

THERMOPLASTIC POLYESTER RESIN

Crastin® 6003 NC010 is an Unreinforced Low Viscosity Polybutylene Terephthalate

Product information			
Resin Identification Part Marking Code	PBT >PBT<		ISO 1043 ISO 11469
Rheological properties			
Melt mass-flow rate	87 250	g/10min	ISO 1133
Melt mass-flow rate, Temperature Melt mass-flow rate, Load	2.16		
Typical mechanical properties			
Tensile modulus	2600		ISO 527-1/-2
Tensile stress at yield, 50mm/min Tensile strain at yield, 50mm/min	3.5	MPa %	ISO 527-1/-2 ISO 527-1/-2
Nominal strain at break		%	ISO 527-1/-2
Tensile strain at break, 50mm/min	15		ISO 527-1/-2
Flexural strength		MPa kJ/m²	ISO 178 ISO 179/1eA
Charpy notched impact strength, 23°C Izod notched impact strength, 23°C	_	kJ/m²	ISO 179/16A ISO 180/1A
Poisson's ratio	0.38		
Thermal properties			
Melting temperature, 10°C/min	225		ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa Temperature of deflection under load, 0.45 MPa	50 125	°C	ISO 75-1/-2 ISO 75-1/-2
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Flammability	D		100 0705 (EMN/00 000)
FMVSS Class Burning rate, Thickness 1 mm	B ~80	mm/min	ISO 3795 (FMVSS 302) ISO 3795 (FMVSS 302)
-	\00	11111/111111	100 0700 (1 WV00 002)
Physical/Other properties			
Density	1310	kg/m³	ISO 1183
Injection			
Drying Recommended	yes	20	
Drying Temperature Drying Time, Dehumidified Dryer	120 2 - 4		
Processing Moisture Content	≤0.04		
Melt Temperature Optimum	250		
Min. melt temperature	240		
Max. melt temperature Mold Temperature Optimum	260 80	°C	
Min. mould temperature		°C	
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Printed: 2024-09-02 Page: 1 of 4

Revised: 2023-11-01 Source: Celanese Materials Database



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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	MPa
	possible	
Ejection temperature	170	°C

Extrusion

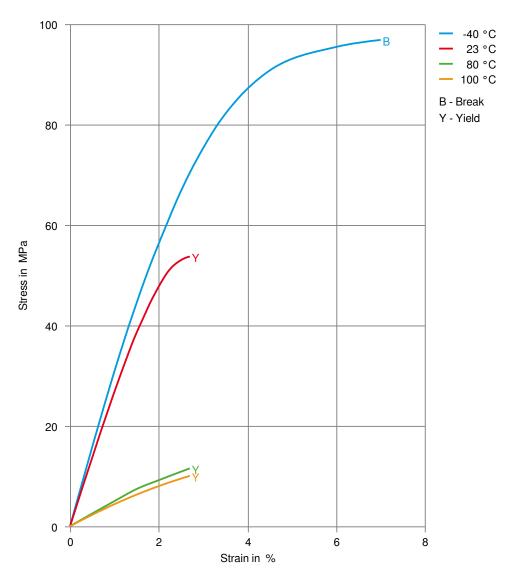
Drying Temperature	110 - 130	°C
Drying Time, Dehumidified Dryer	2 - 4	h
Processing Moisture Content	≤0.04	%
Melt Temperature Optimum	250	°C
Melt Temperature Range	240 - 260	°C

Stress-strain (measured on Crastin® S600F40 NC010)

Printed: 2024-09-02 Page: 2 of 4



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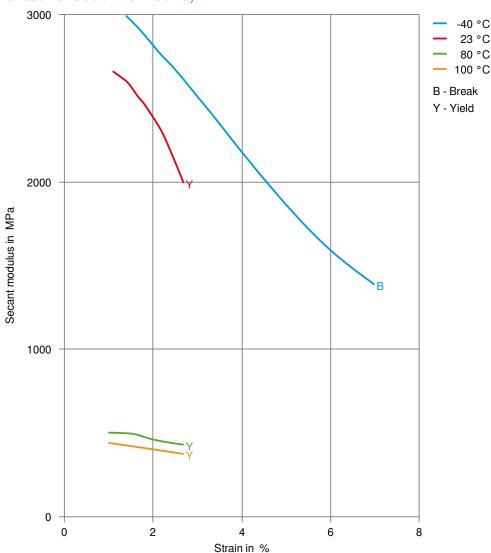


Printed: 2024-09-02 Page: 3 of 4



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



Printed: 2024-09-02 Page: 4 of 4

Revised: 2023-11-01 Source: Celanese Materials Database

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