

CELSTRAN® PP-GF60-02 AD3002 Black

Material code according to ISO 1043-1: PP Polypropylene with 60 weight percent fiber content, long glass fibers reinforced. Black. The fibers are chemically coupled to the polypropylene matrix. The pellets are cylindrical and normally as well as the embedded fibers 11 mm long. Parts molded of CELSTRAN have outstanding mechanical properties such as high strength and stiffness combined with high heat deflection. The notched impact strength is increased at elevated and low temperatures due to the fiber skeleton built in the parts. The long fiber reinforcement reduces creep significantly. The very isotropic shrinkage in the molded parts minimizes the warpage. Complex parts can be manufactured with high reproducibility by injection molding. Application field: Functional/structural parts for automotive

Typical mechanical properties

Tensile Modulus	14000 MPa	ISO 527-1/-2
Stress at break, 5mm/min	155 MPa	ISO 527-1/-2
Strain at break, 5mm/min	1.6 %	ISO 527-1/-2
Flexural Modulus	15000 MPa	ISO 178
Flexural Strength	280 MPa	ISO 178
Charpy notched impact strength, 23°C	33 kJ/m ²	ISO 179/1eA

Other properties

Density	1430 kg/m ³	ISO 1183
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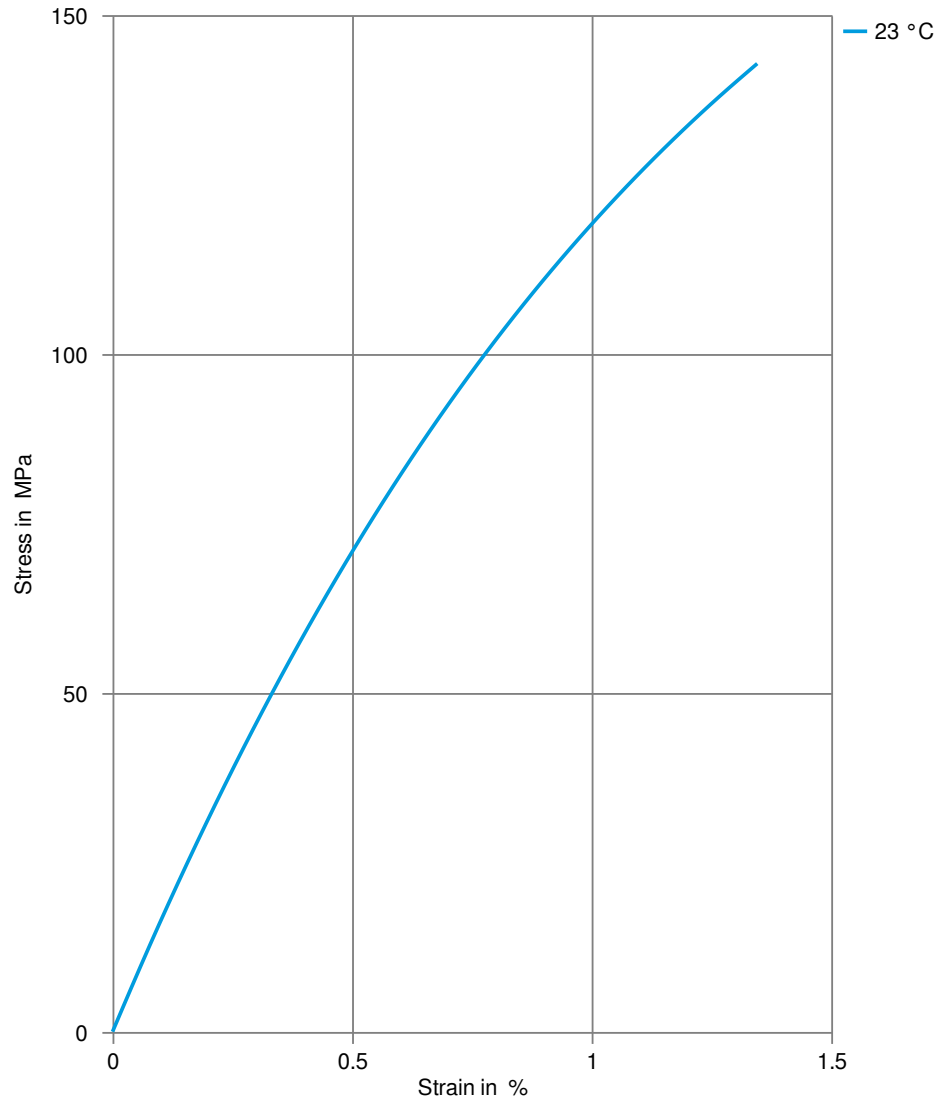
Injection

Drying Temperature	90 - 100 °C
Drying Time, Dehumidified Dryer	2 h
Processing Moisture Content	0.2 %
Screw tangential speed	0.1 m/s
Max. mould temperature	30 - 70 °C
Back pressure	3 MPa
Injection speed	slow



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Stress-strain



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Secant modulus-strain

