

Product Texts

Chemical abbreviation according to ISO 1043-1: PBT PET GF30, PTFE-modified grade with 30% glass fiber for injection molded parts with superior gloss and improved slip and wear characteristics. Flammability UL 94 HB minimum thickness 0.8 mm.

Preliminary Data Sheet

Flammability at thickness h (0.8 HB mm)

Processing/Physical Characteristics

	Value	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	10	cm ³ /10min	ISO 1133
Temperature	265	°C	-
Load	2.16	kg	-

[C]: CAMPUS

Mechanical properties

	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	10500	MPa	ISO 527
^[C] Stress at break	145	MPa	ISO 527
^[C] Strain at break	2.5	%	ISO 527

[C]: CAMPUS

Thermal properties

	Value	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	255	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 1.80 MPa	200	°C	ISO 75-1/-2
^[C] Burning Behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	0.8	mm	-

[C]: CAMPUS

Other properties

	Value	Unit	Test Standard
^[C] Humidity absorption	0.15	%	Sim. to ISO 62
^[C] Density	1500	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics

Processing Injection Molding	Special Characteristics Heat stabilized or stable to heat
Delivery form Pellets	Features High Gloss
Additives Release agent	Regional Availability Europe

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%. The drying should be done in a dry-air dryer (dew point < -30°C) with a temperature of 120 to 140 °C and a drying time of 2 to 4 hours. In case of longer residence times in the dry-air dryer, the temperature should be reduced to 100°C.

The time between drying and processing should be kept as short as possible. The processing machine feed hopper should be closed during the processing operation.

Melt Temperature 265-275 °C

Mold Temperature *) 90-100 °C

Maximum Barrel Residence Time **) 5-10 min
Injection Speed fast
Peripheral screw speed max.0,3 m/sec
Back Pressure 10-30 bar
Injection Pressure 600-1000 bar
Holding Pressure 400-800 bar
Nozzle Design open design preferred

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.

Celanese recommends only externally heated hot runner systems.

*) For moulded parts with especially high requirements to the surface quality or dimensional stability, a mold temperature of up to 110 °C can be advantageous.

**) If the cylinder temperatures are higher than the recommended maximum temperatures, the max. residence time in the barrel has to be reduced.