

DuPont™ Thermx® PCT

high performance polyester resin

Thermx® CG923 NC010

Thermx® CG923 NC010 is a 20% glass fiber reinforced, flame retardant polycyclohexylenedimethylene terephthalate resin for injection molding.

Property	Test Method	Units	Value
Identification			
Resin Identification	ISO 1043		PCT-GF20FR(17)
Part Marking Code	ISO 11469		>PCT-GF20FR(17)<
Mechanical			
Stress at Break	ISO 527	MPa (kpsi)	100 (14.5)
Strain at Break	ISO 527	%	1.8
Tensile Modulus	ISO 527	MPa (kpsi)	8000 (1160)
Flexural Modulus	ISO 178	MPa (kpsi)	7200 (1070)
Flexural Strength	ISO 178	MPa (kpsi)	145 (21.0)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m ²	5
Unnotched Charpy Impact Strength	ISO 179/1eU	kJ/m ²	30
Thermal			
Deflection Temperature 1.80MPa	ISO 75	°C (°F)	235 (455)
Melting Temperature 10°C/min	ISO 11357-1/-3	°C (°F)	285 (545)
Flammability			
Flammability Classification 1.5mm	IEC 60695-11-10		V-0
Flammability Classification 1.5mm	UL94		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.

The DuPont Oval Logo, DuPont™, The miracles of science™ and Thermx® are trademarks or registered trademarks of DuPont Company. Copyright© 2006.

060222/060223

The information provided in this data sheet corresponds to our knowledge on the subject at the date of its publication. This information may be subject to revision as new knowledge and experience becomes available. The data provided fall within the normal range of product properties and relate only to the specific material designated; these data may not be valid for such material used in combination with any other materials, additives or pigments or in any process, unless expressly indicated otherwise. The data provided should not be used to establish specification limits or used alone as the basis of design; they are not intended to substitute for any testing you may need to conduct to determine for yourself the suitability of a specific material for your particular purposes. Since DuPont cannot anticipate all variations in actual end-use conditions DuPont makes no warranties and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent rights. DuPont advises you to seek independent counsel for a freedom to practice opinion on the intended application or end-use of our products. Caution: Do not use this product in medical applications involving permanent implantation in the human body. For other medical applications see "DuPont Medical Caution Statement", H-50102.

Thermx® CG923 NC010

Property	Test Method	Units	Value
Temperature Index			
RTI, Electrical 1.5mm	UL 746B	°C	150
RTI, Strength 1.5mm	UL 746B	°C	130
Other			
Density	ISO 1183	kg/m ³ (g/cm ³)	1570 (1.57)
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

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.

The DuPont Oval Logo, DuPont™, The miracles of science™ and Thermx® are trademarks or registered trademarks of DuPont Company. Copyright© 2006.

060222/060223

The information provided in this data sheet corresponds to our knowledge on the subject at the date of its publication. This information may be subject to revision as new knowledge and experience becomes available. The data provided fall within the normal range of product properties and relate only to the specific material designated; these data may not be valid for such material used in combination with any other materials, additives or pigments or in any process, unless expressly indicated otherwise. The data provided should not be used to establish specification limits or used alone as the basis of design; they are not intended to substitute for any testing you may need to conduct to determine for yourself the suitability of a specific material for your particular purposes. Since DuPont cannot anticipate all variations in actual end-use conditions DuPont makes no warranties and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent rights. DuPont advises you to seek independent counsel for a freedom to practice opinion on the intended application or end-use of our products. Caution: Do not use this product in medical applications involving permanent implantation in the human body. For other medical applications see "DuPont Medical Caution Statement", H-50102.