

CELSTRAN® PP-GF20-02 Black

Polypropylene with 20wt% long-glass-fibers

Material Code according to ISO 104-1: PP Polypropylene homopolymer reinforced with 20 weight percent long glass fibers. Black. The fibers are chemically coupled to the polypropylene matrix. Then pellets are cylindrical and normally as well as the embedded fibers 10mm long. This material imparts excellent impact and modulus properties that exceed that short fiber polypropylene.

Typical mechanical properties

Tensile Modulus	5000 MPa	ISO 527-1/-2
Stress at break, 5mm/min	86 MPa	ISO 527-1/-2
Strain at break, 5mm/min	2.4 %	ISO 527-1/-2
Flexural Modulus	4900 MPa	ISO 178
Flexural Strength	135 MPa	ISO 178
Charpy impact strength, 23°C	45 kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	22 kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	14 kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	15 kJ/m ²	ISO 179/1eA
Poisson's ratio	0.35	

Thermal properties

Temp. of deflection under load, 1.8 MPa	158 °C	ISO 75-1/-2
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Other properties

Density	1030 kg/m ³	ISO 1183
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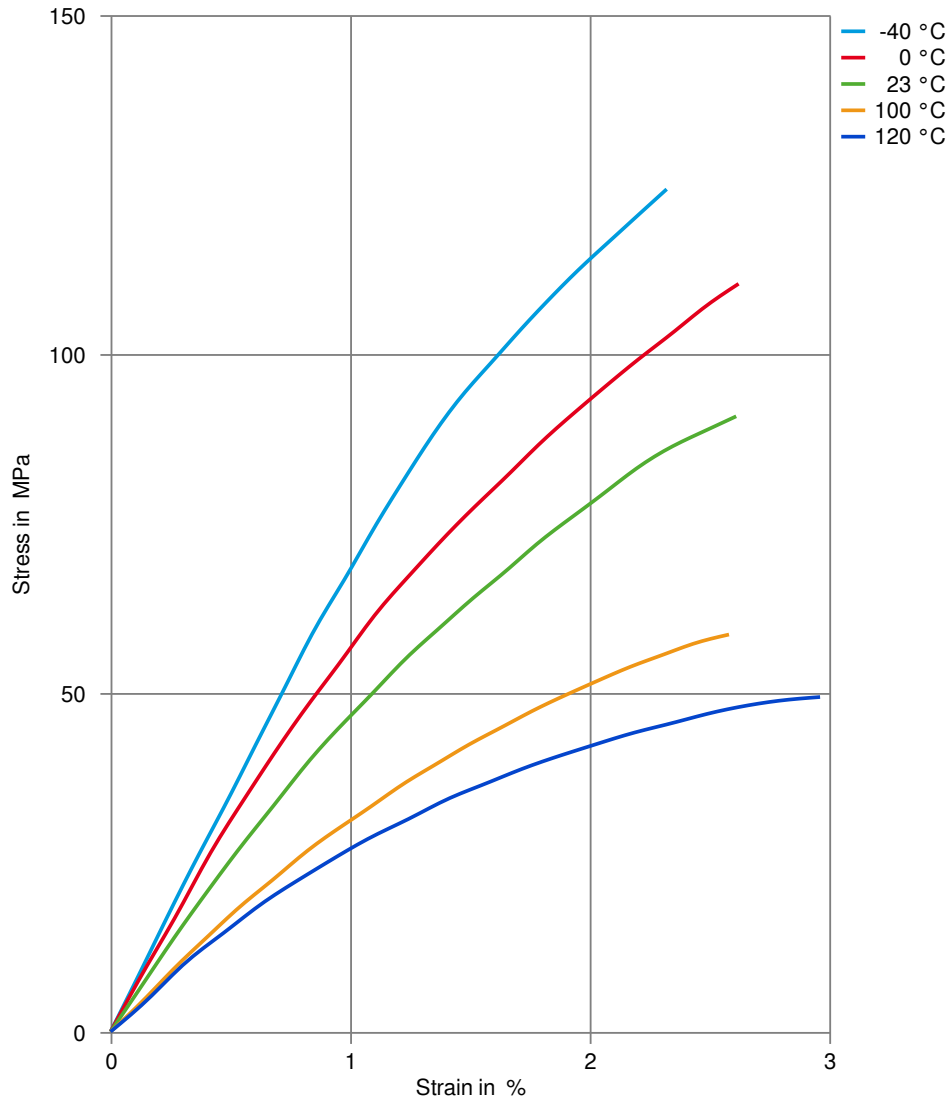
Injection

