

# CELSTRAN® PA66-GF30-02 AD3002 Black

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

## Typical mechanical properties

|                                      |                      |              |
|--------------------------------------|----------------------|--------------|
| Tensile Modulus                      | 10200 MPa            | ISO 527-1/-2 |
| Stress at break, 5mm/min             | 140 MPa              | ISO 527-1/-2 |
| Strain at break, 5mm/min             | 1.55 %               | ISO 527-1/-2 |
| Flexural Modulus                     | 8900 MPa             | ISO 178      |
| Flexural Strength                    | 225 MPa              | ISO 178      |
| Charpy notched impact strength, 23°C | 19 kJ/m <sup>2</sup> | ISO 179/1eA  |

## Thermal properties

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

## Other properties

|         |                        |          |
|---------|------------------------|----------|
| Density | 1360 kg/m <sup>3</sup> | ISO 1183 |
|---------|------------------------|----------|

## Injection

|                                 |             |          |
|---------------------------------|-------------|----------|
| Drying Temperature              | 70 - 80 °C  |          |
| Drying Time, Dehumidified Dryer | 2 - 4 h     |          |
| Processing Moisture Content     | 0.18 %      |          |
| Melt Temperature Optimum        | 305 °C      | Internal |
| Max. mould temperature          | 80 - 100 °C |          |

## Additional information

Injection molding

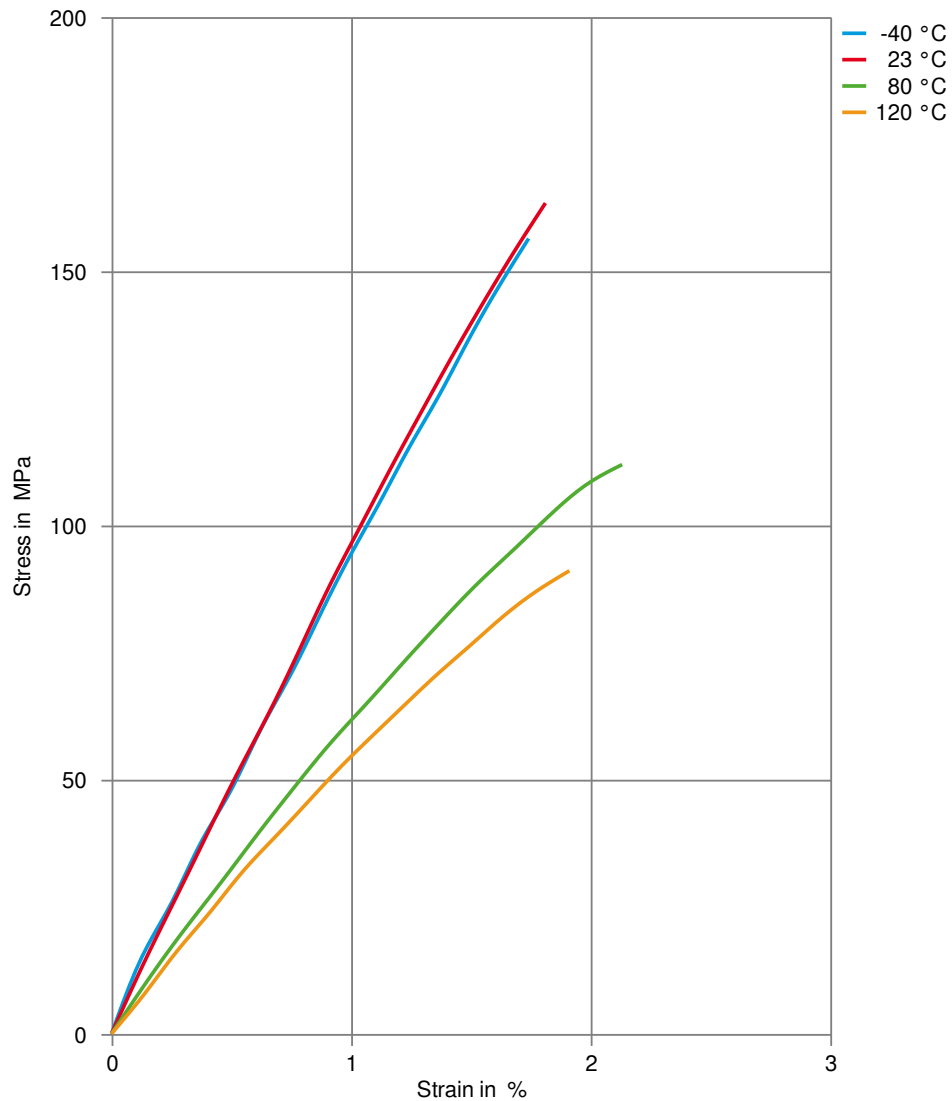
Celstran can be processed on a standard injection molding unit. A general purpose metering screw is recommended with a zone distribution of 40% feed, 40% transition, and 20% metering. A free flowing check ring assembly is recommended.

