DuPont™ Crastin® PBT

thermoplastic polyester resin

Crastin® 6130C NC010

Crastin® 6130C NC010 is an unreinforced, medium high viscosity polybutylene terephthalate resin for extrusion and injection molding.

Property	Test Method	Units	Value
Identification			
Resin Identification	ISO 1043		PBT
Part Marking Code	ISO 11469		>PBT<
Mechanical			
Yield Stress	ISO 527	MPa (kpsi)	59 (8.6)
Strain at Break	ISO 527	%	
50mm/min			110
Nominal Strain at Break	ISO 527	%	50
Yield Strain	ISO 527	%	8
Tensile Modulus	ISO 527	MPa (kpsi)	2600 (377)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m^2	5
Thermal			
Deflection Temperature	ISO 75f	°C (°F)	
0.45MPa			115 (239)
0.45MPa, Annealed			180 (356)
1.80MPa			50 (122)
1.80MPa, Annealed			60 (140)
Melting Temperature	ISO 11357-1/-3	°C (°F)	
10°C/min			225 (437)

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.

050424/050422

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Property	Test Method	Units	Value
Thermal			
CLTE, Normal	ISO 11359-1/-2	E-4/C (E-4/F)	
-40 - 23°C (-40 - 73°F)			0.9 (0.5)
23 - 55°C (73 - 130°F)			1.44 (0.8)
55 - 160°C (130 - 320°F)			1.62 (0.9)
CLTE, Parallel	ISO 11359-1/-2	E-4/C (E-4/F)	
-40 - 23°C (-40 - 73°F)			0.72 (0.4)
23 - 55°C (73 - 130°F)			1.08 (0.6)
55 - 160°C (130 - 320°F)			1.44 (0.8)
Electrical			
CTI	UL 746A	V	600
Flammability			
Flammability Classification	IEC 60695-11-10		
0.81mm			HB
Flammability Classification	UL94		
0.81mm			HB
High Amperage Arc Ignition Resistance	UL 746A	arcs	
0.81mm			200
Hot Wire Ignition	UL 746A	s	
0.81mm			13
1.5mm			30
3.0mm			45
Temperature Index			
RTI, Electrical	UL 746B	°C	
0.81mm			75
RTI, Impact	UL 746B	°C	
0.81mm			75
RTI, Strength	UL 746B	°C	
0.81mm			75

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Property	Test Method	Units	Value
Other			
Density	ISO 1183	kg/m^3 (g/cm^3)	1300 (1.30)
Molding Shrinkage	ISO 294-4	%	
Normal, 2.0mm			1.5
Parallel, 2.0mm			1.6
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
Snake Flow		mm	
90MPa, 5x0.30mm			11
90MPa, 5x0.50mm			35
90MPa, 5x0.75mm			75
90MPa, 5x1.00mm			112

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