

## DuPont Performance Polymers Crastin® FG6129 NC010 PBT (Unverified Data\*\*)

Category : Polymer , Thermoplastic , Polyester, TP , Polybutylene Terephthalate (PBT)

### Material Notes:

Crastin® FG6129 NC010 is an unreinforced, high viscosity polybutylene terephthalate resin for extrusion and injection molding. It has been developed for consideration into applications such as parts for the food industry. Information provided by DuPont Performance Polymers

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_DuPont-Performance-Polymers-Crastin-FG6129-NC010-PBT-nbspUnverified-Data.php](http://www.lookpolymers.com/polymer_DuPont-Performance-Polymers-Crastin-FG6129-NC010-PBT-nbspUnverified-Data.php)

Physical Properties	Metric	English	Comments
Density	1.30 g/cc	0.0470 lb/in <sup>3</sup>	ISO 1183
Water Absorption	0.20 %	0.20 %	Equilibrium 50%RH; ISO 62, Similar to
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	0.40 %	0.40 %	Saturation, immersed; ISO 62, Similar to
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Linear Mold Shrinkage, Flow	0.017 cm/cm	0.017 in/in	ISO 294-4
	@Thickness 2.00 mm	@Thickness 0.0787 in	
Linear Mold Shrinkage, Transverse	0.015 cm/cm	0.015 in/in	ISO 294-4
	@Thickness 2.00 mm	@Thickness 0.0787 in	
Melt Flow	10 g/10 min	10 g/10 min	ISO 1133
	@Load 2.16 kg, Temperature 250 °C	@Load 4.76 lb, Temperature 482 °F	
Melt Index of Compound	10 g/10 min	10 g/10 min	cm <sup>3</sup> /10 min; ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	58.0 MPa	8410 psi	ISO 527
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Elongation at Break	>= 50 %	>= 50 %	nominal; ISO 527
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	200 %	200 %	50mm/min; ISO 527
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Elongation at Yield	5.0 %	5.0 %	ISO 527
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Mechanical Properties	2.60 GPa Metric	377 ksi English	Comments
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Flexural Strength	85.0 MPa	12300 psi	ISO 178
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Flexural Modulus	2.35 GPa	341 ksi	ISO 178
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Izod Impact, Notched (ISO)	4.50 kJ/m <sup>2</sup>	2.14 ft-lb/in <sup>2</sup>	ISO 180/1A
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	6.00 kJ/m <sup>2</sup>	2.86 ft-lb/in <sup>2</sup>	ISO 180/1A
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Izod Impact, Unnotched (ISO)	130 kJ/m <sup>2</sup>	61.9 ft-lb/in <sup>2</sup>	ISO 180/1U
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	NB	NB	ISO 180/1U
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact Unnotched	NB	NB	ISO 179/1eU
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	NB	NB	ISO 179/1eU
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact, Notched	0.400 J/cm <sup>2</sup>	1.90 ft-lb/in <sup>2</sup>	ISO 179/1eA
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	0.550 J/cm <sup>2</sup>	2.62 ft-lb/in <sup>2</sup>	ISO 179/1eA
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Tensile Creep Modulus, 1 hour	2600 MPa	377000 psi	ISO 899
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Tensile Creep Modulus, 1000 hours	1800 MPa	261000 psi	ISO 899
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	500 µm/m-°C	278 µin/in-°F	ISO 11359-1/-2
	@Temperature -40.0 - 23.0 °C	@Temperature -40.0 - 73.4 °F	
	500 µm/m-°C	278 µin/in-°F	

Thermal Properties	Metric	English	ISO 11359-1/-2 Comments
	55.0 °C @Temperature 23.0 - 55.0 °C	131 °F @Temperature 73.4 - 131 °F	
	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	90.0 µm/m-°C @Temperature -40.0 - 23.0 °C	50.0 µin/in-°F @Temperature -40.0 - 73.4 °F	ISO 11359-1/-2
	130 µm/m-°C @Temperature 23.0 - 55.0 °C	72.2 µin/in-°F @Temperature 73.4 - 131 °F	ISO 11359-1/-2
	162 µm/m-°C @Temperature 55.0 - 160 °C	90.0 µin/in-°F @Temperature 131 - 320 °F	ISO 11359-1/-2
Melting Point	225 °C	437 °F	10°C/min; ISO 11357-1/-3
Deflection Temperature at 0.46 MPa (66 psi)	115 °C	239 °F	ISO 75-1/-2
	180 °C	356 °F	Annealed; ISO 75-1/-2
Deflection Temperature at 1.8 MPa (264 psi)	50.0 °C	122 °F	ISO 75-1/-2
	60.0 °C	140 °F	Annealed; ISO 75-1/-2

Processing Properties	Metric	English	Comments
Melt Temperature	250 °C	482 °F	Optimum
	240 - 260 °C	464 - 500 °F	
Mold Temperature	80.0 °C	176 °F	optimum
	30.0 - 130 °C	86.0 - 266 °F	
Drying Temperature	110 - 130 °C	230 - 266 °F	
Dry Time	2.00 - 4.00 hour	2.00 - 4.00 hour	
Moisture Content	<= 0.040 %	<= 0.040 %	

Descriptive Properties	Value	Comments
Appearance	Natural Color	
Features	Food Contact Acceptable	

Descriptive Properties	Lubricated Value	Comments
	Viscosity, Low	
Forms	Pellets	
Generic	PBT	
Material Status	Current	
Part Marking Code	>PBT<	ISO 11469
Processing Method	Extrusion	
Product Category	Extrusion Resins	
	Food Contact Resins	
	Food Contact Resins	
	Unreinforced Resins	
Region Available - Global	Yes	
Resin Identification	PBT	ISO 1043
RoHS Compliance	Contact Manufacturer	
Uses	Food Applications, Non-specific	

## Contact Songhan Plastic Technology Co.,Ltd.

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