



Celanex® 5300-2

Celanese Corporation - Polybutylene Terephthalate

Monday, November 4, 2019

General Information

Product Description

Celanex 5300-2 is a 30% fiberglass reinforced polyester with improved surface finish. Celanex 5300-2 contains an internal lubricant.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Additive	• Lubricant		
Features	• Good Surface Finish	• Lubricated	
RoHS Compliance	• Contact Manufacturer		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.54	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (265°C/2.16 kg)	20	cm ³ /10min	ISO 1133
Molding Shrinkage - Flow	0.30 to 0.50	%	ISO 294-4
Water Absorption (Saturation, 73°F)	0.40	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.20	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.45E+6	psi	ISO 527-2/1A
Tensile Stress (Break)	19600	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.0	%	ISO 527-2/1A/5
Flexural Modulus (73°F)	1.31E+6	psi	ISO 178
Flexural Stress (73°F)	29000	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	4.3	ft-lb/in ²	
73°F	4.5	ft-lb/in ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	23	ft-lb/in ²	
73°F	23	ft-lb/in ²	
Notched Izod Impact Strength (73°F)	3.9	ft-lb/in ²	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	93		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (66 psi, Unannealed)	428	°F	ISO 75-2/B
Heat Deflection Temperature (264 psi, Unannealed)	392	°F	ISO 75-2/A
Heat Deflection Temperature (1160 psi, Unannealed)	248	°F	ISO 75-2/C
Glass Transition Temperature ²	140	°F	ISO 11357-2
Vicat Softening Temperature	437	°F	ISO 306/B50
Melting Temperature ²	437	°F	ISO 11357-3
CLTE - Flow	1.3E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	4.2E-5	in/in/°F	ISO 11359-2

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.

Celanex® 5300-2

Celanese Corporation - Polybutylene Terephthalate

Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+15	ohms	IEC 60093
Volume Resistivity	> 1.0E+15	ohms·cm	IEC 60093
Electric Strength	760	V/mil	IEC 60243-1
Relative Permittivity			IEC 60250
100 Hz	4.60		
1 MHz	4.20		
Comparative Tracking Index	350	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.028 in)	HB		UL 94
Oxygen Index	20	%	ISO 4589-2

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	248 to 266	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.020	%
Hopper Temperature	68 to 122	°F
Rear Temperature	446 to 482	°F
Middle Temperature	455 to 491	°F
Front Temperature	455 to 491	°F
Nozzle Temperature	482 to 509	°F
Processing (Melt) Temp	455 to 509	°F
Mold Temperature	149 to 199	°F
Injection Rate	Moderate-Fast	

Injection Notes

Die Temperature: 250 to 265°C
Feed Temperature: 230 to 250°C
Zone 4 Temperature: 240 to 260°C

Notes

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

² 10°C/min