Thermx® TE3002

Tuesday, November 5, 2019

Celanese Corporation - Polycyclohexylenedimethylene Terephthalate

General Information

Product Description

Thermx® TE3002 is a 30% glass fiber reinforced, flame retardant, black high performance polyester resin for injection molding.

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	• Flame Retardant		
Features	• Flame Retardant		
RoHS Compliance	• Contact Manufacturer		
Appearance	• Black		
Processing Method	• Injection Molding		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.65	g/cm³	ISO 1183
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	1.45E+6	psi	ISO 527-2/1A
Tensile Stress (Break)	14500	psi	ISO 527-2/1A/5
Tensile Strain (Break)	1.2	%	ISO 527-2/1A/5
Flexural Modulus (73°F)	1.52E+6	psi	ISO 178
Flexural Stress (73°F)	21800	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (73°F)	3.3	ft·lb/in²	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	9.5	ft·lb/in²	ISO 179/1eU
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature (264 psi, Unannealed)	464	°F	ISO 75-2/A
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.031 in)	V-0		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	203	°F
Drying Time	4.0 to 6.0	hr
Suggested Max Moisture	0.030	%
Processing (Melt) Temp	563 to 590	°F
Mold Temperature	176 to 248	°F

Notes

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