

CELSTRAN® PA6-GF40-01 AD3002 Black

40% long strand glass fiber reinforced nylon 6
 40% long strand glass fiber reinforced nylon 6 Natural

Typical mechanical properties

Tensile Modulus	13000 MPa	ISO 527-1/-2
Stress at break, 5mm/min	205 MPa	ISO 527-1/-2
Strain at break, 5mm/min	1.95 %	ISO 527-1/-2
Flexural Modulus	11700 MPa	ISO 178
Flexural Strength	325 MPa	ISO 178
Charpy notched impact strength, 23°C	27 kJ/m ²	ISO 179/1eA

Thermal properties

Temp. of deflection under load, 1.8 MPa	210 °C	ISO 75-1/-2
---	--------	-------------

Other properties

Density	1450 kg/m ³	ISO 1183
---------	------------------------	----------

Injection

Drying Temperature	70 - 80 °C	
Drying Time, Dehumidified Dryer	2 - 4 h	
Processing Moisture Content	0.18 %	
Melt Temperature Optimum	275 °C	Internal
Max. mould temperature	80 - 100 °C	

Additional information

Injection molding

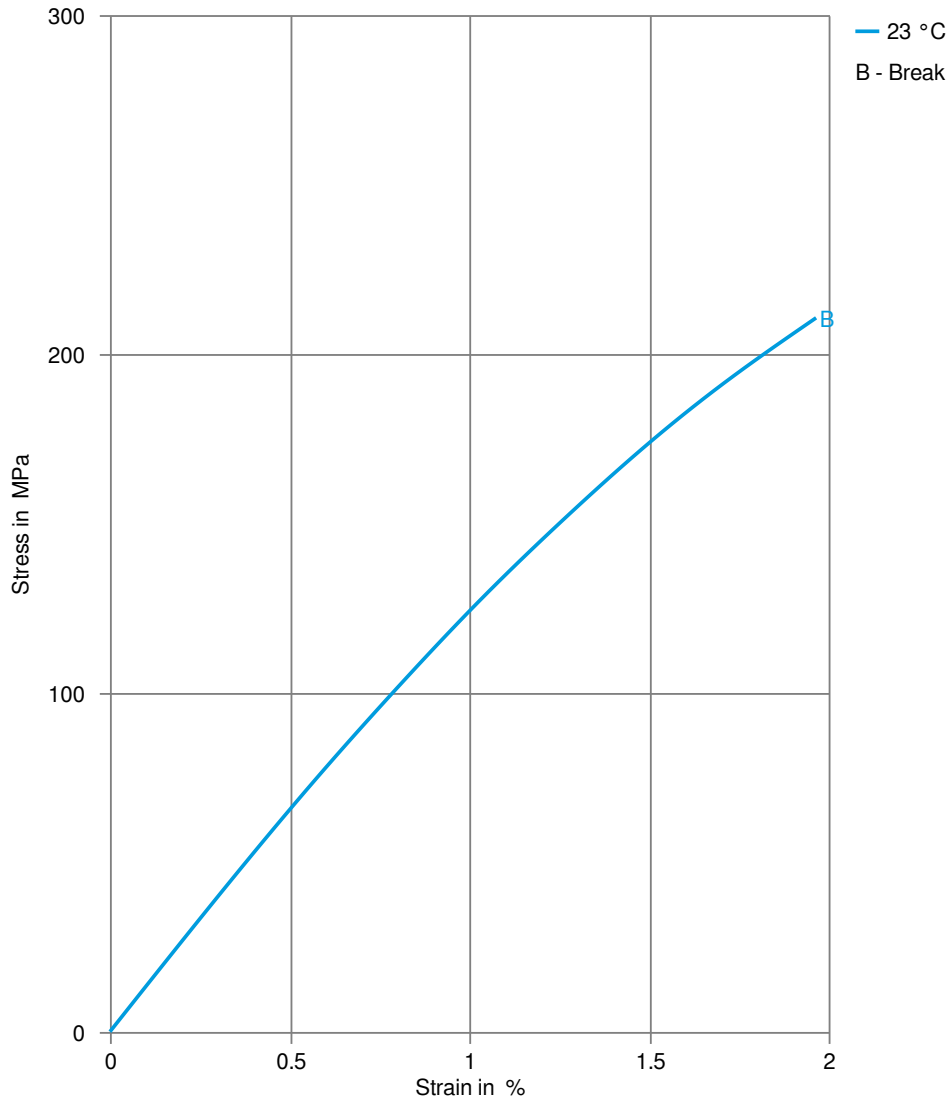
Celstran can be processed on a standard injection molding unit. A general purpose metering screw is recommended with a zone distribution of 40% feed, 40% transition, and 20% metering. A free flowing check ring assembly is recommended.

