

CELSTRAN® PA66-GF50-02 AF3001 Natural

PA66 with 50 % ash content - heat stabilized -11mm

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 11mm 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.

Typical mechanical properties

Tensile Modulus	16500 MPa	ISO 527-1/-2
Stress at break, 5mm/min	260 MPa	ISO 527-1/-2
Strain at break, 5mm/min	2 %	ISO 527-1/-2
Flexural Modulus	14700 MPa	ISO 178
Flexural Strength	425 MPa	ISO 178
Charpy notched impact strength, 23°C	49 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	261 °C	ISO 75-1/-2

Other properties

Density	1560 kg/m ³	ISO 1183
---------	------------------------	----------

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	80 - 100 °C
Back pressure	3 MPa

