



## CELSTRAN<sup>®</sup> TPU-GF50-01 AD3002 BLACK CELSTRAN<sup>®</sup> Long Fibre

50% long strand fiber glass reinforced thermoplastic polyurethane

## Product information

Resin Identification Part Marking Code	TPU-LGF50 >TPU-LGF50<		ISO 1043 ISO 11469
Typical mechanical properties			
Tensile modulus 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, 23°C Poisson's ratio [C]: Calculated	1.7 13400 320 C 47	MPa % MPa MPa kJ/m <sup>2</sup> kJ/m <sup>2</sup>	ISO 527-1/-2 ISO 527-1/-2 ISO 527-1/-2 ISO 178 ISO 178 ISO 179/1eA ISO 180/1A
Thermal properties			
Temperature of deflection under load,	1.8 MPa 96	°C	ISO 75-1/-2
Physical/Other properties Density	1630	kg/m³	ISO 1183
Characteristics			
Processing	Injection Moulding		
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: 260-265°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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