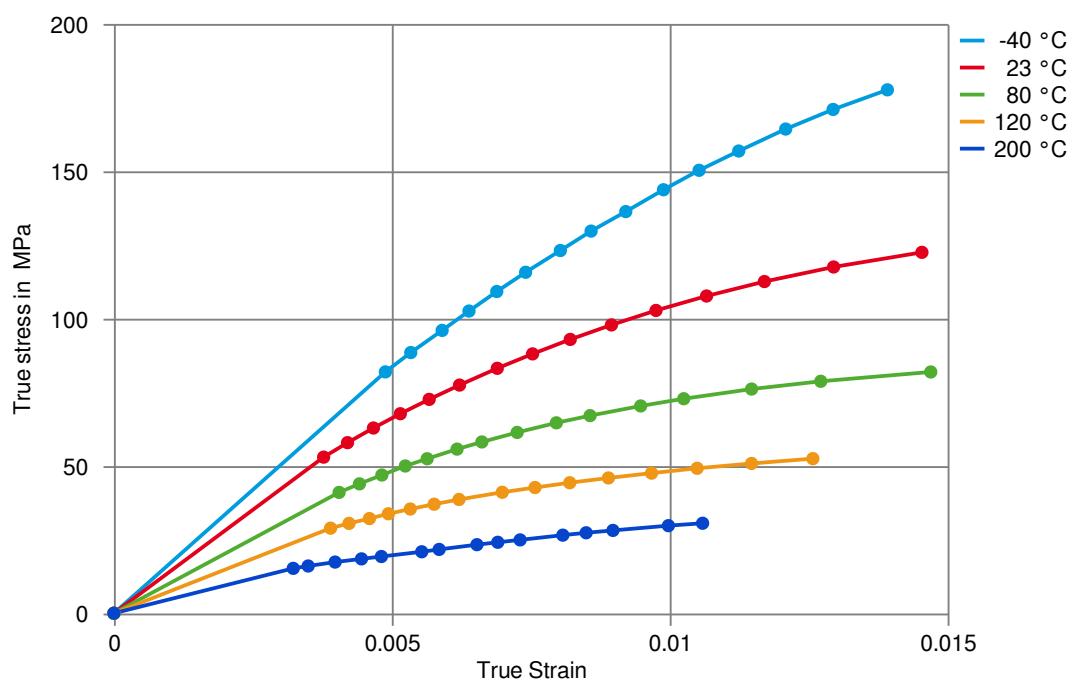
Additional information

Injection molding
Melt Temperature Optimum = 355 °C
Melt Temperature Range = 350-360 °C
Mold Temperature Optimum = 90 °C
Mold Temperature Range = 30-160 °C



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True stress-strain



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Processing Texts

Injection molding

Melt Temperature Optimum = 355 °C
Melt Temperature Range = 350-360 °C
Mold Temperature Optimum = 90 °C
Mold Temperature Range = 30-160 °C

Injection molding Preprocessing

Drying Recommended = Yes
Drying Temperature = 130 °C
Drying Time, Dehumidified Dryer = 4h
Processing Moisture Content = <0.01 %

