Celanex® 5300-2

Celanese Corporation - Polybutylene Terephthalate

Tuesday, January 21, 2020

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	• Asia Pacific • Europe	• Latin America • North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight	
Additive	• Lubricant	
Features	• Good Surface Finish	• Lubricated

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.54	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (265°C/2.16 kg)	20	cm³/10min	ISO 1133
Molding Shrinkage - Flow	0.30 to 0.50	%	ISO 294-4
Water Absorption (Saturation, 23°C)	0.40	%	ISO 62
Water Absorption (Equilibrium, 23°C, 50% RH)	0.20	%	ISO 62
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature (0.45 MPa, Unannealed)	220	°C	ISO 75-2/B
Heat Deflection Temperature (1.8 MPa, Unannealed)	200	°C	ISO 75-2/A
Heat Deflection Temperature (8.0 MPa, Unannealed)	120	°C	ISO 75-2/C
Glass Transition Temperature [2]	60.0	°C	ISO 11357-2
Vicat Softening Temperature	225	°C	ISO 306/B50
Melting Temperature [2]	225	°C	ISO 11357-3
CLTE - Flow	2.4E-5	cm/cm/°C	ISO 11359-2
CLTE - Transverse	7.5E-5	cm/cm/°C	ISO 11359-2
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	30	kV/mm	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 (0.71 mm)	HB		UL 94
Oxygen Index	20	%	ISO 4589-2

Notes

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

[2] 10°C/min