

CELSTRAN® PA6-GF30-01

CELSTRAN® Long Fibre

30% long strand glass fiber reinforced nylon 6 Black

Product information

| | | |
|----------------------|-------------|-----------|
| Resin Identification | PA6-LGF30 | ISO 1043 |
| Part Marking Code | >PA6-LGF30< | ISO 11469 |

Typical mechanical properties

| | | |
|--------------------------------------|------------------------|--------------|
| Tensile modulus | 9510 MPa | ISO 527-1/-2 |
| Tensile stress at break, 5mm/min | 155 MPa | ISO 527-1/-2 |
| Tensile strain at break, 5mm/min | 1.8 % | ISO 527-1/-2 |
| Flexural modulus | 8830 MPa | ISO 178 |
| Flexural strength | 250 MPa | ISO 178 |
| Charpy notched impact strength, 23°C | 18 kJ/m ² | ISO 179/1eA |
| Izod notched impact strength, 23°C | 26 kJ/m ² | ISO 180/1A |
| Izod impact strength, -40°C | 23.5 kJ/m ² | ISO 180/1U |
| Poisson's ratio | 0.34 ^[C] | |

[C]: Calculated

Thermal properties

| | | |
|---|--------|-------------|
| Temperature of deflection under load, 1.8 MPa | 207 °C | ISO 75-1/-2 |
|---|--------|-------------|

Physical/Other properties

| | | |
|---------|------------------------|----------|
| Density | 1360 kg/m ³ | 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: 270-280°C.
Mold Temp: 85- 95°C.

Processing Notes

Pre-Drying

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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.