

DuPont Performance Polymers Sorona® 3015GV NC010 Polytrimethylene Terephthalate (PTT) (Unverified Data**)

Category : Polymer , Renewable/Recycled Polymer , Thermoplastic , Polyester, TP , Polytrimethylene Terephthalate (PTT)

Material Notes:

Sorona® 3015GV NC010 is a 15% glass reinforced PTT resin containing 31% renewably sourced ingredients by weight (37% based on polymer only) with low warpage and superior strength, stiffness and surface appearance in a broad range of conditions. Information provided by DuPont Performance Polymers

Order this product through the following link:

http://www.lookpolymers.com/polymer_DuPont-Performance-Polymers-Sorona-3015GV-NC010-Polytrimethylene-Terephthalate-PTT-nbspUnverified-Data.php

Physical Properties	Metric	English	Comments
Density	1.40 g/cc	0.0506 lb/in ³	ISO 1183
Water Absorption	0.080 % @Temperature 23.0 °C	0.080 % @Temperature 73.4 °F	Immersion 24h; ISO 62, Similar to
Linear Mold Shrinkage, Flow	0.0020 cm/cm @Thickness 2.00 mm	0.0020 in/in @Thickness 0.0787 in	Mold 80°C; ISO 294-4
	0.0030 cm/cm @Thickness 3.00 mm	0.0030 in/in @Thickness 0.118 in	Mold 80°C; ISO 294-4
	0.0040 cm/cm @Thickness 4.00 mm	0.0040 in/in @Thickness 0.157 in	Mold 80°C; ISO 294-4
Linear Mold Shrinkage, Transverse	0.0070 cm/cm @Thickness 2.00 mm	0.0070 in/in @Thickness 0.0787 in	Mold 80°C; ISO 294-4
	0.0070 cm/cm @Thickness 3.00 mm	0.0070 in/in @Thickness 0.118 in	Mold 80°C; ISO 294-4
	0.010 cm/cm @Thickness 4.00 mm	0.010 in/in @Thickness 0.157 in	Mold 80°C; ISO 294-4

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	125 MPa @Temperature 23.0 °C	18100 psi @Temperature 73.4 °F	ISO 527
Elongation at Break	3.0 % @Temperature 23.0 °C	3.0 % @Temperature 73.4 °F	ISO 527
	6.50 GPa	943 ksi	

Mechanical Properties	Metric @ Temperature 23.0 °C	English @ Temperature 73.4 °F	ISO 527 Comments
Flexural Strength	190 MPa @ Temperature 23.0 °C	27600 psi @ Temperature 73.4 °F	ISO 178
Flexural Modulus	5.80 GPa @ Temperature 23.0 °C	841 ksi @ Temperature 73.4 °F	ISO 178
Charpy Impact Unnotched	2.50 J/cm ² @ Temperature 23.0 °C	11.9 ft-lb/in ² @ Temperature 73.4 °F	ISO 179/1eU
	3.00 J/cm ² @ Temperature -30.0 °C	14.3 ft-lb/in ² @ Temperature -22.0 °F	ISO 179/1eU
Charpy Impact, Notched	0.550 J/cm ² @ Temperature 23.0 °C	2.62 ft-lb/in ² @ Temperature 73.4 °F	ISO 179/1eA
	0.600 J/cm ² @ Temperature -30.0 °C	2.86 ft-lb/in ² @ Temperature -22.0 °F	ISO 179/1eA

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	500 µm/m-°C @ Temperature -40.0 - 23.0 °C	278 µin/in-°F @ Temperature -40.0 - 73.4 °F	ISO 11359-1/-2
	500 µm/m-°C @ Temperature 23.0 - 55.0 °C	278 µin/in-°F @ Temperature 73.4 - 131 °F	ISO 11359-1/-2
	500 µm/m-°C @ Temperature 55.0 - 160 °C	278 µin/in-°F @ Temperature 131 - 320 °F	ISO 11359-1/-2
CTE, linear, Transverse to Flow	74.0 µm/m-°C @ Temperature -40.0 - 23.0 °C	41.1 µin/in-°F @ Temperature -40.0 - 73.4 °F	ISO 11359-1/-2
	89.0 µm/m-°C @ Temperature 23.0 - 55.0 °C	49.4 µin/in-°F @ Temperature 73.4 - 131 °F	ISO 11359-1/-2
	132 µm/m-°C @ Temperature 55.0 - 160 °C	73.3 µin/in-°F @ Temperature 131 - 320 °F	ISO 11359-1/-2
Melting Point	227 °C	441 °F	10°C/min; ISO 11357-1/-3

