

## DuPont Performance Polymers Rynite® FR530L NC010 Polyethylene Terephthalate (PET)

Category : Polymer , Thermoplastic , Polyester, TP , Polyethylene Terephthalate (PET) , Polyethylene Terephthalate (PET), Glass Fiber Filled, Flame Retardant

### Material Notes:

Rynite FR530 NC010 is a 30% glass reinforced flame retardant modified polyethylene terephthalate resin. Information provided by DuPont Performance Polymers

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_DuPont-Performance-Polymers-Rynite-FR530L-NC010-Polyethylene-Terephthalate-PET.php](http://www.lookpolymers.com/polymer_DuPont-Performance-Polymers-Rynite-FR530L-NC010-Polyethylene-Terephthalate-PET.php)

Physical Properties	Metric	English	Comments
Density	1.68 g/cc	0.0607 lb/in <sup>3</sup>	ISO 1183
Water Absorption	0.75 % @Thickness 2.00 mm	0.75 % @Thickness 0.0787 in	Sim. to ISO 62
Moisture Absorption	0.150 % @Thickness 2.00 mm	0.150 % @Thickness 0.0787 in	Sim. to ISO 62
Linear Mold Shrinkage, Flow	0.0020 cm/cm	0.0020 in/in	ISO 294-4 2577
Linear Mold Shrinkage, Transverse	0.0080 cm/cm	0.0080 in/in	ISO 294-4 2577
Melt Flow	6.0 g/10 min @Load 2.16 kg, Temperature 280 °C	6.0 g/10 min @Load 4.76 lb, Temperature 536 °F	cm <sup>3</sup> /10min; ISO 1133

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	95	95	ASTM D785
Hardness, Rockwell R	120	120	ASTM D785
Tensile Strength at Break	135 MPa	19600 psi	ISO 527-1/-2
Elongation at Break	2.0 %	2.0 %	ISO 527-1/-2
Tensile Modulus	11.5 GPa	1670 ksi	ISO 527-1/-2
Flexural Modulus	10.5 GPa	1520 ksi	ISO 178
Shear Modulus	0.525 GPa @Temperature 160 °C	76.1 ksi @Temperature 320 °F	Dynamic; ISO 11403-1 -2
	0.654 GPa @Temperature 120 °C	94.9 ksi @Temperature 248 °F	Dynamic; ISO 11403-1 -2

Mechanical Properties	Metric	English	Comments
	@Temperature 70.0 °C	@Temperature 158 °F	Dynamic; ISO 11403-1 -2
	1.974 GPa	286.3 ksi	Dynamic; ISO 11403-1 -2
	@Temperature 20.0 °C	@Temperature 68.0 °F	
	2.208 GPa	320.2 ksi	Dynamic; ISO 11403-1 -2
	@Temperature -20.0 °C	@Temperature -4.00 °F	
	2.432 GPa	352.7 ksi	Dynamic; ISO 11403-1 -2
	@Temperature -50.0 °C	@Temperature -58.0 °F	
Charpy Impact Unnotched	4.00 J/cm <sup>2</sup>	19.0 ft-lb/in <sup>2</sup>	ISO 179/1eU
	4.00 J/cm <sup>2</sup>	19.0 ft-lb/in <sup>2</sup>	ISO 179/1eU
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Charpy Impact, Notched	1.00 J/cm <sup>2</sup>	4.76 ft-lb/in <sup>2</sup>	ISO 179/1eA
	0.900 J/cm <sup>2</sup>	4.28 ft-lb/in <sup>2</sup>	ISO 179/1eA
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Tensile Creep Modulus, 1 hour	11200 MPa	1.62e+6 psi	ISO 899-1
	@Time 3600 sec	@Time 1.00 hour	
Tensile Creep Modulus, 1000 hours	9700 MPa	1.41e+6 psi	ISO 899-1
	@Time 3.60e+6 sec	@Time 1000 hour	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	19.0 µm/m-°C	10.6 µin/in-°F	ISO 11359-1/-2
	22.0 µm/m-°C	12.2 µin/in-°F	ISO 11359-1/-2
	@Temperature -40.0 - 23.0 °C	@Temperature -40.0 - 73.4 °F	
CTE, linear, Transverse to Flow	92.0 µm/m-°C	51.1 µin/in-°F	ISO 11359-1/-2
	68.0 µm/m-°C	37.8 µin/in-°F	ISO 11359-1/-2
	@Temperature -40.0 - 23.0 °C	@Temperature -40.0 - 73.4 °F	
Melting Point	252 °C	486 °F	10°C/min; ISO 11357-1/-3
Deflection Temperature at 0.46 MPa (66 psi)	243 °C	469 °F	ISO 75-1/-2
Deflection Temperature at 1.8 MPa (264 psi)	225 °C	437 °F	ISO 75-1/-2

Vicat Softening Point Thermal Properties	220 °C Metric	428 °F English	50°C/5 50N; ISO 305 Comments
UL RTI, Electrical	155 °C @Thickness 0.400 mm	311 °F @Thickness 0.0157 in	UL 746B
Flammability, UL94	V-0 @Thickness 1.50 mm	V-0 @Thickness 0.0591 in	IEC 60695-11-10
	V-0 @Thickness 0.300 mm	V-0 @Thickness 0.0118 in	IEC 60695-11-10
	5VA @Thickness 0.900 mm	5VA @Thickness 0.0354 in	IEC 60695-11-20
Oxygen Index	33 %	33 %	ISO 4589-1/-2
	33 %	33 %	ASTM D2863

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+15 ohm-cm	1.00e+15 ohm-cm	IEC 60093
Surface Resistance	1.00e+14 ohm	1.00e+14 ohm	IEC 60093
Dielectric Constant	3.7 @Frequency 1.00e+6 Hz	3.7 @Frequency 1.00e+6 Hz	ASTM D150
	3.8 @Frequency 1000 Hz	3.8 @Frequency 1000 Hz	ASTM D150
	4.7 @Frequency 1.00e+6 Hz	4.7 @Frequency 1.00e+6 Hz	IEC 60250
	4.8 @Frequency 100 Hz	4.8 @Frequency 100 Hz	IEC 60250
Dielectric Strength	33.0 kV/mm	838 kV/in	IEC 60243-1
Dissipation Factor	0.0070 @Frequency 100 Hz	0.0070 @Frequency 100 Hz	IEC 60250
	0.010 @Frequency 1.00e+6 Hz	0.010 @Frequency 1.00e+6 Hz	IEC 60250
	0.011	0.011	ASTM D150

Electrical Properties	@Frequency 1000 Hz Metric	@Frequency 1000 Hz English	Comments
	0.018	0.018	
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	ASTM D150
Comparative Tracking Index	225 V	225 V	IEC 60112
	250 - 400 V	250 - 400 V	UL 746A

Descriptive Properties	Value	Comments
Additives	Release agent	
Delivery Form	Pellets	
Part Marking Code	>PET-GF30FR<	ISO 11469
Processing	Injection Moulding	
Regional Availability	Europe	
	Near East/Africa	
Resin Identification	PET-GF30FR(17)	
UL recognition	UL	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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