Celanex® 7040 GM30

Celanese Corporation - Polybutylene Terephthalate

Monday, November 4, 2019

General Information

Product Description

Celanex 7040 GM30 is a 30% glass/mineral polyester with a good balance of mechanical properties and processability and high rigidity

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass\Mineral, 30% Filler by Weight		
Features	• Good Processability	• High Rigidity	

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.55	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (250°C/2.16 kg)	16	cm³/10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	0.70 to 1.0	%	
Flow	0.30 to 0.40	%	
Water Absorption (Equilibrium, 73°F, 50% RH)	0.15	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	1.45E+6	psi	ISO 527-2/1A
Tensile Stress (Break)	17400	psi	ISO 527-2/1A/5
Tensile Strain (Break)	2.5	%	ISO 527-2/1A/5
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (73°F)	3.1	ft·lb/in²	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	19	ft·lb/in²	
73°F	21	ft·lb/in²	
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
Melting Temperature [2]	437	°F	ISO 11357-3

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	250	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.020	%
Suggested Max Regrind	25	%
Rear Temperature	446 to 482	°F
Middle Temperature	455 to 491	°F
Front Temperature	464 to 500	°F
Nozzle Temperature	482 to 509	°F
Processing (Melt) Temp	455 to 509	°F
Mold Temperature	149 to 199	°F

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Injection	Nominal Value	Unit
Injection Rate	Fast	
Back Pressure	0.00 to 50.0	psi

Notes

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

[2] 10°C/min