



## Celstran® TPU-GF40-01

Celanese Corporation - Thermoplastic Polyurethane Elastomer

Wednesday, November 6, 2019

### General Information

#### Product Description

40% long strand glass fiber reinforced thermoplastic polyurethane

#### General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • North America
Filler / Reinforcement	• Long Glass Fiber, 40% Filler by Weight
RoHS Compliance	• Contact Manufacturer

### ASTM & ISO Properties<sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density	1.52	g/cm <sup>3</sup>	ISO 1183
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.61E+6	psi	ISO 527-2/1A
Tensile Stress (Break)	30500	psi	ISO 527-2/1A/5
Tensile Strain (Break)	2.5	%	ISO 527-2/1A/5
Flexural Modulus (73°F)	1.46E+6	psi	ISO 178
Flexural Stress (73°F)	45700	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	23	ft-lb/in <sup>2</sup>	ISO 179/1eA
Notched Izod Impact Strength			ISO 180/1A
-22°F	16	ft-lb/in <sup>2</sup>	
73°F	19	ft-lb/in <sup>2</sup>	
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Unannealed)	194	°F	ISO 75-2/A

### Processing Information

Injection	Nominal Value	Unit
Drying Temperature	176	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.050	%
Hopper Temperature	158 to 176	°F
Rear Temperature	464 to 482	°F
Middle Temperature	473 to 491	°F
Front Temperature	473 to 500	°F
Nozzle Temperature	473 to 500	°F
Processing (Melt) Temp	473 to 500	°F
Mold Temperature	158 to 194	°F

#### Injection Notes

Feeding zone temperature: 20 to 50°C  
Zone4 temperature: 245 to 260°C  
Hot runner temperature: 250 to 260°C

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.