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CELSTRAN® PP-GF20-02 BLACK

CELSTRAN® Long Fibre

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.

Product information

Resin Identification	PP-LGF20	ISO 1043
Part Marking Code	>PP-LGF20<	ISO 11469

Typical mechanical properties

Tensile modulus	5000	MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	86	MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.4	%	ISO 527-1/-2
Flexural modulus	4900	MPa	ISO 178
Flexural strength	140	MPa	ISO 178
Charpy impact strength, 23°C	45	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	22	kJ/m²	ISO 179/1eU
Charpy notched impact strength, 23°C	14	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	15	kJ/m²	ISO 179/1eA
Poisson's ratio	0.35		

Thermal properties

Melting temperature, 10°C/min	163	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	158	°C	ISO 75-1/-2

Flammability

FMVSS Class	B		ISO 3795 (FMVSS 302)
Burning rate, Thickness 2 mm	14.4	mm/min	ISO 3795 (FMVSS 302)

Physical/Other properties

Density	1030	kg/m³	ISO 1183

Injection

Back pressure	3	MPa
Ejection temperature	116	°C

Characteristics

Processing	Injection Moulding
Delivery form	Pellets

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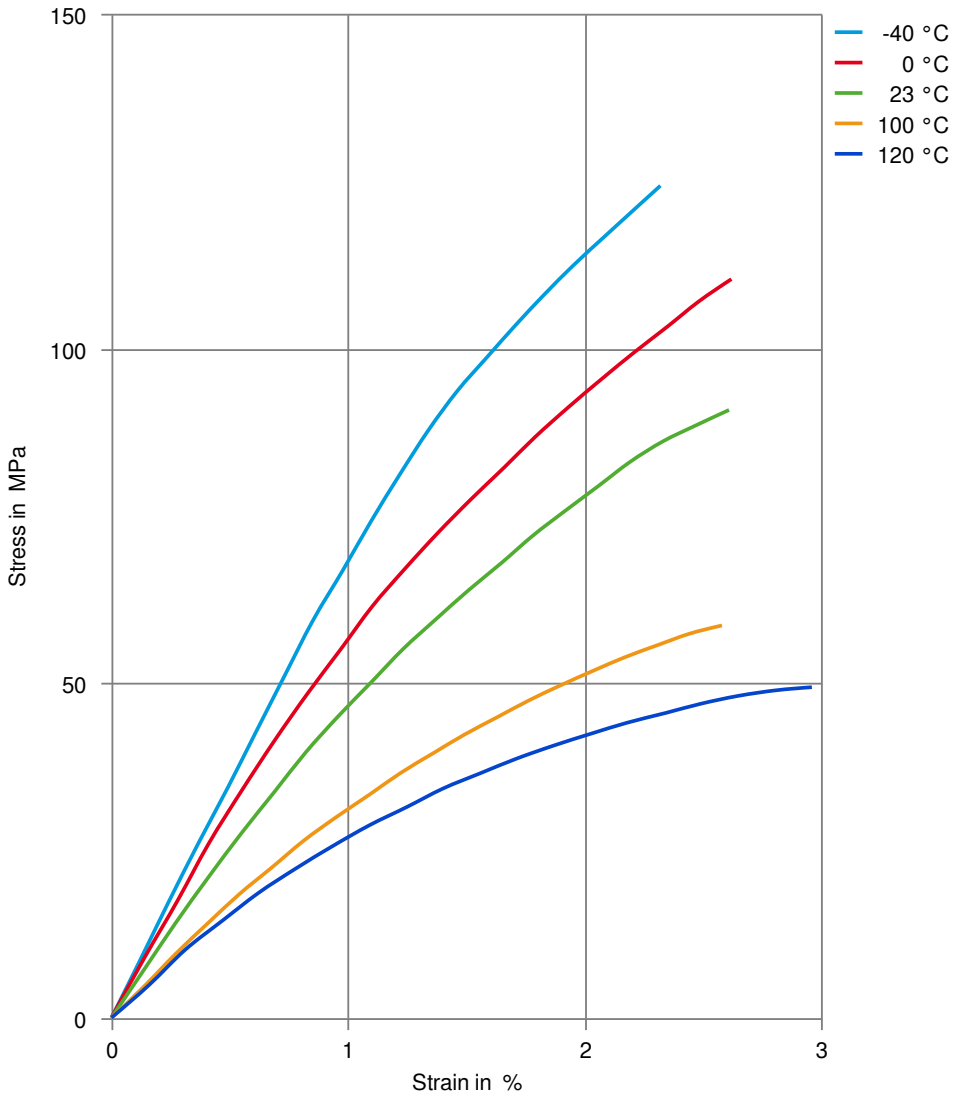
Automotive

