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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

Rheological properties

Melt mass-flow rate	87	g/10min	ISO 1133
Melt mass-flow rate, Temperature	250	°C	
Melt mass-flow rate, Load	2.16	kg	

Typical mechanical properties

Tensile modulus	2600	MPa	ISO 527-1/-2
Tensile stress at yield, 50mm/min	56	MPa	ISO 527-1/-2
Tensile strain at yield, 50mm/min	3.5	%	ISO 527-1/-2
Nominal strain at break	9	%	ISO 527-1/-2
Tensile strain at break, 50mm/min	15	%	ISO 527-1/-2
Flexural strength	80	MPa	ISO 178
Charpy notched impact strength, 23°C	3.2	kJ/m²	ISO 179/1eA
Izod notched impact strength, 23°C	2.5	kJ/m²	ISO 180/1A
Poisson's ratio	0.38		

Thermal properties

Melting temperature, 10°C/min	225	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	50	°C	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	125	°C	ISO 75-1/-2

Flammability

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

Physical/Other properties

Density	1310	kg/m³	ISO 1183

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
Min. melt temperature	240	°C
Max. melt temperature	260	°C
Mold Temperature Optimum	80	°C
Min. mould temperature	60	°C

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Max. mould temperature	130	°C
Hold pressure range	≥60	MPa
Hold pressure time	4	s/mm
Back pressure	As low as possible	MPa
Ejection temperature	170	°C

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

Characteristics

Processing	Injection Moulding
Delivery form	Pellets

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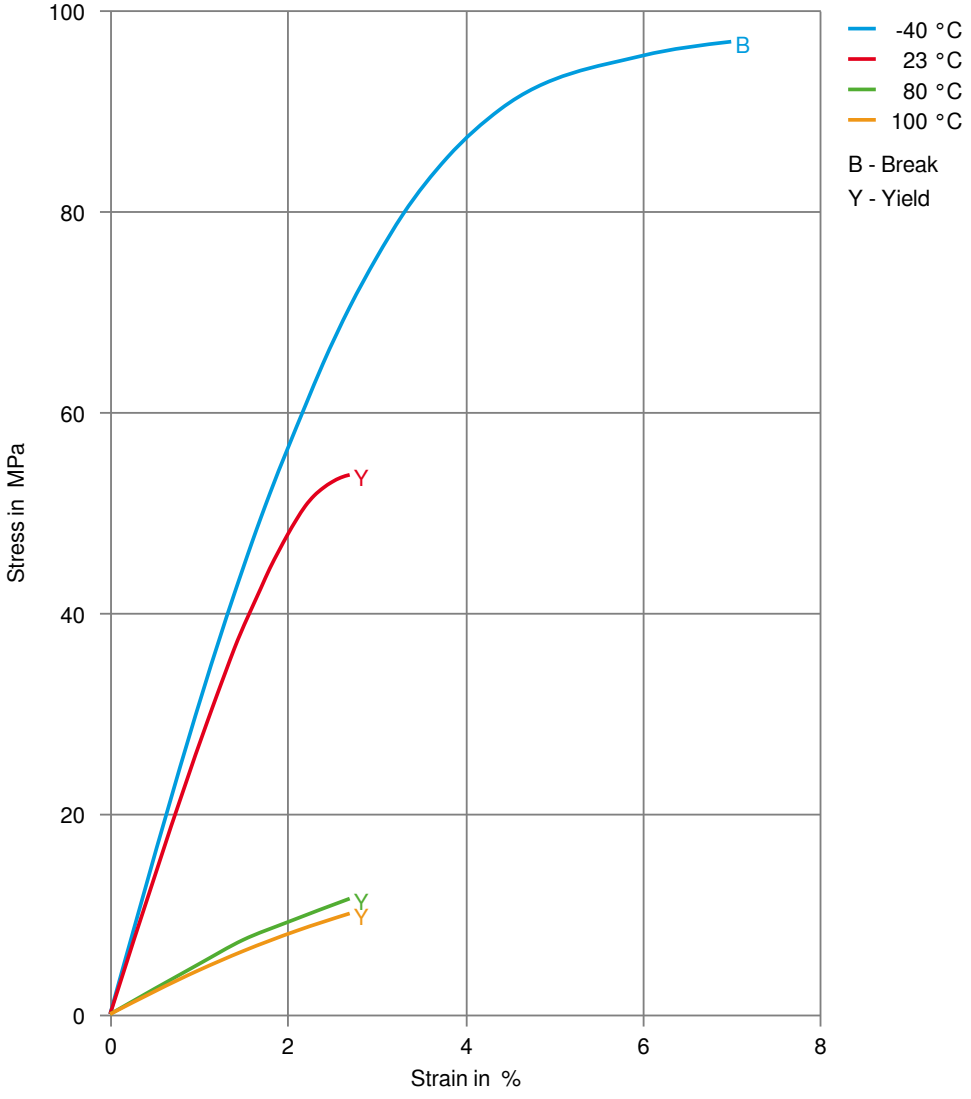
Stress-strain
(measured on Crastin® S600F40 NC010)



