

CELSTRAN® PA66-GF50-02 P7

PA66 with 50 % ash content - heat stabilized - 7mm

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.

Rheological properties

Viscosity number	136 cm ³ /g	ISO 307, 1157, 1628
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Typical mechanical properties

Tensile Modulus	16600 MPa	ISO 527-1/-2
Stress at break, 5mm/min	265 MPa	ISO 527-1/-2
Strain at break, 5mm/min	2.05 %	ISO 527-1/-2
Flexural Modulus	15000 MPa	ISO 178
Flexural Strength	420 MPa	ISO 178
Charpy notched impact strength, 23°C	50 kJ/m ²	ISO 179/1eA

Thermal properties

Melting temperature, 10°C/min	260 °C	ISO 11357-1/-3
Temp. of deflection under load, 1.8 MPa	260 °C	ISO 75-1/-2

Other properties

Density	1560 kg/m ³	ISO 1183
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Injection

Drying Temperature	70 - 80 °C
Drying Time, Dehumidified Dryer	2 - 4 h
Processing Moisture Content	0.15 %
Screw tangential speed	0.1 m/s
Max. mould temperature	90 - 120 °C
Back pressure	3 MPa
Injection speed	medium

