



CELSTRAN® PA66-GF50-02 P7

CELSTRAN® Long Fibre

Material code according to ISO 1043-1: PA66

Heat stabilized Nylon 66 reinforced by 50 weight percent long glass fibers. The pellets are cylindrical and normally as well as the embedded fibers 7 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	PA66-LGF50		ISO 1043
Part Marking Code	>PA66-LGF50<		ISO 11469
Rheological properties			
Viscosity number	136	cm ³ /g	ISO 307, 1628
Typical mechanical properties			
Tensile modulus	16600	MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	265	MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	2	%	ISO 527-1/-2
Flexural modulus	15000		ISO 178
Flexural strength		MPa	ISO 178
Charpy notched impact strength, 23°C		kJ/m²	ISO 179/1eA
Poisson's ratio	0.33 ^[C]		
[C]: Calculated			
Thermal properties			
Melting temperature, 10°C/min	260	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	260	°C	ISO 75-1/-2
Physical/Other properties			
Density	1560	kg/m³	ISO 1183
Injection			
Drying Recommended	yes		
Drying Tomporature	,	۰.	

Drying Recommended	yes
Drying Temperature	80 °C
Drying Time, Dehumidified Dryer	2-4 h
Processing Moisture Content	≤0.2 %
Melt Temperature Optimum	295 °C
Min. melt temperature	285 °C
Max. melt temperature	305 °C
Screw tangential speed	≤0.2 m/s
Mold Temperature Optimum	100 °C
Min. mould temperature	70 °C

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Revised: 2024-01-23 Source: Celanese Materials Database





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Max. mould temperature 120 °C
Hold pressure range 50 - 100 MPa
Back pressure 3 MPa

Characteristics

Processing Injection Moulding

Delivery form Pellets

Special characteristics Heat stabilised or stable to heat

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