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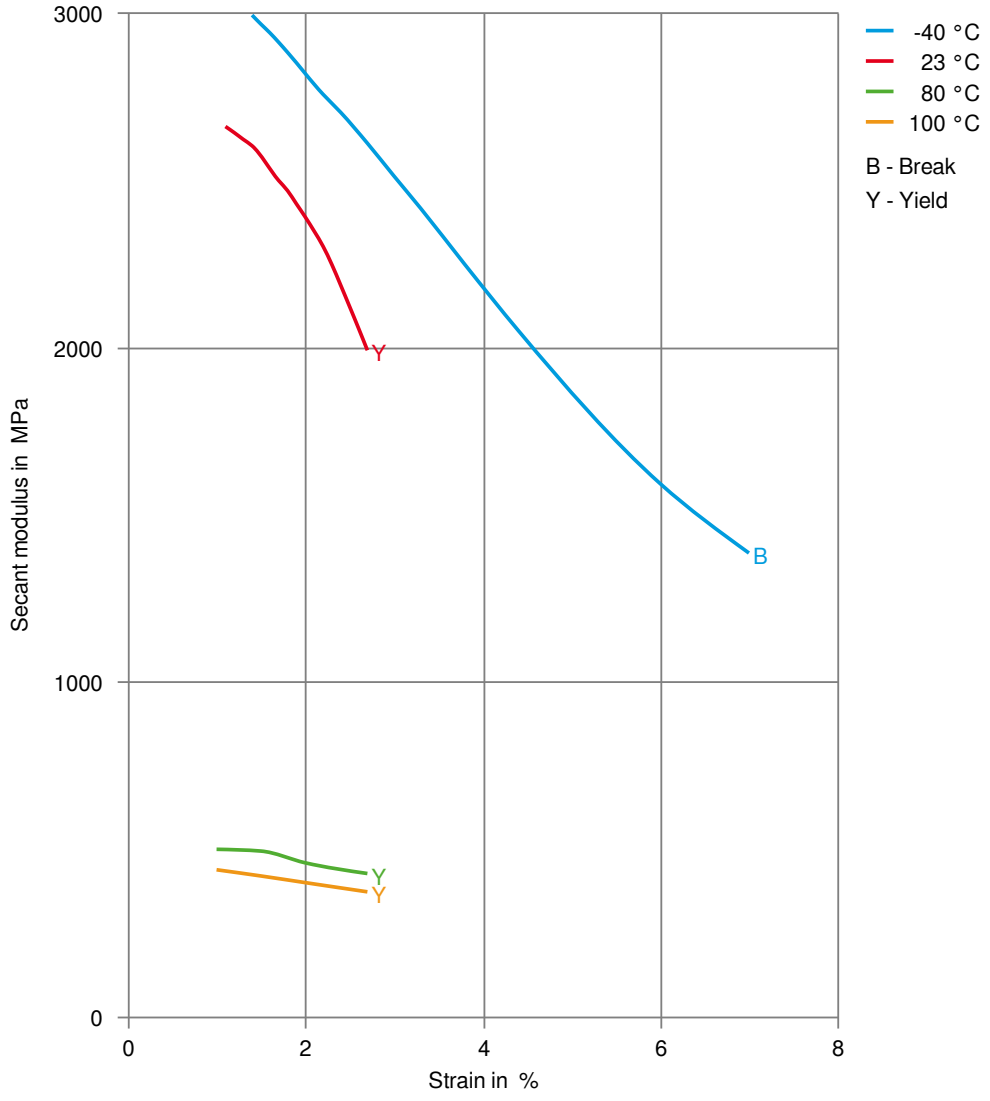
THERMOPLASTIC POLYESTER RESIN

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



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