

THERMX® CG923

20% glass fiber reinforced, flame retardant

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

Rheological properties

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

Typical mechanical properties

Tensile Modulus	8000 MPa	ISO 527-1/-2
Stress at break, 5mm/min	100 MPa	ISO 527-1/-2
Strain at break, 5mm/min	1.8 %	ISO 527-1/-2
Flexural Modulus	7200 MPa	ISO 178
Flexural Strength	145 MPa	ISO 178
Charpy impact strength, 23°C	30 kJ/m²	ISO 179/1eU
Charpy notched impact strength, 23°C	5 kJ/m²	ISO 179/1eA
Izod notched impact strength, 23°C	5 kJ/m²	ISO 180/1A

Thermal properties

Melting temperature, 10°C/min	285 °C	ISO 11357-1/-3
Temp. of deflection under load, 1.8 MPa	235 °C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	15 E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	110 E-6/K	ISO 11359-1/-2

Flammability

Burning Behav. at 1.5mm nom. thickn.	V-0 class	UL 94
Thickness tested	1.5 mm	UL 94

Electrical properties

Comparative tracking index	PLC 2 PLC	UL 746A
----------------------------	-----------	---------

Other properties

Density	1570 kg/m³	ISO 1183
---------	------------	----------

Injection

Drying Temperature	≥95 °C
Drying Time, Dehumidified Dryer	4 - 6 h
Processing Moisture Content	0.03 %
Max. mould temperature	80 - 120 °C



