CELSTRAN® PP-GF20-0553 AD9600R BLACK

CELSTRAN® Long Fibre

Polypropylene with 20% reinforced long-glass-fiber
Material code according to ISO 1043-1: PP Polypropylene copolymer reinforced with 20weight percent long glass fibers.Black. Low emission. 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.

Product information

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

Typical mechanical properties

Tensile modulus	699000	psi	ISO 527-1/-2
Tensile stress at break, 5mm/min	12800	psi	ISO 527-1/-2
Tensile strain at break, 50mm/min	2.5	%	ISO 527-1/-2
Flexural modulus	670000	psi	ISO 178
Flexural strength	20300	psi	ISO 178
Charpy notched impact strength, 23 °C	9.99	ftlb/in²	ISO 179/1eA

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

Characteristics

Processing	Injection Molding
Special characteristics	High impact or impact modified, Low emissions

Revised: 2025-07-10 Source: Celanese Materials Database

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