

CELSTRAN® PA66-GF30-02 AD3002 BLACK

CELSTRAN® Long Fibre

30% long glass fiber reinforced, heat stabilized, Nylon 6/6

Product information

| | | |
|----------------------|--------------|-----------|
| Resin Identification | PA66-LGF30 | ISO 1043 |
| Part Marking Code | >PA66-LGF30< | ISO 11469 |

Typical mechanical properties

| | | |
|--------------------------------------|------------------------|--------------|
| Tensile modulus | 10200 MPa | ISO 527-1/-2 |
| Tensile stress at break, 5mm/min | 140 MPa | ISO 527-1/-2 |
| Tensile strain at break, 5mm/min | 1.6 % | ISO 527-1/-2 |
| Flexural modulus | 8900 MPa | ISO 178 |
| Flexural strength | 220 MPa | ISO 178 |
| Charpy notched impact strength, 23°C | 19 kJ/m ² | ISO 179/1eA |
| Izod notched impact strength, 23°C | 27 kJ/m ² | ISO 180/1A |
| Izod impact strength, -40°C | 29.9 kJ/m ² | ISO 180/1U |
| Poisson's ratio | 0.34 ^[C] | |

[C]: Calculated

Thermal properties

| | | |
|---|--------|-------------|
| Temperature of deflection under load, 1.8 MPa | 252 °C | ISO 75-1/-2 |
|---|--------|-------------|

Physical/Other properties

| | | |
|---------|------------------------|----------|
| Density | 1360 kg/m ³ | ISO 1183 |
|---------|------------------------|----------|

Injection

| | |
|---------------------------------|--------------|
| Drying Recommended | yes |
| Drying Temperature | 80 °C |
| Drying Time, Dehumidified Dryer | 2 - 4 h |
| Processing Moisture Content | ≤0.2 % |
| Melt Temperature Optimum | 295 °C |
| Min. melt temperature | 285 °C |
| Max. melt temperature | 305 °C |
| Screw tangential speed | ≤0.2 m/s |
| Mold Temperature Optimum | 100 °C |
| Min. mould temperature | 70 °C |
| Max. mould temperature | 120 °C |
| Hold pressure range | 50 - 100 MPa |
| Ejection temperature | 226 °C |

Characteristics

| | |
|-------------------------|-----------------------------------|
| Processing | Injection Moulding |
| Delivery form | Pellets |
| Special characteristics | Heat stabilised or stable to heat |

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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: 290-295°C.
Mold Temp: 85- 95°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.

Automotive

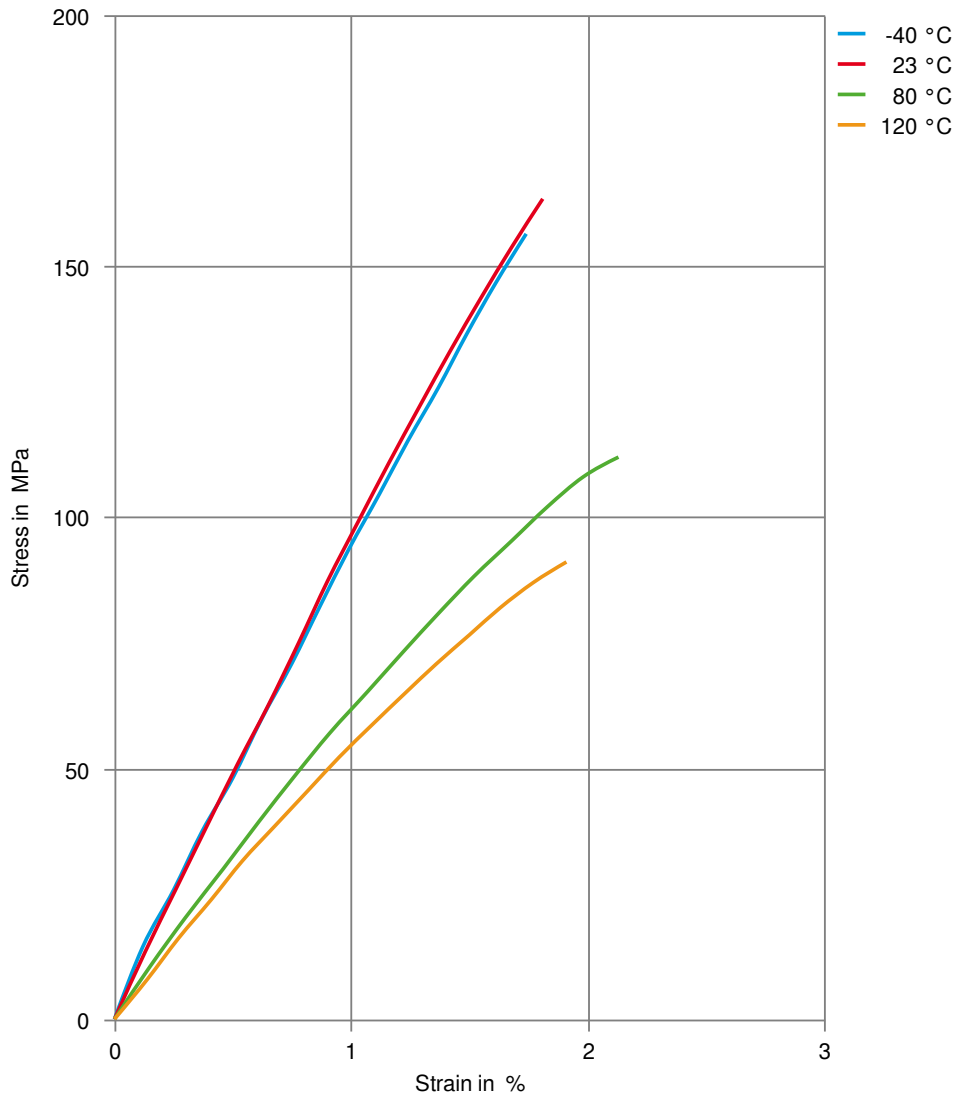
OEM
Ford

STANDARD
WSB-M4D677-A

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Stress-strain



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Secant modulus-strain