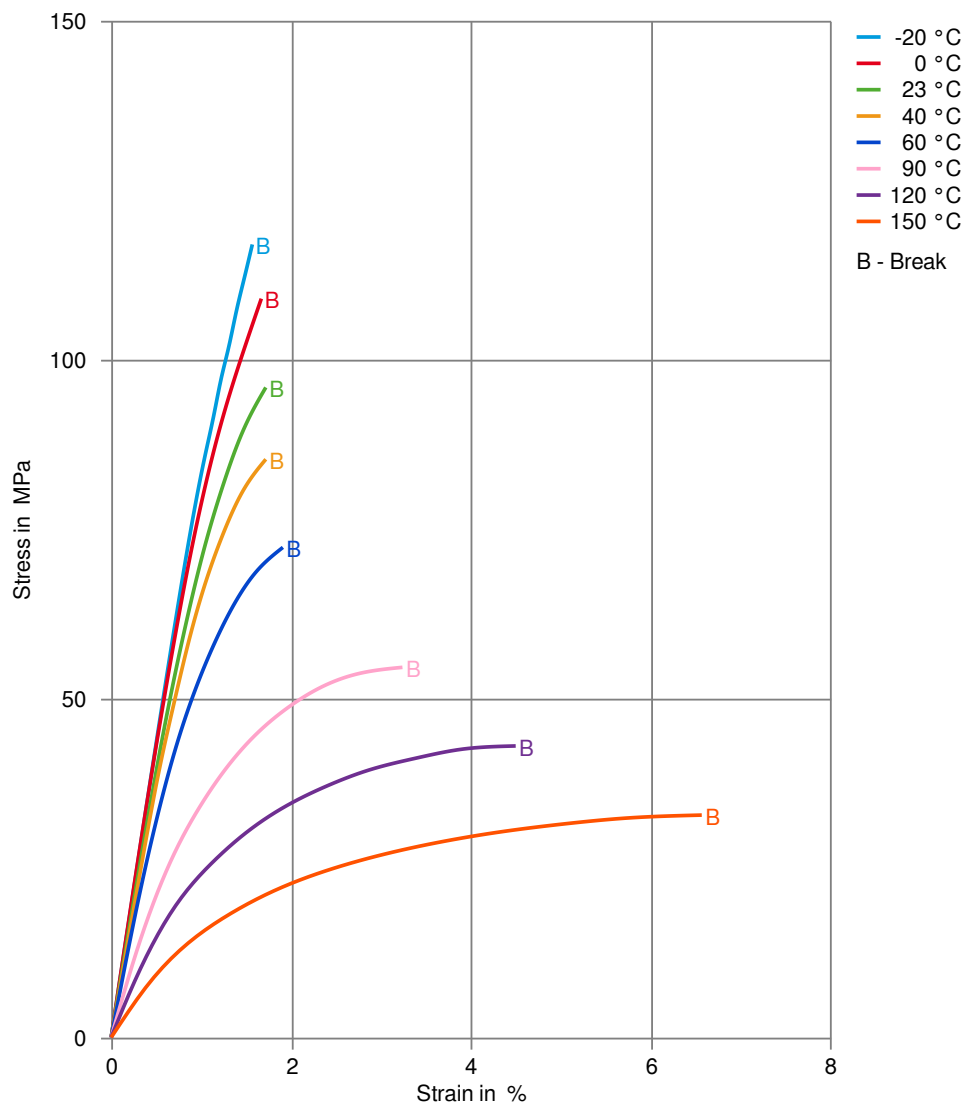
THERMX® CG923

Additional information

Injection molding

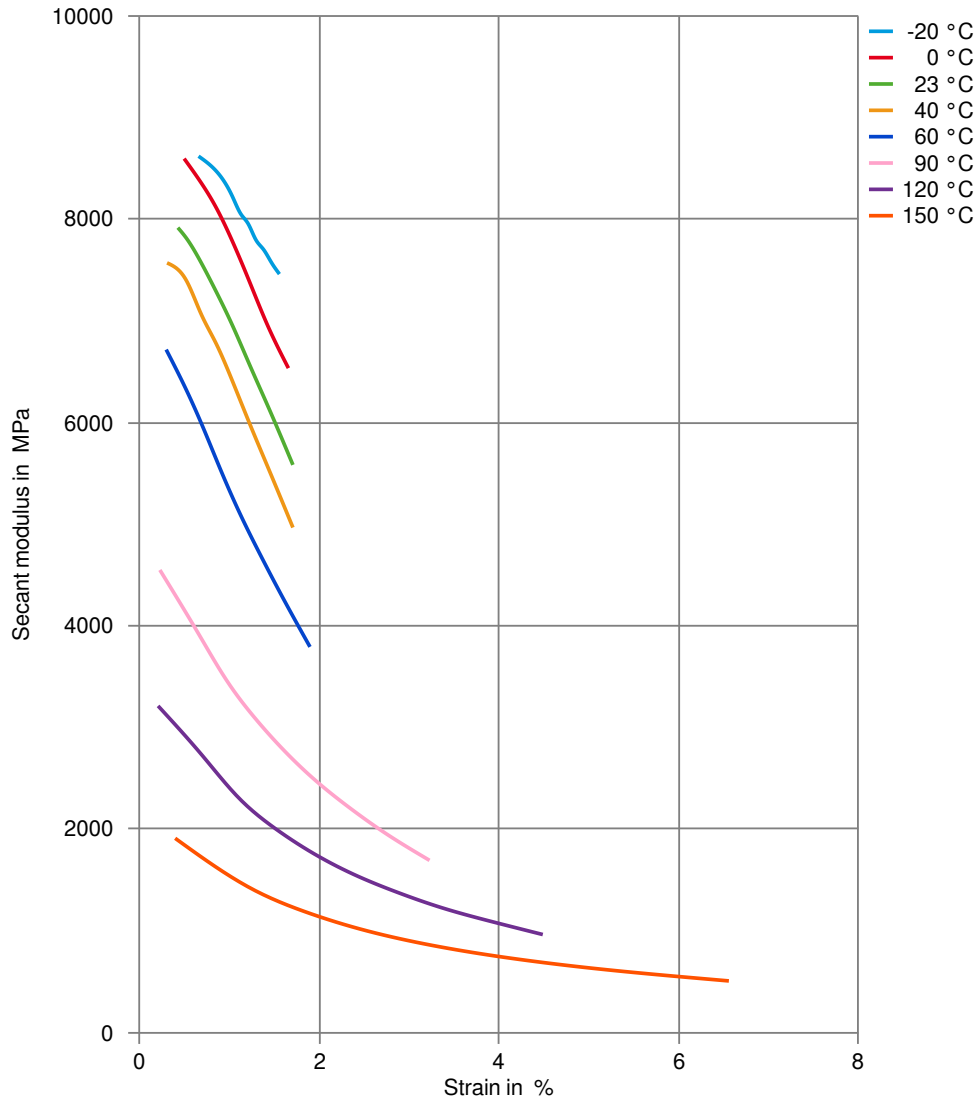
Melt Temperature Optimum = 300 °C
Melt Temperature Range = 295-310 °C
Mold Temperature Optimum = 100 °C
Mold Temperature Range = 80-120 °C

Stress-strain



THERMX[®] CG923

Secant modulus-strain



THERMX[®] CG923

Processing Texts

Injection molding

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

Injection molding Preprocessing

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

