

CELSTRAN® PA66-GF40-01

CELSTRAN® Long Fibre

Material code according to ISO 1043-1: PA66

Nylon 66 reinforced by 40 weight percent long glass fibers. The pellets are cylindrical and normally as well as the embedded fibers 10 mm long.

Parts molded of CELSTRAN have outstanding mechanical properties such as high strength and stiffness combined with high heat deflection. The notched impact strength is increased at elevated and low temperatures due to the fiber skeleton built in the parts. The long fiber reinforcement reduces creep significantly.

The very isotropic shrinkage in the molded parts minimizes the warpage.

Complex parts can be manufactured with high reproducibility by injection molding.

Can be used for substituting die cast metal with the advantage of Weight reduction, no corrosion problems, no post treatment.

Product information

Resin Identification	PA666-LGF20	ISO 1043
Part Marking Code	>PA666-LGF20<	ISO 11469

Typical mechanical properties

	dry/cond.		
Flexural modulus	11100 / 8600	MPa	ISO 178
Flexural strength	300 / 240	MPa	ISO 178
Flexural strain at failure	3.2 / 3.6	%	ISO 178
Charpy impact strength, 23°C	91 / 91	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	65 / 65	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	36 / 36	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	36 / 37	kJ/m ²	ISO 179/1eA
Izod notched impact strength, 23°C	66 / -	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C	64.0 / -	kJ/m ²	ISO 180/1A

Physical/Other properties

	dry/cond.		
Density	1460 / -	kg/m ³	ISO 1183

Injection

Back pressure	3 MPa
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Characteristics

Processing	Injection Moulding
Delivery form	Pellets
Special characteristics	Heat stabilised or stable to heat

Additional information

Processing Notes

Pre-Drying

CELSTRAN PA should in principle be predried. Because of the necessary low maximum residual moisture content the use of dry air dryers is recommended. The dew point should be =< -30° C. The time between drying and processing should be as short as possible.

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