CELSTRAN® PP-GF20-02 NATURAL

CELSTRAN® Long Fibre

Material Code according to ISO 104-1: PP Polypropylene homopolymer reinforced with 20 weight percent long glass fibers. Natural. The fibers are chemically coupled to the polypropylene matrix. Then pellets are cylindrical and normally as well as the embedded fibers 10mm long

Product information

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

Typical mechanical properties

Tensile modulus	783000	psi	ISO 527-1/-2
Tensile stress at break, 5mm/min	15200	psi	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.8	%	ISO 527-1/-2
Flexural modulus	747000	psi	ISO 178
Flexural strength	23200	psi	ISO 178
Charpy notched impact strength, 23°C	10.9	ftlb/in²	ISO 179/1eA
Poisson's ratio	0.35		

Thermal properties

Melting temperature, 10°C/min	325	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	315	°F	ISO 75-1/-2

Flammability

Burning Behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	0.0394	in	IEC 60695-11-10

Physical/Other properties

Density	0.0372	lb/in³	ISO 1183

Injection

Drying Recommended	yes	
Drying Temperature	194	°F
Drying Time, Dehumidified Dryer	2 - 3	h
Processing Moisture Content	≤0.2	%
Melt Temperature Optimum	446	°F
Min. melt temperature	392	°F
Max. melt temperature	464	°F
Max. screw tangential speed	≤0.1	m/s
Mold Temperature Optimum	122	°F
Min. mold temperature	86	°F
Max. mold temperature	158	°F
Back pressure	435	psi

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Automotive

OEM	STANDARD	ADDITIONAL INFORMATION
Ford	WSS-M4D865-B5	
Ford	WSS-M4D865-B7	
Li Auto	Q/LiA5310050	
Stellantis - Chrysler	MS-DB-21 / CPN-5109	Natural
Tesla	TM-1001-12	Winona USA
Tesla	TM-1001-22	Winona USA

