CELSTRAN® PP-GF20-03 natural | PP | Glass Reinforced

Description

Material Code according to ISO 104-1: PP

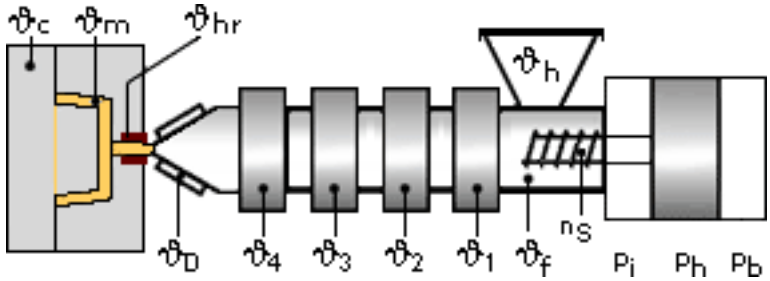
Polypropylene homopolymer reinforced with 20 weight percent long glass fibers. The fibers are chemically coupled to the polyproylene matrix. Then pellets are cylindrical and normally as well as the embedded fibers 10mm long
Developed for aesthetic applications requirering good impact with a class A appearance.

Physical properties	Value	Unit	Test Standard
Density	**1010**	kg/m³	ISO 1183
Mold shrinkage - parallel	**0.47**	%	ISO 294-4
Mold shrinkage - normal	**0.70**	%	ISO 294-4

Mechanical properties	Value	Unit	Test Standard
Tensile modulus (1mm/min)	**5400**	MPa	ISO 527-2/1A
Tensile stress at break (5mm/min)	**105**	MPa	ISO 527-2/1A
Tensile strain at break (5mm/min)	**2.8**	%	ISO 527-2/1A
Flexural modulus (23°C)	**5150**	MPa	ISO 178
Flexural strength (23°C)	**160**	MPa	ISO 178
Charpy notched impact strength @ 23°C	**23.0**	kJ/m²	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
DTUL @ 1.8 MPa	**157**	°C	ISO 75-1/-2

Typical injection moulding processing conditions



Temperature:

	ϑManifold	ϑMold	ϑMelt	ϑNozzle	ϑZone4	ϑZone3	ϑZone2	ϑZone1	ϑFeed
min (°C)	230	30	230	240	250	240	230	220	20
max (°C)	270	70	270	250	250	250	240	230	50

Pressure:

	Inj press	Hold press	Back pressure
min (bar)	600	400	0
max (bar)	1200	800	30

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Speed:

Injection speed: slow

Screw speed

Screw diameter (mm)	16	25	40	55	75
Screw speed (RPM)	-	-	50	35	25