Melt Temp: 275-285°C.
 Mold Temp: 85- 95°C.



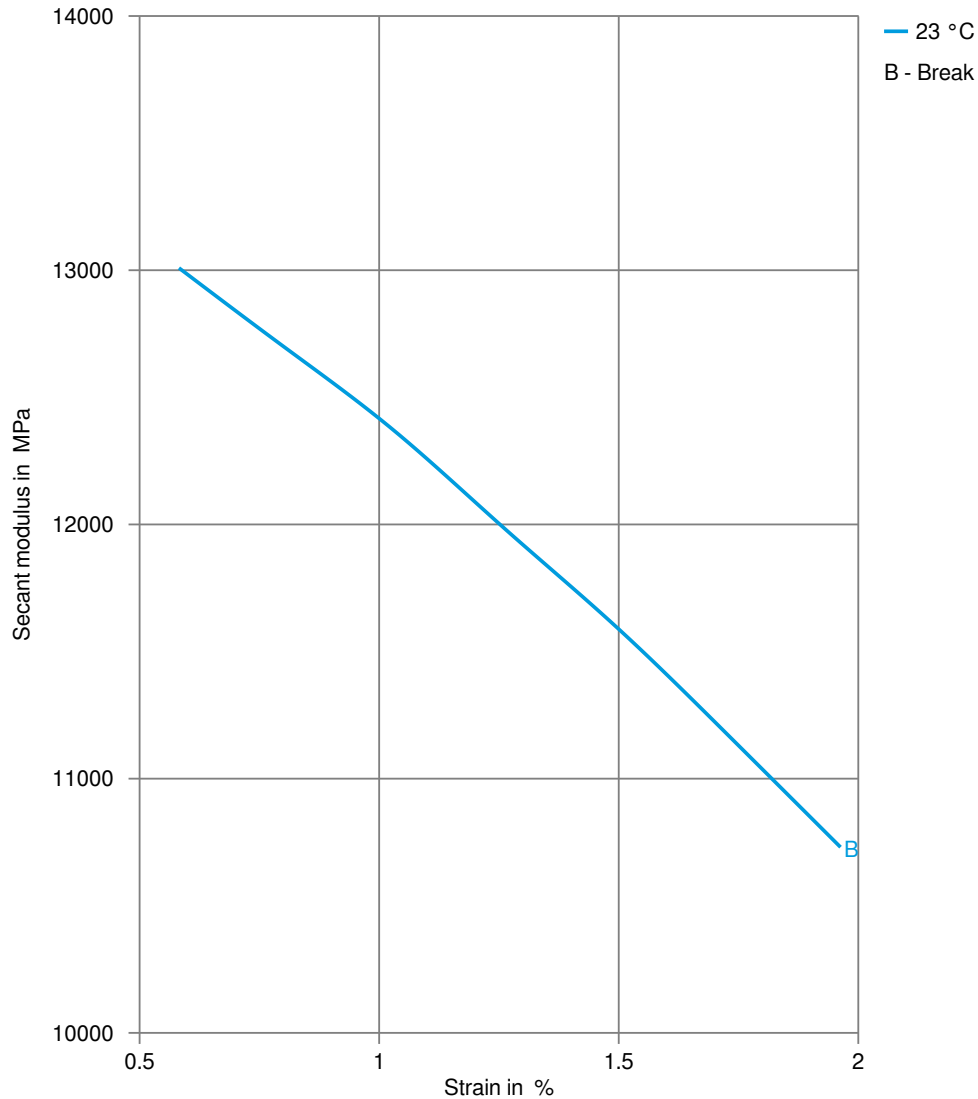
CELSTRAN® PA6-GF40-01 AD3002 Black

Stress-strain



CELSTRAN® PA6-GF40-01 AD3002 Black

Secant modulus-strain



CELSTRAN® PA6-GF40-01 AD3002 Black

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.

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: $275-285^{\circ}\text{C}$.

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.

