DuPont™ Crastin® FR684NH BK591 (Preliminary Data)

THERMOPLASTIC POLYESTER RESIN

Product Information			
Crastin® FR684NH BK591 is a 25% Glass Reinforced, Flame Retardant, Non-Halogenated, Polybutylene Terephthalate			
General information	Value	Unit	Test Standard
Resin Identification	PBT-GF25FR(40)	-	ISO 1043
Part Marking Code	PBT-GF25FR(40)	-	ISO 11469
Rheological properties	Value	Unit	Test Standard
Moulding shrinkage, parallel	0.2	%	ISO 294-4, 2577
Moulding shrinkage, normal	1.1	%	ISO 294-4, 2577
Mechanical properties	Value	Unit	Test Standard
Tensile Modulus	10200	MPa	ISO 527-1/-2
Stress at break	97	MPa	ISO 527-1/-2
Strain at break	2.3	%	ISO 527-1/-2
Poisson's ratio	0.34	-	ISO 527-1/-2
Charpy notched impact strength, 23°C	7.3	kJ/m²	ISO 179/1eA
Thermal properties	Value	Unit	Test Standard
Melting temperature, 10°C/min	223	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.8 MPa	205	°C	ISO 75-1/-2
RTI, electrical			UL 746B
0.75mm	130	°C	
1.5mm	130	°C	
3mm	130	°C	
RTI, impact			UL 746B
0.75mm	125	°C	
1.5mm	125	°C	
3mm	125	°C	
RTI, strength			UL 746B
0.75mm	140	°C	
1.5mm	140	°C	
3mm	140	°C	
Flammability	Value	Unit	Test Standard
Burning Behav. at 1.5mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	1.5	mm	IEC 60695-11-10
UL recognition	UL	-	UL 94
Burning Behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	0.75	mm	IEC 60695-11-10
UL recognition	UL	-	UL 94
Glow Wire Flammability Index			IEC 60695-2-12
0.75mm	960	°C	
1.5mm	960	°C	
3mm	960	°C	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.75mm	750	°C	
1.5mm	750	°C	
3mm	800	°C	
FMVSS Class	DNI	-	ISO 3795 (FMVSS 302)
Other properties	Value	Unit	Test Standard
Density	1490	kg/m³	ISO 1183
Injection	Value	Unit	Test Standard
Drying Recommended	yes	-	-
Drying Temperature	≥120	°C	-
Drying Time, Dehumidified Dryer	2 - 4	h	-
Processing Moisture Content	≤0.04	%	-
Melt Temperature Optimum	250	°C	-

To find out more, visit DuPont Performance Polymers or contact nearest DuPont location.

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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	3	s/mm	-
Back pressure	As low as possible		-
Ejection temperature	170	°C	-

Characteristics

Processing	• Injection Moulding
Delivery form	• Pellets

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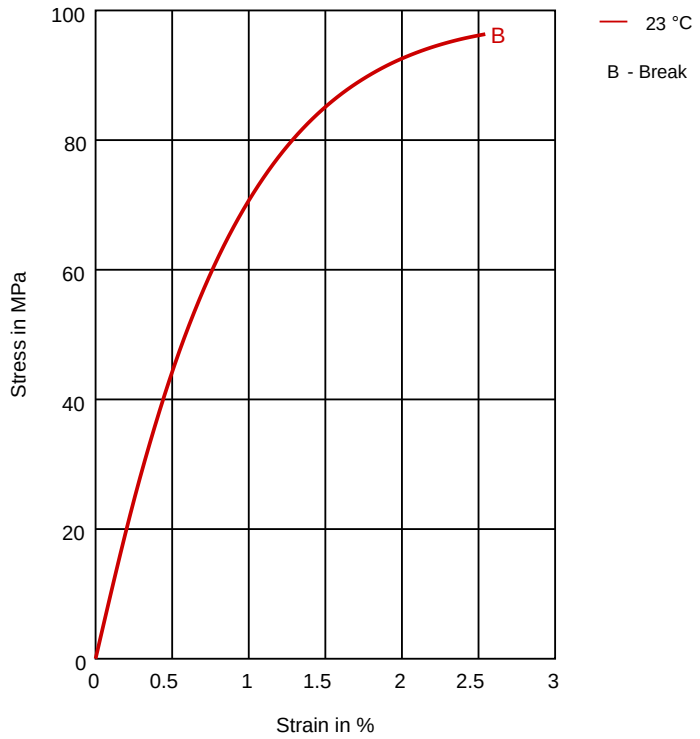
Diagrams

Stress-strain



The above data are preliminary and are subject to change as additional data are developed on subsequent lots.

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc. ISO Mechanical properties measured at 4.0mm (Hytrel® measured at 2 mm), IEC Electrical properties measured at 2.0mm, all ASTM properties measured at 3.2mm, and test temperatures are 23°C unless otherwise stated.

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