Celstran® PP-GF20-23 Natural

Celanese Corporation - Polypropylene

Tuesday, November 5, 2019

General Information

Product Description

Celstran PP-GF20-23 is a 20% long glass fiber Polypropylene. The -23 can be used in food contact applications since all of the raw materials contained within are FDA compliant. This material imparts excellent impact and modulus properties that exceed that of short glass fiber polypropylene.

General		
Material Status	• Commercial: Active	
Availability	• Europe	• North America
Filler / Reinforcement	• Long Glass Fiber, 20% Filler by Weight	
Features	• Food Contact Acceptable	• Good Impact Resistance
Appearance	• Natural Color	

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.01	g/cm³	ISO 1183
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	667000	psi	ISO 527-2/1A/1
Tensile Stress (Break)	12800	psi	ISO 527-2/1A/5
Tensile Strain (Break)	2.8	%	ISO 527-2/1A/5
Flexural Modulus (73°F)	670000	psi	ISO 178
Flexural Stress (73°F)	21000	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (73°F)	9.0	ft·lb/in²	ISO 179/1eA

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	428 to 446	°F
Middle Temperature	446 to 464	°F
Front Temperature	464 to 482	°F
Nozzle Temperature	464 to 482	°F
Processing (Melt) Temp	446 to 518	°F
Mold Temperature	86 to 158	°F
Injection Pressure	8700 to 17400	psi
Injection Rate	Slow	
Holding Pressure	5800 to 11600	psi
Back Pressure	0.00 to 435	psi

Injection Notes

Feed Temperature: 20 to 50°C
Zone 4 Temperature: 250°C
Manifold Temperature: 230 to 270°C

Notes

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