Drying Temperature	90 - 100 °C	
Drying Time, Dehumidified Dryer	2 h	
Processing Moisture Content	0.2 %	
Melt Temperature Optimum	215 °C	Internal
Screw tangential speed	0.1 m/s	
Max. mould temperature	30 - 70 °C	
Back pressure	3 MPa	
Injection speed	slow	



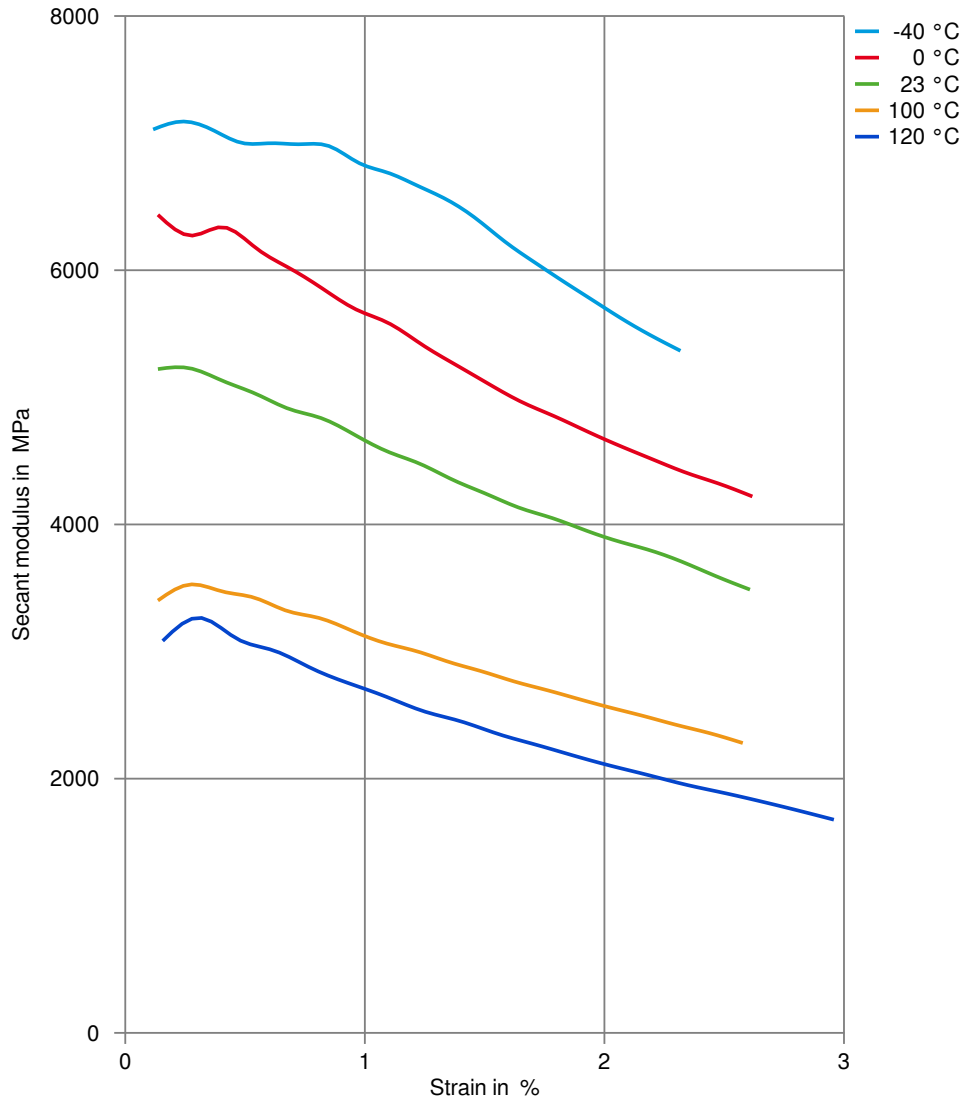
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Stress-strain



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Secant modulus-strain



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Other Approvals

Other Approvals

OEM	Specification	Additional Information
BMW	GS 93016	2011-01 (AD3002 Black)
Stellantis - Chrysler	CPN 4731	Black
Ford	WSS-M4D865-B57	
Ford	WSS-M4D865-B	
Li Auto	Q/LiA5310050	2021 (V2)

