

# CELSTRAN® PP-GF20-0553 XLE

## CELSTRAN® Long Fibre

Material code according to ISO 1043-1: PP Polypropylene with 20 weight percent ash content, long glass fibers reinforced copolymer. 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.

### Product information

Resin Identification	PP-LGF20	ISO 1043
Part Marking Code	>PP-LGF20<	ISO 11469

### Typical mechanical properties

Tensile modulus	4900 MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	92 MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.7 %	ISO 527-1/-2
Flexural modulus	5200 MPa	ISO 178
Flexural strength	150 MPa	ISO 178
Charpy impact strength, 23°C	60 kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	70 kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, 23°C	24 kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	24 kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength, 23°C	23 kJ/m <sup>2</sup>	ISO 180/1A
Poisson's ratio	0.36 <sup>[C]</sup>	

[C]: Calculated

### Thermal properties

Temperature of deflection under load, 1.8 MPa	159 °C	ISO 75-1/-2
---	--------	-------------

### Physical/Other properties

Density	1040 kg/m <sup>3</sup>	ISO 1183
---------	------------------------	----------

### Injection

Back pressure	3 MPa
---------------	-------

### Characteristics

Processing	Injection Moulding
Delivery form	Pellets
Special characteristics	High impact or impact modified, Low emissions

### Additional information

Injection molding

### Preprocessing

**Material Handling:** The best transfer method for Celstran materials is a typical pneumatic system with a filter, although filterless systems are also available. With any system, smooth inner walls are preferred. Too many turns (recommended to use long radius turns), too small size of conveying pipes (recommended diameter >=2 inches), and too high conveying speed

# CELSTRAN® PP-GF20-0553 XLE

## CELSTRAN® Long Fibre

(recommended conveying speed  $\leq 16\text{m/s}$ ) will cause excessive loose fibers accumulation and even blockage. We recommend periodic checks and cleaning of the screen filter in the air conveying system to maintain consistent air flow.

### Processing Notes

#### 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.

**MATERIAL HANDLING:** The best transfer method for Celstran materials is a typical pneumatic system with a filter, although filterless systems are also available. With any system, smooth inner walls are preferred. Too many turns (recommended to use long radius turns), too small size of conveying pipes (recommended diameter  $\geq 2$  inches), and too high conveying speed (recommended conveying speed  $\leq 16\text{m/s}$ ) will cause excessive loose fibers accumulation and even blockage. We recommend periodic checks and cleaning of the screen filter in the air conveying system to maintain consistent air flow.

#### Storage

The product can then be stored in standard conditions until processed.

### Automotive

OEM	STANDARD	ADDITIONAL INFORMATION
Great Wall Motor	MP01 LG-01	
Li Auto	Q/LiA5310050	2021 (V2)
Mercedes-Benz	DBL5404	(5404.70), China
SAIC Motor	SMTC 5 310 041	