

ZENITE® 6330 | LCP | Mineral Reinforced

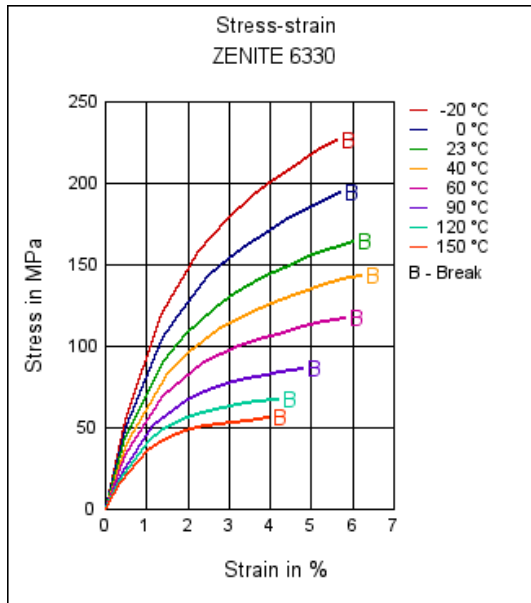
Description

Zenite® 6330 is a 30% mineral reinforced liquid crystal polymer for injection molding. It has excellent impact resistance, excellent heat deflection temperature and is well suited for all kinds of demanding applications.

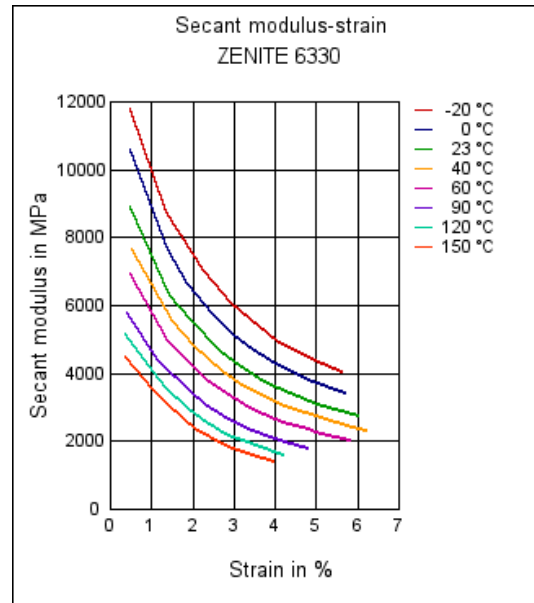
Physical properties	Value	Unit	Test Standard
Density	1640	kg/m ³	ISO 1183
Mold shrinkage - parallel	0	%	ISO 294-4
Mold shrinkage - normal	0.65	%	ISO 294-4
Mechanical properties	Value	Unit	Test Standard
Tensile modulus (1mm/min)	10000	MPa	ISO 527-2/1A
Tensile stress at break (5mm/min)	130	MPa	ISO 527-2/1A
Tensile strain at break (5mm/min)	5	%	ISO 527-2/1A
Flexural modulus (23°C)	9500	MPa	ISO 178
Charpy impact strength @ 23°C	60.0	kJ/m ²	ISO 179/1eU
Charpy impact strength @ -30°C	40.0	kJ/m ²	ISO 179/1eU
Charpy notched impact strength @ 23°C	9.0	kJ/m ²	ISO 179/1eA
Charpy notched impact strength @ -30°C	8.0	kJ/m ²	ISO 179/1eA
Thermal properties	Value	Unit	Test Standard
Melting temperature (10°C/min)	335	°C	ISO 11357-1,-2,-3
Glass transition temperature (10°C/min)	120	°C	ISO 11357-1,-2,-3
DTUL @ 1.8 MPa	245	°C	ISO 75-1/-2
DTUL @ 0.45 MPa	275	°C	ISO 75-1/-2
Coeff.of linear therm. expansion (parallel)	0.08	E-4/°C	ISO 11359-2
Coeff.of linear therm. expansion (normal)	0.4	E-4/°C	ISO 11359-2
Limiting oxygen index (LOI)	47.0	%	ISO 4589
Flammability @1.6mm nom. thickn.	V-0	class	UL94
thickness tested (1.6)	1.5	mm	UL94
UL recognition (1.6)	UL	-	UL94
Flammability at thickness h	V-0	class	UL94
thickness tested (h)	0.85	mm	UL94
UL recognition (h)	UL	-	UL94
Electrical properties	Value	Unit	Test Standard
Relative permittivity - 100 Hz	3.8	-	IEC 60250
Relative permittivity - 1 MHz	3.4	-	IEC 60250
Dissipation factor - 100 Hz	140	E-4	IEC 60250
Dissipation factor - 1 MHz	310	E-4	IEC 60250
Volume resistivity	>1E13	Ohm*m	IEC 60093
Surface resistivity	>1E15	Ohm	IEC 60093
Electric strength	35	kV/mm	IEC 60243-1
Comparative tracking index CTI	200	-	IEC 60112

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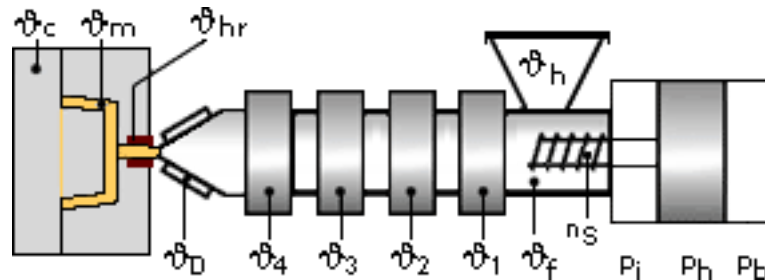
Stress-strain



Secant modulus-strain



Typical injection moulding processing conditions



Pre Drying:

Necessary low maximum residual moisture content: 0.01%

Drying time: 3 h

Drying temperature: 150 - 150 °C

Temperature:

	Mold	Melt
min (°C)	40	350
max (°C)	150	360

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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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