

# CELSTRAN® PA6-GF50-01 AF3001 NATURAL

## CELSTRAN® Long Fibre

50% long strand fiber glass reinforced nylon 6 Natural

### Product information

Resin Identification	PA6-LGF50	ISO 1043
Part Marking Code	>PA6-LGF50<	ISO 11469

### Typical mechanical properties

Tensile modulus	16000 MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	245 MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.1 %	ISO 527-1/-2
Flexural modulus	14500 MPa	ISO 178
Flexural strength	400 MPa	ISO 178
Charpy notched impact strength, 23°C	47 kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength, 23°C	50 kJ/m <sup>2</sup>	ISO 180/1A
Izod impact strength, -40°C	47.5 kJ/m <sup>2</sup>	ISO 180/1U
Poisson's ratio	0.33 <sup>[C]</sup>	

[C]: Calculated

### Thermal properties

Temperature of deflection under load, 1.8 MPa	215 °C	ISO 75-1/-2
---	--------	-------------

### Physical/Other properties

Density	1560 kg/m <sup>3</sup>	ISO 1183
---------	------------------------	----------

### Characteristics

Processing	Injection Moulding
Delivery form	Pellets

### 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: 285-295°C.  
Mold Temp: 85- 95°C.

Processing Notes

### Pre-Drying

# CELSTRAN® PA6-GF50-01 AF3001 NATURAL

## CELSTRAN® Long Fibre

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  $\leq -30^{\circ}\text{C}$ . The time between drying and processing should be as short as possible.

### Storage

Note: Material can be over dried and may discolor.