

CELSTRAN® PA66-GF40-02-Natural

40% long strand glass fiber reinforced heat stabilized Nylon 6/6
 40% Long glass fiber reinforced, heat stabilized, Nylon 6/6

Typical mechanical properties

Tensile Modulus	13400 MPa	ISO 527-1/-2
Stress at break, 5mm/min	225 MPa	ISO 527-1/-2
Strain at break, 5mm/min	2.05 %	ISO 527-1/-2
Flexural Modulus	11600 MPa	ISO 178
Flexural Strength	365 MPa	ISO 178
Charpy impact strength, 23°C	95 kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	46 kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	39 kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	26 kJ/m ²	ISO 179/1eA
Puncture energy, 23°C	18.3 J	ISO 6603-2
Puncture energy, -30°C	17.8 J	ISO 6603-2
Izod impact strength, 23°C	47 kJ/m ²	ISO 180/1U
Izod impact strength, -30°C	43 kJ/m ²	ISO 180/1U

Thermal properties

Melting temperature, 10°C/min	261 °C	ISO 11357-1/-3
Temp. of deflection under load, 1.8 MPa	255 °C	ISO 75-1/-2
Temp. of deflection under load, 8 MPa	240 °C	ISO 75-1/-2

Other properties

Density	1460 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	0.18 %
Max. mould temperature	80 - 100 °C

Additional information

Injection molding

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: 295-300°C.
 Mold Temp: 85- 95°C.



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Processing Texts

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

Longer pre-drying times/storage

Note: Material can be over dried and may discolor.

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Melt Temp: $295-300^{\circ}\text{C}$.

Mold Temp: $85-95^{\circ}\text{C}$.

Injection molding Preprocessing

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

