

DuPont™ Sorona® EP

thermoplastic polymer

PRELIMINARY DATA

Sorona® 3015G NC010

Sorona® 3015G NC010 is a 15% glass fiber reinforced polytrimethylene terephthalate resin made from Bio-PDO™, which is derived from corn. It has good strength and stiffness, low warpage characteristics and improved surface appearance.

Property	Test Method	Units	Value
Identification			
Resin Identification	ISO 1043		PTT-GF15
Part Marking Code	ISO 11469		>PTT-GF15<
Mechanical			
Stress at Break	ISO 527	MPa (kpsi)	123 (17.8)
Strain at Break	ISO 527	%	3
Tensile Modulus	ISO 527	MPa (kpsi)	6200 (900)
Flexural Modulus	ISO 178	MPa (kpsi)	5700 (830)
Flexural Strength	ISO 178	MPa (kpsi)	190 (27.6)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m ²	
-30°C (-22°F)			6
23°C (73°F)			5.5
Unnotched Charpy Impact Strength	ISO 179/1eU	kJ/m ²	
-30°C (-22°F)			30
23°C (73°F)			30
Thermal			
Deflection Temperature	ISO 75-1/-2	°C (°F)	
0.45MPa			223 (433)
1.80MPa			195 (383)

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.

Optimum processing conditions are dependent on many factors, including part thickness and geometry, and application requirements for dimensional stability and appearance. Contact your DuPont® representative for additional information, if needed.

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

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Property	Test Method	Units	Value
Thermal			
Melting Temperature 10°C/min	ISO 11357-1/-3	°C (°F)	227 (441)
CLTE, Parallel -40 - 23°C (-40 - 73°F) 23 - 55°C (73 - 130°F) 55 - 160°C (130 - 320°F)	ISO 11359-1/-2	E-4/C (E-4/F)	0.34 (0.19) 0.15 (0.08) 0.22 (0.12)
CLTE, Normal -40 - 23°C (-40 - 73°F) 23 - 55°C (73 - 130°F) 55 - 160°C (130 - 320°F)	ISO 11359-1/-2	E-4/C (E-4/F)	0.74 (0.41) 0.89 (0.49) 1.32 (0.73)
Other			
Density	ISO 1183	kg/m ³ (g/cm ³)	1400 (1.40)
Molding Shrinkage, Parallel Mold 80°C, 2.0mm Mold 110°C, 2.0mm	ISO 294-4	%	0.5 0.6
Molding Shrinkage, Normal Mold 80°C, 2.0mm Mold 110°C, 2.0mm	ISO 294-4	%	0.7 0.8
Processing			
Melt Temperature Range		°C (°F)	240-260 (465-500)
Melt Temperature Optimum		°C (°F)	250 (480)
Mold Temperature Range		°C (°F)	80-110 (175-230)
Mold Temperature Optimum		°C (°F)	100 (212)
Drying Time, Dehumidified Dryer		h	4
Drying Temperature		°C (°F)	120 (250)
Processing Moisture Content		%	<0.02

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