

Crastin® 6140 NC010

THERMOPLASTIC POLYESTER RESIN

Crastin® 6140 NC010 is an Unreinforced Low Viscosity Polybutylene Terephthalate

Product information

Resin Identification	PBT	ISO 1043
Part Marking Code	>PBT<	ISO 11469

Rheological properties

Melt mass-flow rate	250 g/10min	ISO 1133
Melt mass-flow rate, Temperature	250 °C	
Melt mass-flow rate, Load	2.16 kg	
Intrinsic viscosity	0.63	ISO 307, 1157, 1628
Moulding shrinkage, parallel	1.5 %	ISO 294-4, 2577
Moulding shrinkage, normal	1.5 %	ISO 294-4, 2577

Typical mechanical properties

Tensile Modulus	2500 MPa	ISO 527-1/-2
Stress at break, 5mm/min	55 MPa	ISO 527-1/-2
Strain at break, 5mm/min	2.8 %	ISO 527-1/-2
Charpy impact strength, 23°C	66 kJ/m²	ISO 179/1eU
Charpy notched impact strength, 23°C	1.8 kJ/m²	ISO 179/1eA
Poisson's ratio	0.38	

Thermal properties

Melting temperature, 10°C/min	225 °C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	55 °C	ISO 11357-1/-3

Flammability

FMVSS Class	B	ISO 3795 (FMVSS 302)
Burning rate, Thickness 1 mm	<80 mm/min	ISO 3795 (FMVSS 302)

Other properties

Density	1310 kg/m³	ISO 1183
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Injection

Drying Recommended	yes	
Drying Temperature	120 °C	
Drying Time, Dehumidified Dryer	2 - 4 h	
Processing Moisture Content	≤0.04 %	
Melt Temperature Optimum	250 °C	Internal
Min. melt temperature	240 °C	



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Max. melt temperature	260 °C
Mold Temperature Optimum	80 °C
Min. mould temperature	30 °C
Max. mould temperature	130 °C
Hold pressure range	≥60 MPa
Hold pressure time	4 s/mm
Back pressure	As low as possible
Ejection temperature	170 °C

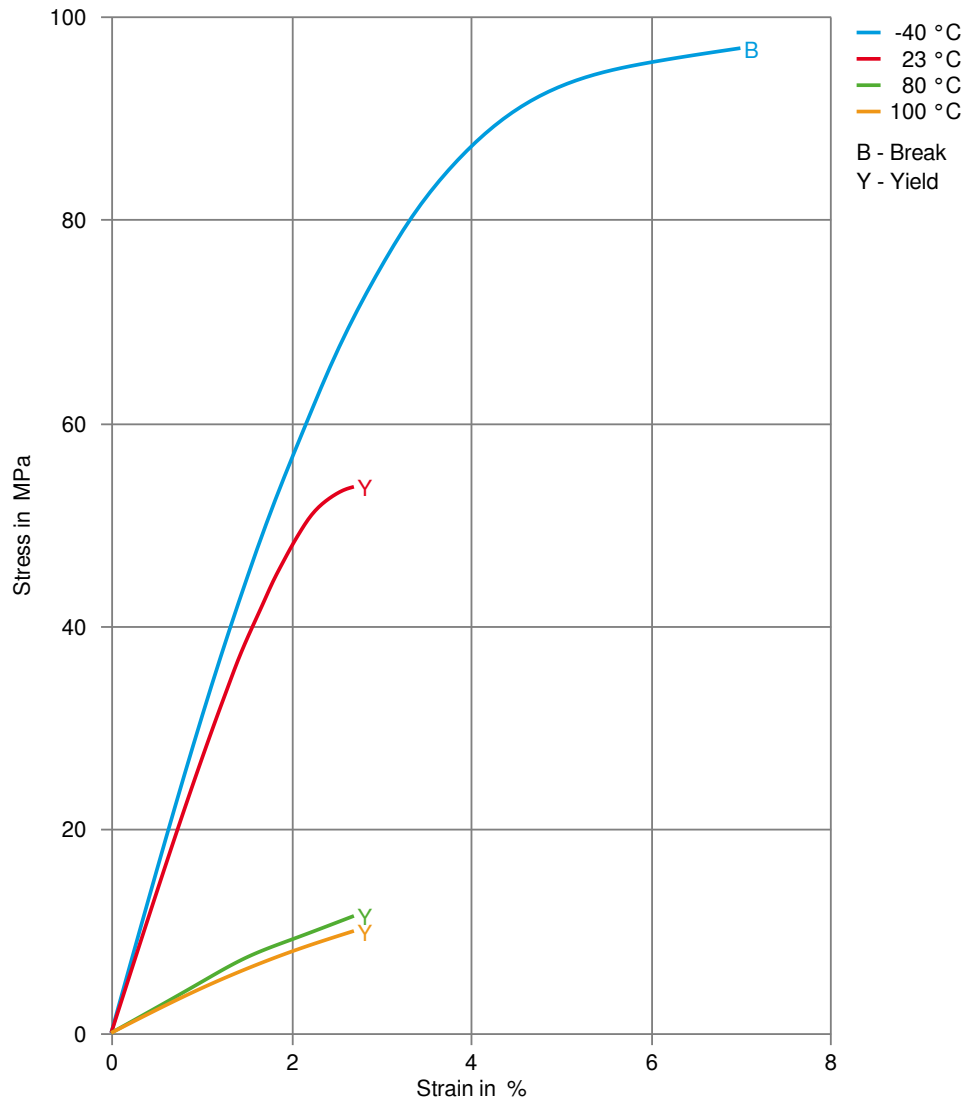
Internal

Stress-strain
(measured on Crastin® S600F40 NC010)



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Secant modulus-strain
(measured on Crastin® S600F40 NC010)

