CELANEX® 4300LM

PBT-GF30 Celanese

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
[C] Molding shrinkage, parallel	**0.4**	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**9300**	MPa	ISO 527
[C] Stress at break	**130**	MPa	ISO 527
[C] Strain at break	**3.1**	%	ISO 527
[C] Charpy impact strength, +23°C	**40**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**10**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**8.5**	kJ/m²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
[C] Temp. of deflection under load, 1.80 MPa	**200**	°C	ISO 75-1/-2

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
[C] Density	**1530**	kg/m³	ISO 1183

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**121**	°C	-
Pre-drying - Time	**4**	h	-
Processing humidity	**≤0.02**	%	-
Melt temperature	**235 - 260**	°C	-
Mold temperature	**65 - 93**	°C	-

Characteristics

Processing

Injection Molding

Delivery form

Pellets

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Other text information

Injection molding

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 <-30°F (-34°C) at 250°F (121°C) for 4 hours.
Rear Temperature 450-470(230-240) deg F (deg C)
Center Temperature 460-480(235-250) deg F (deg C)
Front Temperature 470-500(240-260) deg F (deg C)
Nozzle Temperature 480-500(250-260) deg F (deg C)
Melt Temperature 460-500(235-260) 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.