

# THERMX® CG923

## PCT

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

### Product information

Resin Identification	PCT-GF20	ISO 1043
Part Marking Code	>PCT-GF20<	ISO 11469

### Rheological properties

Moulding shrinkage, parallel	0.4 %	ISO 294-4, 2577
Moulding shrinkage, normal	0.9 %	ISO 294-4, 2577

### Typical mechanical properties

Tensile modulus	8000 MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	100 MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	1.8 %	ISO 527-1/-2
Flexural modulus	7200 MPa	ISO 178
Flexural strength	140 MPa	ISO 178
Charpy impact strength, 23°C	30 kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, 23°C	5 kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength, 23°C	5 kJ/m <sup>2</sup>	ISO 180/1A
Poisson's ratio	0.34 <sup>[C]</sup>	

[C]: Calculated

### Thermal properties

Melting temperature, 10°C/min	285 °C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	235 °C	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	15 E-6/K	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	110 E-6/K	ISO 11359-1/-2

### Flammability

Burning Behav. at 1.5mm nom. thickn.	V-0 class	IEC 60695-11-10
Thickness tested	1.5 mm	IEC 60695-11-10

### Physical/Other properties

Density	1570 kg/m <sup>3</sup>	ISO 1183
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### Characteristics

Processing	Injection Moulding
Delivery form	Pellets
Special characteristics	Flame retardant, Chemical resistant

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PCT

## Additional information

Injection molding

### Preprocessing

Drying Recommended = Yes  
Drying Temperature = 95 °C  
Drying Time, Dehumidified Dryer = 4-6h  
Processing Moisture Content = <0.03 %

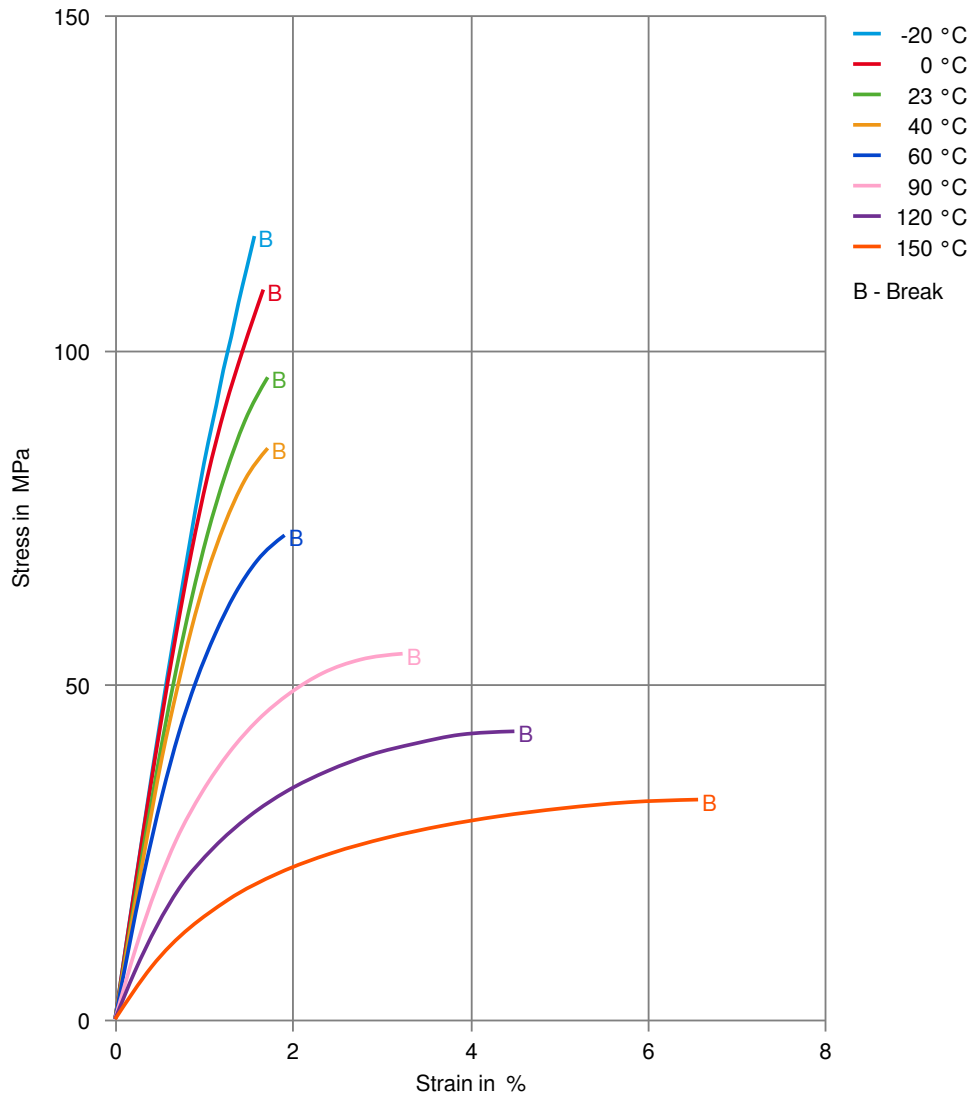
### Processing

Melt Temperature Optimum = 300 °C  
Melt Temperature Range = 295-310 °C  
Mold Temperature Optimum = 100 °C  
Mold Temperature Range = 80-120 °C

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## Stress-strain



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## Secant modulus-strain

