

DuPont™ Crastin® T843FR BK851

THERMOPLASTIC POLYESTER RESIN

Product Information

Crastin® T843FR BK851 is a 20% Glass Reinforced, Flame Retardant, Toughened, Polybutylene Terephthalate

General information	Value	Unit	Test Standard
Resin Identification	PBTC-GF20FR(17)	-	ISO 1043
Part Marking Code	PBTC-GF20FR(17)	-	ISO 11469
Rheological properties	Value	Unit	Test Standard
Moulding shrinkage, parallel	0.5	%	ISO 294-4, 2577
Moulding shrinkage, normal	1.1	%	ISO 294-4, 2577
Mechanical properties	Value	Unit	Test Standard
Tensile Modulus	5800	MPa	ISO 527-1/-2
Stress at break	87	MPa	ISO 527-1/-2
Strain at break	4	%	ISO 527-1/-2
Flexural Strength	142	MPa	ISO 178
Poisson's ratio	0.35	-	ISO 527-1/-2
Charpy impact strength, 23°C	55	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	9	kJ/m ²	ISO 179/1eA
Izod notched impact strength, 23°C	8	kJ/m ²	ISO 180/1A
Thermal properties	Value	Unit	Test Standard
Melting temperature, 10°C/min	205	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.8 MPa	180	°C	ISO 75-1/-2
RTI, electrical			UL 746B
1.5mm	130	°C	
3mm	130	°C	
6mm	130	°C	
RTI, impact			UL 746B
1.5mm	120	°C	
3mm	130	°C	
6mm	130	°C	
RTI, strength			UL 746B
1.5mm	130	°C	
3mm	130	°C	
6mm	130	°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	yes	-	UL 94
Burning Behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	3	mm	IEC 60695-11-10
UL recognition	yes	-	UL 94
Oxygen index	31	%	ISO 4589-1/-2
Glow Wire Flammability Index, 3mm	960	°C	IEC 60695-2-12
FMVSS Class	DNI	-	ISO 3795 (FMVSS 302)
Electrical properties	Value	Unit	Test Standard
Relative permittivity			IEC 62631-2-1
100Hz	5.2	-	
1MHz	4.7	-	
Dissipation factor			IEC 62631-2-1
100Hz	198	E-4	
1MHz	277	E-4	
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	1E14	Ohm	IEC 62631-3-2
Comparative tracking index	225	-	IEC 60112

To find out more, visit [DuPont Performance Polymers](#) or contact nearest DuPont location.

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Other properties	Value	Unit	Test Standard
Density	1590	kg/m ³	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	-
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	150	°C	-

Characteristics			
Processing	• Injection Moulding		
Additives	• Lubricants		
Regional Availability	• North America • Europe	• Asia Pacific • South and Central America	• Near East/Africa • Global

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc. ISO Mechanical properties measured at 4mm (Hytrell® measured at 2 mm), IEC Electrical properties measured at 2mm, all ASTM properties measured at 3.2mm, and test temperatures are 23°C unless otherwise stated.

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