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CELANEX® 733LD

30% glass-fiber reinforced PBT+SAN blend, low warpage grade
Celanex 733LD is a 30% glass-filled PBT alloy that exhibits low warp characteristics. Celanex 733LD is well suited for electrical connectors.

Product information

Part Marking Code	> (PBT+SAN)-GF30 <	ISO 11469

Rheological properties

Melt mass-flow rate	8	g/10min	ISO 1133
Melt mass-flow rate, Temperature	250	°C	
Melt mass-flow rate, Load	2.16	kg	
Moulding shrinkage range, parallel	0.1 - 0.3	%	ISO 294-4, 2577
Moulding shrinkage range, normal	0.5 - 0.7	%	ISO 294-4, 2577

Typical mechanical properties

Tensile Modulus	9927	MPa	ISO 527-1/-2
Stress at break, 5mm/min	127	MPa	ISO 527-1/-2
Strain at break, 5mm/min	2	%	ISO 527-1/-2
Flexural Modulus	10400	MPa	ISO 178
Flexural Strength	200	MPa	ISO 178
Charpy notched impact strength, 23°C	7.2	kJ/m²	ISO 179/1eA
Izod notched impact strength, 23°C	7	kJ/m²	ISO 180/1A

Thermal properties

Temp. of deflection under load, 1.8 MPa	184	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	217	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	23	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	113	E-6/K	ISO 11359-1/-2

Electrical properties

Volume resistivity	1E14	Ohm.m	IEC 62631-3-1
Electric strength	18	kV/mm	IEC 60243-1
Comparative tracking index	PLC 3	PLC	UL 746A
Arc Resistance	93	s	Internal

Other properties

Density	1430	kg/m³	ISO 1183

Characteristics

Additives	Release agent

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Additional information

Injection molding	Rear Temperature 450-480 (230-250) deg F (deg C) Center Temperature 460-490(235-255) deg F (deg C) Front Temperature 470-500 (240-260) deg F (deg C) Nozzle Temperature 480-510 (250-265) deg F (deg C) Melt Temperature 460-510 (235-265) deg F (deg C) Mold Temperature 150-200(65-93) deg F (deg C) Back Pressure 0-50 psi Screw Speed Medium Injection Speed Fast Injection speed, injection pressure and holding pressure have to be optimized to the individual article geometry. To avoid material degradation during processing low back pressure and minimum screw speed have to be used. Overheating of the material has to be avoided, in particular for flame retardant grades. Up to 25% clean and dry regrind may be used.

Processing Texts

Pre-drying	To avoid hydrolytic degradation during processing, CELANEX resins have to be dried to a moisture level equal to or less than 0.02%. Drying should be done in a dehumidifying hopper dryer capable of dewpoints <-40°F (-40°C) at 250°F (121°C) for 4 hours.
Longer pre-drying times/storage	For subsequent storage of the material in the dryer until processed (<= 60 h) it is necessary to lower the temperature to 100° C.
Injection molding	Rear Temperature 450-480 (230-250) deg F (deg C) Center Temperature 460-490(235-255) deg F (deg C) Front Temperature 470-500 (240-260) deg F (deg C) Nozzle Temperature 480-510 (250-265) deg F (deg C) Melt Temperature 460-510 (235-265) deg F (deg C) Mold Temperature 150-200(65-93) deg F (deg C) Back Pressure 0-50 psi Screw Speed Medium Injection Speed Fast Injection speed, injection pressure and holding pressure have to be optimized to the individual article geometry. To avoid material degradation during processing low back pressure and minimum screw speed have to be used. Overheating of the material has to be avoided, in particular for flame retardant grades. Up to 25% clean and dry regrind may be used.
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