

# CELSTRAN<sup>®</sup> PA66-GF50-02-NATURAL CELSTRAN® Long Fibre

50 % Long glass fiber reinforced, heat stabilized, Nylon 6/6

#### Product information

Resin Identification Part Marking Code	PA66-LGF50 >PA66-LGF50<		ISO 1043 ISO 11469
Typical mechanical properties			
Tensile modulus Tensile stress at break, 5mm/min Tensile strain at break, 5mm/min Flexural modulus Flexural strength Flexural strength Flexural strength, 23°C Charpy impact strength, -30°C Charpy notched impact strength, 23°C Charpy notched impact strength, -30°C Izod notched impact strength, 23°C Izod impact strength, -40°C Poisson's ratio [C]: Calculated	2 14700 420 3.8 95 80 49 34 61	MPa % MPa MPa	ISO 527-1/-2 ISO 527-1/-2 ISO 527-1/-2 ISO 178 ISO 178 ISO 178 ISO 179/1eU ISO 179/1eU ISO 179/1eA ISO 179/1eA ISO 180/1A ISO 180/1U
Thermal properties Melting temperature, 10°C/min Temperature of deflection under load, 1.8 MPa Temperature of deflection under load, 8 MPa	261 256 249	°C	ISO 11357-1/-3 ISO 75-1/-2 ISO 75-1/-2
Physical/Other properties			
Density	1560	kg/m³	ISO 1183
Injection			
Drying Recommended Drying Temperature Drying Time, Dehumidified Dryer Processing Moisture Content Melt Temperature Optimum Min. melt temperature Max. melt temperature Screw tangential speed Mold Temperature Optimum Min. mould temperature Max. mould temperature	2 - 4 ≤0.2 295 285 305 ≤0.2 100 70 120	% °C °C °C m/s °C °C °C	
Hold pressure range	50 - 100	мРа	



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## Characteristics

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

## Additional information

Injection molding

## Preprocessing

PA6&PA66 drying requirements: 4 hrs. @80° C. A dehumidifier or desiccant dryer is recommended.

### Processing

Celstran can be processed on a standard injection molding unit. A general purpose metering screw is recommended with a zone distribution of 40% feed, 40% transition, and 20% metering. A free flowing check ring assembly is recommended.

Melt Temp: 300-310°C. Mold Temp: 90-100°C.

#### **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.

#### Storage

Note: Material can be over dried and may discolor.

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