OEM	STANDARD	ADDITIONAL INFORMATION
BMW	GS93016	2011-01 (AD3002 Black)
Ford	WSS-M4D865-B5	
Ford	WSS-M4D865-B7	
Li Auto	Q/LiA5310050	2021 (V2)
Stellantis	MS-DB-21 / PP-H.LGF20.5000F.15C	CPN4731 BLACK, CPN 5109 NAT, CPN5104 COLOR MATCH
Stellantis - Chrysler	MS-DB-21 / CPN-4731	Black
Stellantis - Chrysler	MS-DB-21 / CPN-5104	100% Color Match

Stress-strain



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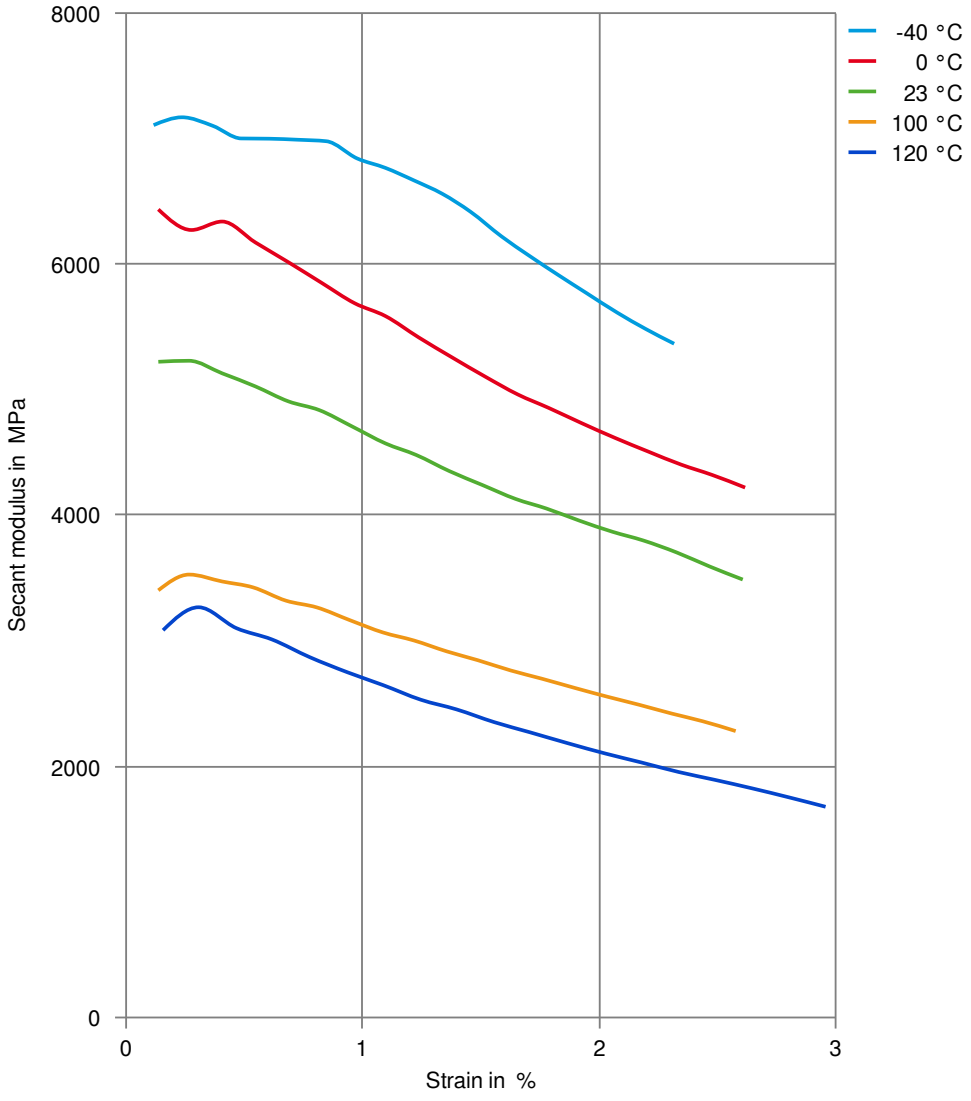
Secant modulus-strain



Revised: 2025-04-17 Source: Celanese Materials Database