Melt Temp: 290-295°C.  
 Mold Temp: 85- 95°C.



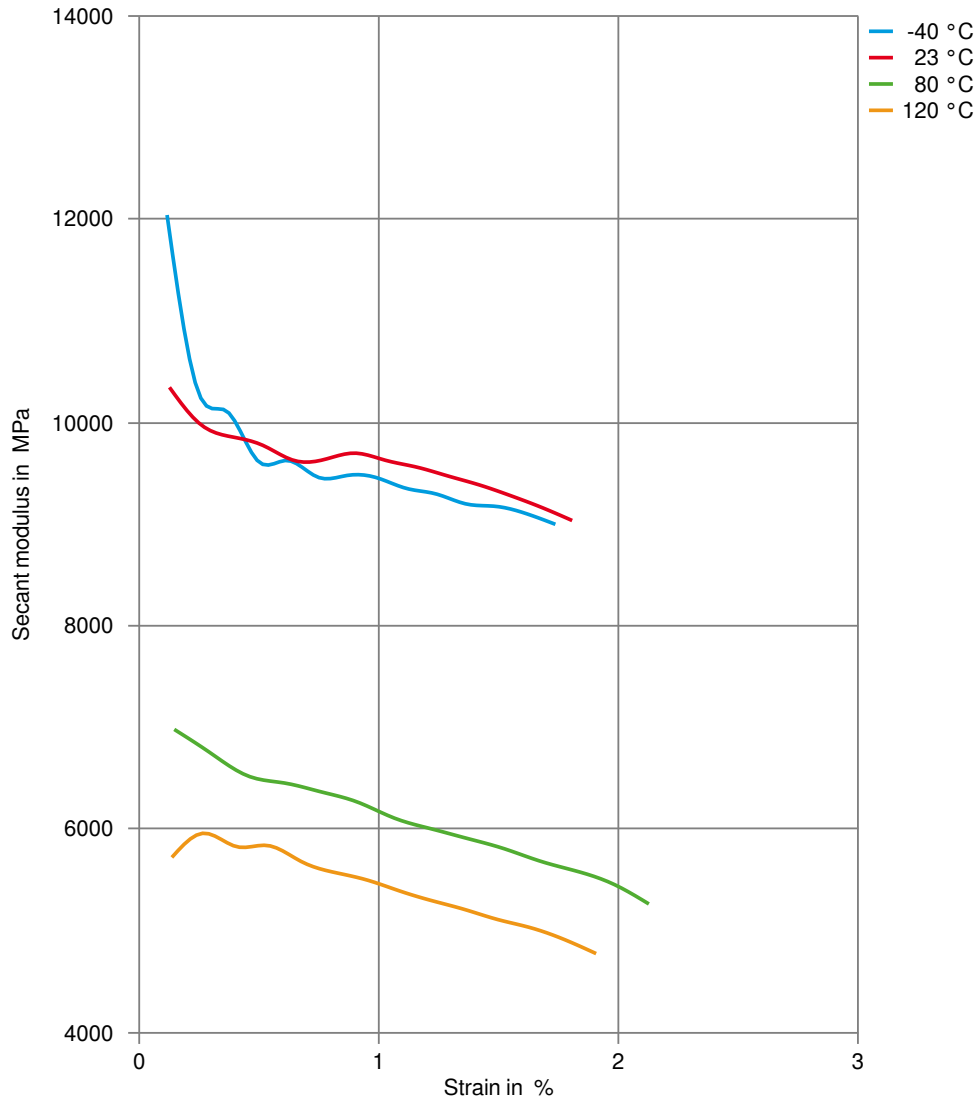
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## Stress-strain



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## Secant modulus-strain



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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.

### 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:  $290-295^{\circ}\text{C}$ .

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

### Injection molding Preprocessing

PA6&PA66 drying requirements: 4 hrs. @  $80^{\circ}\text{C}$ .  
A dehumidifier or desiccant dryer is recommended.

## Other Approvals

### Other Approvals

| OEM  | Specification |
|------|---------------|
| Ford | WSB-M4D677-A  |