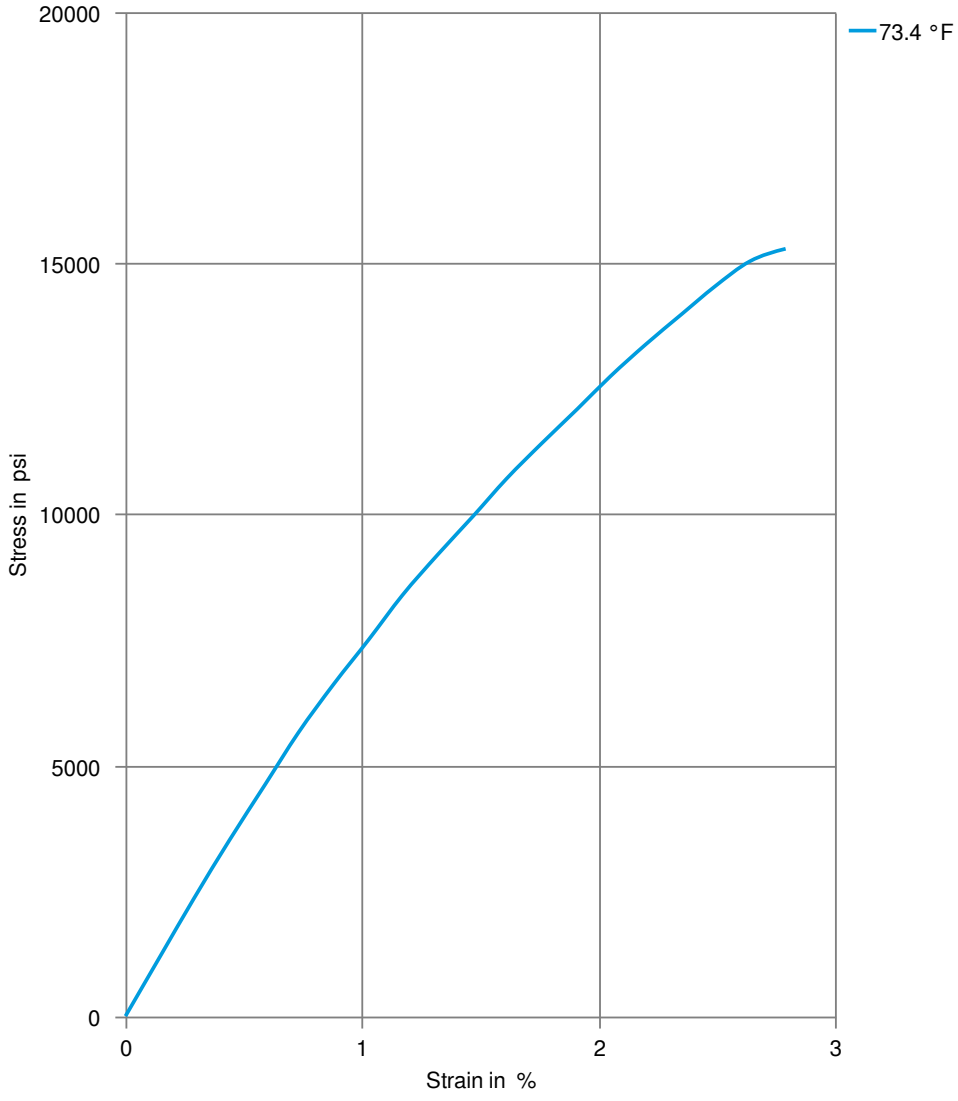
Characteristics

Processing	Injection Molding

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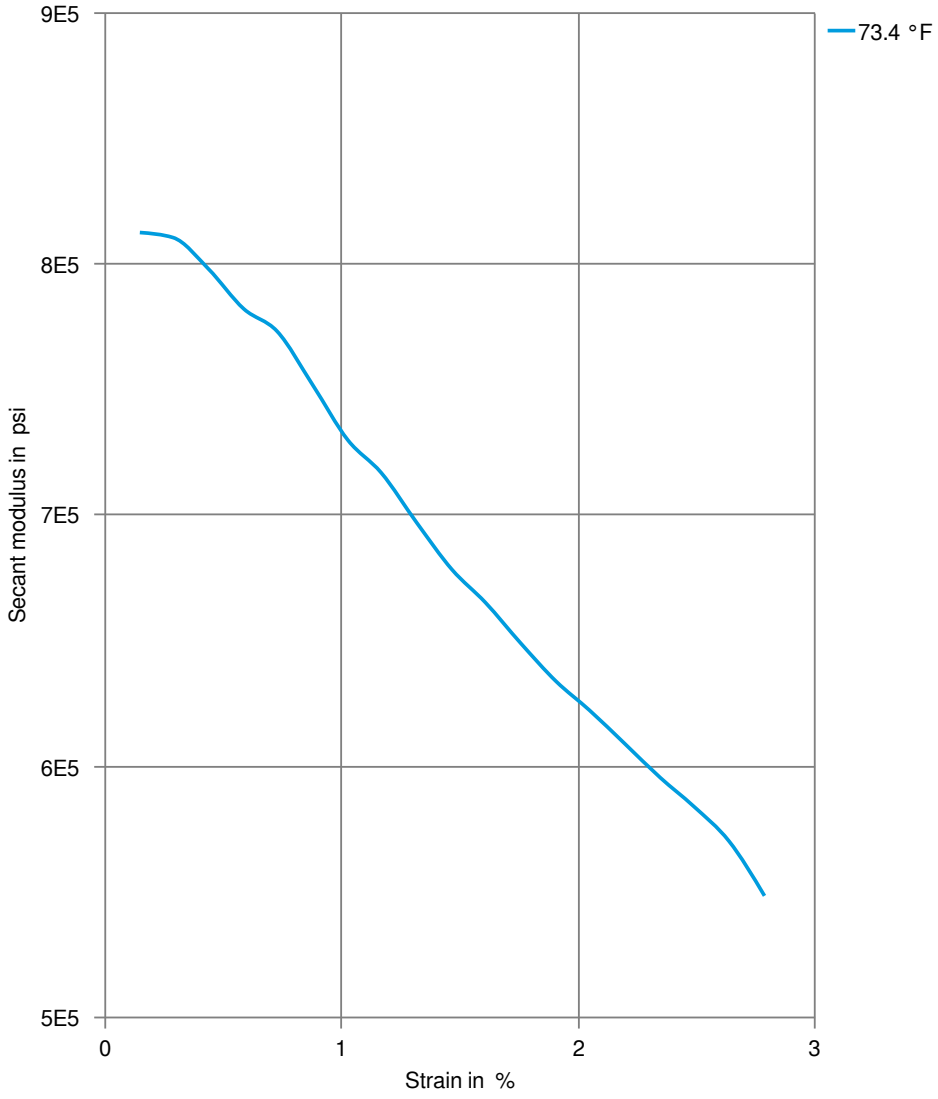
Stress-strain



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Secant modulus-strain



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