

## Nilit Nilitop BT G6 General Purpose, 30% Glass Fiber Reinforced PBT

Category : Polymer , Thermoplastic , Polyester, TP , Polybutylene Terephthalate (PBT) , Polybutylene Terephthalate (PBT), 30% Glass Fiber Filled

### Material Notes:

Description: Nilitop BT G6 is a general purpose, 30% glass fiber reinforced PBT. This product has good overall mechanical performance, low moisture absorption and excellent UV resistance. It is used for applications that need a high dimensional stability, like automotive connectors, transmission housings for electro motors or parts that are subjected to high UV radiation, like exterior automotive parts. Key characteristics: Good overall mechanical performance Low moisture absorption Good UV resistance Good thermal performance Information provided by NILIT.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Nilit-Nilitop-BT-G6-General-Purpose-30-Glass-Fiber-Reinforced-PBT.php](http://www.lookpolymers.com/polymer_Nilit-Nilitop-BT-G6-General-Purpose-30-Glass-Fiber-Reinforced-PBT.php)

Physical Properties	Metric	English	Comments
Density	1.53 g/cc	0.0553 lb/in <sup>3</sup>	ASTM D792, ISO 1183
Water Absorption	0.10 %	0.10 %	23°C, 24h in H <sub>2</sub> O; sim. ISO 62
Water Absorption at Saturation	0.40 %	0.40 %	sim. ISO 62
Linear Mold Shrinkage, Flow	0.0030 cm/cm	0.0030 in/in	Euronil
Linear Mold Shrinkage, Transverse	0.0060 cm/cm	0.0060 in/in	Euronil

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	130 MPa	18900 psi	ISO 527, ASTM D638
Elongation at Break	2.5 %	2.5 %	ISO 527, ASTM D638
Flexural Yield Strength	210 MPa	30500 psi	ISO 178, ASTM D790
	120 MPa	17400 psi	ISO 178, ASTM D790
	@Temperature 90.0 °C	@Temperature 194 °F	
Flexural Modulus	9.00 GPa	1310 ksi	ISO 178, ASTM D790
	4.80 GPa	696 ksi	ISO 178, ASTM D790
	@Temperature 90.0 °C	@Temperature 194 °F	
Izod Impact, Notched (ISO)	8.00 kJ/m <sup>2</sup>	3.81 ft-lb/in <sup>2</sup>	ISO 180/1A
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	9.00 kJ/m <sup>2</sup>	4.28 ft-lb/in <sup>2</sup>	ISO 180/1A
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact Unnotched	4.50 J/cm <sup>2</sup>	21.4 ft-lb/in <sup>2</sup>	ISO 179

Mechanical Properties	Metric	English	Comments
	@Temperature -30.0 °C	@Temperature -22.0 °F	ISO 179
Charpy Impact, Notched	1.10 J/cm <sup>2</sup>	5.24 ft-lb/in <sup>2</sup>	ISO 179
	1.00 J/cm <sup>2</sup>	4.76 ft-lb/in <sup>2</sup>	ISO 179
	@Temperature -30.0 °C	@Temperature -22.0 °F	

Thermal Properties	Metric	English	Comments
Maximum Service Temperature, Air	140 °C	284 °F	20,000 hr; IEC 216
Deflection Temperature at 0.46 MPa (66 psi)	220 °C	428 °F	ISO 75, ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	205 °C	401 °F	ISO 75, ASTM D648
Vicat Softening Point	213 °C	415 °F	49 N; ISO 306, ASTM D1525
	222 °C	432 °F	9.8 N; ISO 306, ASTM D1525
Flammability, UL94	HB	HB	
	@Thickness 0.800 mm	@Thickness 0.0315 in	
	HB	HB	
	@Thickness 3.20 mm	@Thickness 0.126 in	
Oxygen Index	20 %	20 %	ASTM D2863
Glow Wire Test	750 °C	1380 °F	Glow Wire Flammability Index; IEC 694-2-12
	@Thickness 0.800 mm	@Thickness 0.0315 in	
	750 °C	1380 °F	Glow Wire Flammability Index; IEC 694-2-12
	@Thickness 3.20 mm	@Thickness 0.126 in	

Electrical Properties	Metric	English	Comments
Dielectric Strength	23.0 kV/mm	584 kV/in	ASTM D149
	@Thickness 2.00 mm	@Thickness 0.0787 in	
Comparative Tracking Index	175 V	175 V	Sol. B; IEC 112, UL 746A
	@Thickness 3.20 mm	@Thickness 0.126 in	
	400 V	400 V	Sol. A; IEC 112, UL 746A
	@Thickness 3.20 mm	@Thickness 0.126 in	

Descriptive Properties	Value	Comments
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Descriptive Properties Test	Value	Comments C 309
	OK	at 165°C, IEC 309

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## Contact Songhan Plastic Technology Co.,Ltd.

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