

DuPont™ Crastin® PBT

thermoplastic polyester resin

Crastin® ST830FR BK507

Crastin® ST830FR BK507 is an unreinforced, Super Tough, flame retardant, black polybutylene terephthalate resin for injection molding. It is recognized as UL94V-0 at 0.85mm (0.033in).

Property	Test Method	Units	Value
Identification			
Resin Identification	ISO 1043		PBT-HIFR(17)
Part Marking Code	ISO 11469		>PBT-HIFR(17)<
Mechanical			
Yield Stress	ISO 527	MPa (kpsi)	40 (5.8)
Yield Strain	ISO 527	%	10
Nominal Strain at Break	ISO 527	%	50
Tensile Modulus	ISO 527	MPa (kpsi)	2100 (305)
Flexural Modulus	ISO 178	MPa (kpsi)	1900 (275)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m ²	
-40°C (-40°F)			10
23°C (73°F)			90
Unnotched Charpy Impact Strength	ISO 179/1eU	kJ/m ²	
-30°C (-22°F)			350
23°C (73°F)			NB
Thermal			
Deflection Temperature	ISO 75f	°C (°F)	
0.45MPa			125 (255)
1.80MPa			55 (130)
Melting Temperature	ISO 11357-1/-3	°C (°F)	
10°C/min			225 (437)
Electrical			
CTI	UL 746A	V	>600

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, ISO Electrical properties measured at 2.0mm, and all ASTM properties measured at 3.2mm.

Test temperatures are 23°C unless otherwise stated.

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Property	Test Method	Units	Value
Flammability			
Flammability Classification 0.85mm	IEC 60695-11-10		V-0
Flammability Classification 0.85mm	UL94		V-0
5V Rating	IEC 60695-11-20		5VA
5V Min. Thickness Tested	IEC 60695-11-20	mm	2.7
Temperature Index			
RTI, Electrical 0.85mm	UL 746B	°C	130
RTI, Impact 0.85mm	UL 746B	°C	130
RTI, Strength 0.85mm	UL 746B	°C	130
Other			
Density	ISO 1183	kg/m ³ (g/cm ³)	1370 (1.37)
Molding Shrinkage	ISO 294-4	%	
Normal, 2.0mm			1.6
Parallel, 2.0mm			2.0
Processing			
Melt Temperature Range		°C (°F)	240-260 (465-500)
Melt Temperature Optimum		°C (°F)	250 (480)
Mold Temperature Range		°C (°F)	30-130 (85-265)
Mold Temperature Optimum		°C (°F)	80 (175)
Drying Time, Dehumidified Dryer		h	2-4
Drying Temperature		°C (°F)	110-130 (230-265)
Processing Moisture Content		%	<0.04

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