



Celstran® TPU-GF50-01

Celanese Corporation - Thermoplastic Polyurethane Elastomer

Wednesday, November 6, 2019

General Information

Product Description

50% long strand fiber glass reinforced thermoplastic polyurethane

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • North America
Filler / Reinforcement	• Long Glass Fiber, 50% Filler by Weight
RoHS Compliance	• Contact Manufacturer

ASTM & ISO Properties¹

Physical	Nominal Value	Unit	Test Method
Density	1.63	g/cm ³	ISO 1183
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2.19E+6	psi	ISO 527-2/1A
Tensile Stress (Break)	33400	psi	ISO 527-2/1A/5
Tensile Strain (Break)	2.1	%	ISO 527-2/1A/5
Flexural Modulus (73°F)	2.03E+6	psi	ISO 178
Flexural Stress (73°F)	54400	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	26	ft-lb/in ²	ISO 179/1eA
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Unannealed)	205	°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

¹ Typical properties: these are not to be construed as specifications.