



CELSTRAN[®] TPU-GF40-01 AD3002 BLACK CELSTRAN[®] Long Fibre

40% long strand glass fiber reinforced thermoplastic polyurethane

Product information

Resin Identification Part Marking Code	>	TPU-LGF40 TPU-LGF40<		ISO 1043 ISO 11469
Typical mechanical properties Tensile modulus		11300	MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min Tensile strain at break, 5mm/min Flexural modulus Flexural strength Charpy notched impact strength, 23°C Izod notched impact strength, -30°C Izod notched impact strength, -30°C Poisson's ratio [C]: Calculated	С	1.9 10400 270 35.1 39		ISO 527-1/-2 ISO 527-1/-2 ISO 178 ISO 178 ISO 179/1eA ISO 180/1A ISO 180/1A
Thermal properties				
Temperature of deflection under load	, 1.8 MPa	113	°C	ISO 75-1/-2
Physical/Other properties Density		1520	kg/m³	ISO 1183
Characteristics				
Processing	Injection Mouldin	g		
Delivery form	Pellets			
Special characteristics	Low Warpage			
Additional information				
Injection molding	Preprocessing			
	Polyurethane material drying requirements: 4 hrs. @80 ° C. A dehumidifier or desiccant dryer is recommended.			
	Processing			
	Celstran can be processed on a standard injection molding unit. A general purpose metering screw is recommended with a zone distribution of 40% feed, 40% transition, and 20% metering. A free flowing check ring assembly is recommended.			
	Melt Temp: 245-255°C. Mold Temp: 70- 75°C.			

Processing Notes

Pre-Drying

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CELSTRAN TPU should in principle be predried. Because of the necessary low maximum residual moisture content the use of dry air dryers is recommended. The dew point should be =< -30 °C. The time between drying and processing should be as short as possible

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