Celstran® PPS-CF30-01

Celanese Corporation - Polyphenylene Sulfide

Tuesday, November 5, 2019

General Information

Product Description

Celstran PPS-CF30-01 is a 30% long carbon fiber reinforced 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, 30% Filler by Weight		
Features	• Good Impact Resistance	• High Stiffness	
RoHS Compliance	• Contact Manufacturer		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.45	g/cm³	ISO 1183
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	4.62E+6	psi	ISO 527-2/1A
Tensile Stress (Break)	29400	psi	ISO 527-2/1A/50
Tensile Strain (Break)	0.72	%	ISO 527-2/1A/5
Flexural Modulus (73°F)	4.37E+6	psi	ISO 178
Flexural Stress (73°F)	49200	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (73°F)	6.9	ft·lb/in²	ISO 179/1eA
Thermal	**Nominal Value**	**Unit**	**Test Method**
CLTE - Flow	2.1E-4	in/in/°F	ISO 11359-2
CLTE - Transverse	1.7E-3	in/in/°F	ISO 11359-2

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	230 to 266	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Hopper Temperature	158 to 176	°F
Rear Temperature	545 to 563	°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 Notes

Feeding zone temperature: 20 to 50°C
Zone4 temperature: 315 to 345°C

Notes

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