

Crastin® 6003 NC010

THERMOPLASTIC POLYESTER RESIN

Crastin® 6003 NC010 is an Unreinforced Low Viscosity Polybutylene Terephthalate

Product information

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

Typical mechanical properties

Tensile Modulus	2600 MPa	ISO 527-1/-2
Yield stress, 50mm/min	56 MPa	ISO 527-1/-2
Yield strain, 50mm/min	3.5 %	ISO 527-1/-2
Nominal strain at break	9 %	ISO 527-1/-2
Strain at break, 50mm/min	15 %	ISO 527-1/-2
Flexural Strength	80 MPa	ISO 178
Charpy notched impact strength, 23°C	3 kJ/m ²	ISO 179/1eA
Izod notched impact strength, 23°C	2.5 kJ/m ²	ISO 180/1A
Poisson's ratio	0.38	

Thermal properties

Melting temperature, 10°C/min	225 °C	ISO 11357-1/-3
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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/m ³	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	
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	



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Back pressure

As low as MPa
possible

Ejection temperature

170 °C

Internal

Extrusion

Drying Temperature

110 - 130 °C

Drying Time, Dehumidified Dryer

2 - 4 h

Processing Moisture Content

≤0.04 %

Melt Temperature Optimum

250 °C

Melt Temperature Range

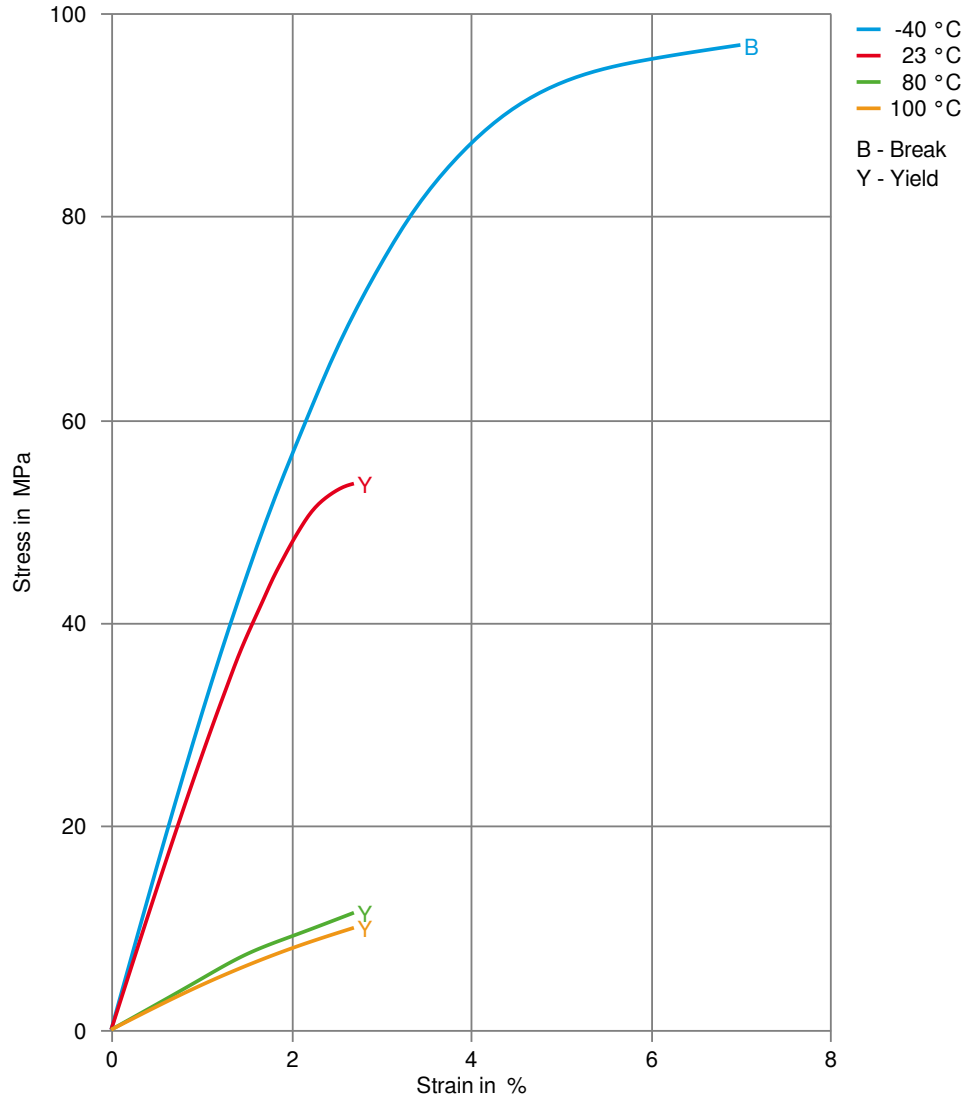
240 - 260 °C



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Stress-strain
(measured on Crastin® S600F40 NC010)



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

