

# DuPont™ Thermx® PCT

high performance polyester resin

## Thermx® TE1001 BK010

Thermx® TE1001 BK010 is a 40% glass fiber reinforced, black polycyclohexylenedimethylene terephthalate resin for injection molding.

Property	Test Method	Units	Value
<b>Identification</b>			
Resin Identification	ISO 1043		PCT-GF40
Part Marking Code	ISO 11469		>PCT-GF40<
<b>Mechanical</b>			
Stress at Break	ISO 527	MPa (kpsi)	134 (19.4)
Strain at Break	ISO 527	%	1.7
Tensile Modulus	ISO 527	MPa (kpsi)	12500 (1810)
Flexural Modulus	ISO 178	MPa (kpsi)	10600 (1540)
Flexural Strength	ISO 178	MPa (kpsi)	196 (28)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m <sup>2</sup>	9.5
Unnotched Charpy Impact Strength	ISO 179/1eU	kJ/m <sup>2</sup>	46
<b>Thermal</b>			
Deflection Temperature 1.80MPa	ISO 75	°C (°F)	259 (498)
Melting Temperature 10°C/min	ISO 11357-1/-3	°C (°F)	283 (541)
<b>Other</b>			
Density	ISO 1183	kg/m <sup>3</sup> (g/cm <sup>3</sup> )	1560 (1.56)

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® TE1001 BK010

Property	Test Method	Units	Value
<b>Processing</b>			
Melt Temperature Range		°C (°F)	295-310 (565-590)
Melt Temperature Optimum		°C (°F)	300 (570)
Mold Temperature Range		°C (°F)	120-150 (250-300)
Mold Temperature Optimum		°C (°F)	135 (275)
Drying Time, Dehumidified Dryer		h	4-6
Drying Temperature		°C (°F)	95 (200)
Processing Moisture Content		%	<0.03

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