

DuPont™ Thermx® PCT

high performance polyester resin

Thermx® CG033 BK010T

Thermx® CG033 BK010T is a 30% glass fiber reinforced, black polycyclohexylenedimethylene terephthalate resin for injection molding.

Property	Test Method	Units	Value
Identification			
Resin Identification	ISO 1043		PCT-GF30
Part Marking Code	ISO 11469		>PCT-GF30<
Mechanical			
Stress at Break	ISO 527	MPa (kpsi)	120 (17.4)
Strain at Break	ISO 527	%	2
Tensile Modulus	ISO 527	MPa (kpsi)	8700 (1260)
Flexural Modulus	ISO 178	MPa (kpsi)	7800 (1130)
Flexural Strength	ISO 178	MPa (kpsi)	180 (26.1)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m ²	7
Unnotched Charpy Impact Strength	ISO 179/1eU	kJ/m ²	40
Thermal			
Deflection Temperature 1.80MPa	ISO 75	°C (°F)	258 (496)
Melting Temperature 10°C/min	ISO 11357-1/-3	°C (°F)	283 (541)
Flammability			
Flammability Classification 0.8mm	IEC 60695-11-10		HB
Flammability Classification 0.8mm	UL94		HB

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc.
 ISO Mechanical properties measured at 4.0mm, ISO Electrical properties measured at 2.0mm, and all ASTM properties measured at 3.2mm.
 Test temperatures are 23°C unless otherwise stated.

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Property	Test Method	Units	Value
Other			
Density	ISO 1183	kg/m ³ (g/cm ³)	1450 (1.45)
Molding Shrinkage	ISO 294-4	%	
Normal, 2.0mm			0.8
Parallel, 2.0mm			0.3
Processing			
Melt Temperature Range		°C (°F)	295-310 (565-590)
Melt Temperature Optimum		°C (°F)	300 (570)
Mold Temperature Range		°C (°F)	80-120 (175-250)
Mold Temperature Optimum		°C (°F)	100 (210)
Drying Time, Dehumidified Dryer		h	4-6
Drying Temperature		°C (°F)	95 (200)
Processing Moisture Content		%	<0.03

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