Thermal Properties	Metric	English	Comments
Deflection Temperature at 1.8 MPa (264 psi)	200 °C	392 °F	ISO 75-1/-2
Flammability, UL94	HB	HB	IEC 60695-11-10
	@Thickness 0.750 mm	@Thickness 0.0295 in	
	HB	HB	IEC 60695-11-10
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	HB	HB	IEC 60695-11-10
	@Thickness 3.00 mm	@Thickness 0.118 in	
	HB	HB	UL94
@Thickness 3.00 mm	@Thickness 0.118 in		
Flammability, UL94	HB	HB	UL94
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	HB	HB	UL94
	@Thickness 0.750 mm	@Thickness 0.0295 in	
Oxygen Index	19 %	19 %	ISO 4589-1/-2
Glow Wire Test	650 °C	1200 °F	IEC 60695-2-12
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	675 °C	1250 °F	IEC 60695-2-12
	@Thickness 0.850 mm	@Thickness 0.0335 in	
	675 °C	1250 °F	Ignition; IEC 60695-2-13
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	700 °C	1290 °F	IEC 60695-2-12
	@Thickness 3.00 mm	@Thickness 0.118 in	
700 °C	1290 °F	Ignition; IEC 60695-2-13	
@Thickness 0.850 mm	@Thickness 0.0335 in		
	725 °C	1340 °F	Ignition; IEC 60695-2-13
	@Thickness 3.00 mm	@Thickness 0.118 in	

Electrical Properties	Metric	English	Comments
Volume Resistivity	2.00e+16 ohm-cm	2.00e+16 ohm-cm	IEC 60093

Electrical Properties	@Temperature 23.0 °C Metric	@Temperature 73.4 °F English	Comments
Surface Resistance	1.00e+14 ohm @Temperature 23.0 °C	1.00e+14 ohm @Temperature 73.4 °F	IEC 60093
Dielectric Constant	3.7 @Frequency 1.00e+6 Hz, Temperature 23.0 °C	3.7 @Frequency 1.00e+6 Hz, Temperature 73.4 °F	IEC 60250
	3.9 @Frequency 100 Hz, Temperature 23.0 °C	3.9 @Frequency 100 Hz, Temperature 73.4 °F	IEC 60250
	3.9 @Frequency 1000 Hz, Temperature 23.0 °C	3.9 @Frequency 1000 Hz, Temperature 73.4 °F	IEC 60250
Dielectric Strength	27.0 kV/mm @Thickness 2.00 mm, Temperature 23.0 °C	686 kV/in @Thickness 0.0787 in, Temperature 73.4 °F	IEC 60243-1
	27.0 kV/mm @Thickness 2.00 mm, Temperature 90.0 °C	686 kV/in @Thickness 0.0787 in, Temperature 194 °F	IEC 60243-1
	36.0 kV/mm @Thickness 1.00 mm, Temperature 23.0 °C	914 kV/in @Thickness 0.0394 in, Temperature 73.4 °F	IEC 60243-1
	36.0 kV/mm @Thickness 1.00 mm, Temperature 90.0 °C	914 kV/in @Thickness 0.0394 in, Temperature 194 °F	IEC 60243-1
Dissipation Factor	0.0015 @Frequency 100 Hz, Temperature 23.0 °C	0.0015 @Frequency 100 Hz, Temperature 73.4 °F	IEC 60250
	0.0027 @Frequency 1000 Hz, Temperature 23.0 °C	0.0027 @Frequency 1000 Hz, Temperature 73.4 °F	IEC 60250
Comparative Tracking Index	250 V @Temperature 23.0 °C	250 V @Temperature 73.4 °F	IEC 60112

Processing Properties	Metric	English	Comments
Melt Temperature	260 °C	500 °F	Optimum
	250 - 270 °C	482 - 518 °F	

Processing Properties	Metric ¹⁰ °C	English ¹⁰ °F	Comments
	100 °C	212 °F	optimum
Drying Temperature	120 °C	248 °F	
Dry Time	4.00 hour	4.00 hour	
Moisture Content	<= 0.020 %	<= 0.020 %	

Descriptive Properties	Value	Comments
Appearance	Natural Color	
Forms	Pellets	
Generic	Polytrimethylene Terephthalate (PTT)	
Material Status	Current	
Part Marking Code	>PTT-GF15<	ISO 11469
Processing Method	Injection Molding	
Product Category	Glass Reinforced Resins	
	Renewably Sourced Resins	
Region Available - Global	Yes	
Resin Identification	PTT-GF15	ISO 1043
RoHS Compliance	Contact Manufacturer	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China