

Thermx® CG943

Celanese Corporation - Polycyclohexylenedimethylene Terephthalate

Tuesday, November 5, 2019

General Information					
Product Description					
Thermx® CG943 is a 40% glass	fiber reinforced and flame retardant poly	cyclohexylenedimethylene terep	ohthalate for injection molding.		
General					
Material Status	Commercial: Active				
Availability	Africa & Middle EastAsia Pacific	EuropeLatin America	North America		
Filler / Reinforcement	Glass Fiber, 40% Filler by Weight				
Additive	Flame Retardant				
Features	Flame Retardant				
RoHS Compliance	 Contact Manufacturer 				
Processing Method	Injection Molding				

ASTM & ISO Properties 1					
Physical	Nominal Value	Unit	Test Method		
Density	1.70	g/cm³	ISO 1183		
Mechanical	Nominal Value	Unit	Test Method		
Tensile Modulus	1.89E+6	psi	ISO 527-2/1A		
Tensile Stress (Break)	16700	psi	ISO 527-2/1A/5		
Tensile Strain (Break)	1.3	%	ISO 527-2/1A/5		
Flexural Modulus (73°F)	186000	psi	ISO 178		
Flexural Stress (73°F)	25800	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)	12	ft·lb/in²	ISO 179/1eU		
Thermal	Nominal Value	Unit	Test Method		
Heat Deflection Temperature (264 psi, Unannealed)	504	°F	ISO 75-2/A		
Melting Temperature ²	545	°F	ISO 11357-3		
Electrical	Nominal Value	Unit	Test Method		
Comparative Tracking Index	380	V	IEC 60112		
Flammability	Nominal Value	Unit	Test Method		
Flame Rating (0.06 in)	V-0		UL 94		
Oxygen Index	33	%	ISO 4589-2		

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		



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Notes

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

² 10°C/min

