

Product Texts

Thermx® CG023 is a 20% glass fiber reinforced polycyclohexylenedimethylene terephthalate for injection molding.

Note: Initial properties are from CAMPUS information published by DuPont 3/2010

Flammability @1.6mm nom. HB
thickn.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	30	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	2.16	kg	-
^[C] Molding shrinkage, parallel	0.3	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.8	%	ISO 294-4, 2577
^[C] Density of melt	1140	kg/m ³	-
^[C] Thermal conductivity of melt	0.2	W/(m K)	-
^[C] Spec. heat capacity of melt	1470	J/(kg K)	-
^[C] Ejection temperature	230	°C	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	6400	MPa	ISO 527
^[C] Stress at break	100	MPa	ISO 527
^[C] Strain at break	2.3	%	ISO 527
^[C] Charpy impact strength, +23°C	35	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	30	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	7	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	7	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	285	°C	ISO 11357-1/-3
^[C] Glass transition temperature, 10°C/min	105	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	253	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	30	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	80	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	-

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Volume resistivity	1E13	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	>1E15	Ohm	IEC 62631-3-2
^[C] Electric strength	41	kV/mm	IEC 60243-1

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Density	1380	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa