

CELSTRAN® PP-GF30-0553 XLE - PP

Experimental Grade. Please contact your Celanese representative for further information.

Description

Material code according to ISO 1043-1: PP Polypropylene reinforced with 30 weight percent long glass fibers. Impact modified copolymer, low emission. The fibers are chemically coupled to the polypropylene matrix. The pellets are cylindrical and normally as well as the embedded fibers 10 mm long. Low odor grade, not suggest to use mold release or lubricants in molding.

Physical properties	Value	Unit	Test Standard
Density	1100	kg/m ³	ISO 1183

Mechanical properties	Value	Unit	Test Standard
Tensile modulus	6400	MPa	ISO 527-2/1A
Tensile stress at break, 5mm/min	100	MPa	ISO 527-2/1A
Tensile strain at break, 5mm/min	2.5	%	ISO 527-2/1A
Flexural modulus, 23°C	6300	MPa	ISO 178
Flexural strength, 23°C	160	MPa	ISO 178
Charpy impact strength, 23°C	60	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	25	kJ/m ²	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
Melting temperature, 10°C/min	165	°C	ISO 11357-1/-3
DTUL at 1.8 MPa	160	°C	ISO 75-1, -2

Typical injection moulding processing conditions

Pre Drying	Value	Unit	Test Standard
Necessary low maximum residual moisture content	0.2	%	-
Drying time	2	h	-
Drying temperature	90 - 100	°C	-
Temperature	Value	Unit	Test Standard
Feeding zone temperature	20 - 50	°C	-
Zone1 temperature	200 - 220	°C	-
Zone2 temperature	200 - 220	°C	-
Zone3 temperature	220 - 250	°C	-
Zone4 temperature	220 - 250	°C	-
Nozzle temperature	220 - 250	°C	-
Melt temperature	220 - 250	°C	-
Mold temperature	30 - 70	°C	-
Hot runner temperature	230 - 270	°C	-
Pressure	Value	Unit	Test Standard
Back pressure max.	30	bar	-
Speed	Value	Unit	Test Standard
Injection speed	slow	-	-
Screw Speed	Value	Unit	Test Standard
Screw speed diameter, 40mm	50	RPM	-
Screw speed diameter, 55mm	35	RPM	-
Screw speed diameter, 75mm	25	RPM	-

Other text information

Pre-drying

It is normally not necessary to dry CELSTRAN PP. However, should there be surface moisture (condensate) on the molding compound as a result of incorrect storage, drying is required.

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Characteristics

Product Categories

Low emission, Glass reinforced

Delivery Form

Pellets