

CELSTRAN® TPU-CF40-01

40% long carbon fiber reinforced Thermoplastic Polyurethane
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Typical mechanical properties

Tensile Modulus	4.19E6 psi	ISO 527-1/-2
Stress at break, 5mm/min	46400 psi	ISO 527-1/-2
Strain at break, 5mm/min	1.35 %	ISO 527-1/-2
Flexural Modulus	3.67E6 psi	ISO 178
Flexural Strength	65300 psi	ISO 178
Charpy notched impact strength, 23°C	19.5 ftlb/in ²	ISO 179/1eA

Other properties

Density	12 lb/gal	ISO 1183
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Injection

Drying Temperature	176 °F	
Drying Time, Dehumidified Dryer	4 h	
Processing Moisture Content	0.05 %	
Melt Temperature Optimum	500 °F	Internal
Max. mould temperature	158 - 194 °F	

Processing Texts

Pre-drying

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 $\leq -30^{\circ}\text{C}$. The time between drying and processing should be as short as possible

