



Celstran® PPS-CF40-01

Celanese Corporation - Polyphenylene Sulfide

Tuesday, November 5, 2019

General Information

Product Description

Celstran PPS-CF 40-01 is a 40% long carbon fiber Polyphenylene Sulfide. This material imparts excellent impact and extremely high modulus properties that exceed that of short carbon fiber PPS.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Filler / Reinforcement	• Long Carbon Fiber, 40% Filler by Weight		
Features	• Good Impact Resistance	• High Stiffness	
RoHS Compliance	• Contact Manufacturer		

ASTM & ISO Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density	1.49	g/cm ³	ISO 1183
Mechanical			
Tensile Modulus	5.41E+6	psi	ISO 527-2/1A
Tensile Stress (Break)	26800	psi	ISO 527-2/1A/5
Tensile Strain (Break)	0.57	%	ISO 527-2/1A/5
Flexural Modulus (73°F)	5.06E+6	psi	ISO 178
Flexural Stress (73°F)	49700	psi	ISO 178
Impact			
Charpy Notched Impact Strength (73°F)	7.9	ft·lb/in ²	ISO 179/1eA
Thermal			
CLTE - Flow	1.3E-4	in/in/°F	ISO 11359-2
CLTE - Transverse	1.5E-3	in/in/°F	ISO 11359-2

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	248 to 284	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Hopper Temperature	158 to 176	°F
Rear Temperature	563 to 581	°F
Middle Temperature	599 to 653	°F
Front Temperature	599 to 653	°F
Nozzle Temperature	599 to 653	°F
Processing (Melt) Temp	599 to 635	°F
Mold Temperature	284 to 320	°F
Injection Rate	Moderate	
Back Pressure	< 435	psi

Injection Notes

Feeding zone temperature: 20 to 50°C

Zone4 temperature: 315 to 345°C

Hot runner temperature: 305 to 315°C

UL and the UL logo are trademarks of UL LLC © 2019. All Rights Reserved.

The information presented here was acquired by UL from the producer of the product or material or original information provider. However, UL assumes no responsibility or liability for the accuracy of the information contained on this website and strongly encourages that upon final product or material selection information is validated with the manufacturer. This website provides links to other websites owned by third parties. The content of such third party sites is not within our control, and we cannot and will not take responsibility for the information or content.

Celstran® PPS-CF40-01

Celanese Corporation - Polyphenylene Sulfide

Notes

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