

# DuPont™ Thermx® PCT

high performance polyester resin

## Thermx® CG933 BK010T

Thermx® CG933 BK010T is a 30% glass reinforced, flame retardant, black polycyclohexylenedimethylene terephthalate resin with improved toughness for injection molding.

Property	Test Method	Units	Value
<b>Identification</b>			
Resin Identification	ISO 1043		PCT-GF30FR(17)
Part Marking Code	ISO 11469		>PCT-GF30FR(17)<
<b>Mechanical</b>			
Stress at Break	ISO 527	MPa (kpsi)	114 (16.5)
Strain at Break	ISO 527	%	1.7
Tensile Modulus	ISO 527	MPa (kpsi)	10300 (1490)
Flexural Modulus	ISO 178	MPa (kpsi)	9500 (1380)
Flexural Strength	ISO 178	MPa (kpsi)	170 (24.7)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m <sup>2</sup>	6.5
Unnotched Charpy Impact Strength	ISO 179/1eU	kJ/m <sup>2</sup>	30
<b>Thermal</b>			
Deflection Temperature 1.80MPa	ISO 75f	°C (°F)	240 (464)
Melting Temperature 10°C/min	ISO 11357-1/-3	°C (°F)	285 (545)
<b>Flammability</b>			
Flammability Classification 0.79mm	IEC 60695-11-10		V-2
1.5mm			V-0
Flammability Classification 0.79mm	UL94		V-2
1.5mm			V-0

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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**Thermx® CG933 BK010T**

Property	Test Method	Units	Value
<b>Temperature Index</b>			
RTI, Electrical 1.5mm	UL 746B	°C	150
RTI, Strength 1.5mm	UL 746B	°C	150
<b>Other</b>			
Density	ISO 1183	kg/m <sup>3</sup> (g/cm <sup>3</sup> )	1610 (1.61)
<b>Processing</b>			
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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