

Product Texts

Material code according to ISO 1043-1: PP UV-stabilized polypropylene reinforced with 40 weight percent long glass fibers. 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

Flammability at thickness h (1.5 HB mm)

UL recognition (h)

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	9200	MPa	ISO 527
^[C] Stress at break	130	MPa	ISO 527
^[C] Strain at break	2	%	ISO 527
^[C] Charpy impact strength, +23°C	62	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	60	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	25	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	30	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	165	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 1.80 MPa	158	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	165	°C	ISO 75-1/-2
^[C] Burning Behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Yellow Card available	yes	-	-

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Density	1210	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics

Processing

Injection Molding, Profile Extrusion, Sheet Extrusion, Other Extrusion, Coating, Transfer Molding

Features

Chemically Coupled Reinforcement, Creep Resistance, Long fiber reinforced, Low Warpage

Delivery form

Pellets, Black

Applications

Automotive

Special Characteristics

U.V. stabilized or stable to weather, Heat stabilized or stable to heat

Regional Availability

North America, Europe, Asia Pacific