



# 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/m²	ISO 179/1eU
Charpy notched impact strength, 23°C	24	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	24	kJ/m²	ISO 179/1eA
Izod notched impact strength, 23°C		kJ/m²	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

Printed: 2025-05-30 Page: 1 of 2

Revised: 2024-11-20 Source: Celanese Materials Database





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(recommended conveying speed <= 16m/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 >=2 inches), and too high conveying speed (recommended conveying speed <= 16m/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

Printed: 2025-05-30 Page: 2 of 2

Revised: 2024-11-20 Source: Celanese Materials Database

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