

Nilit Nilitop BT FR C3 Unfilled, Flame Retardant PBT

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

Material Notes:

Description: Nilitop BT FR C3 is an unfilled, flame retardant PBT with halogens. The flame retardant does not contain PBB and PBDE, so it is compliant with the WEEE directive. Key characteristics: Good overall mechanical performance Low moisture absorption Colorable Good thermal performance UL 94 V0 listing at 0.7 mm Information provided by NILIT.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Nilit-Nilitop-BT-FR-C3-Unfilled-Flame-Retardant-PBT.php

Physical Properties	Metric	English	Comments
Density	1.42 g/cc	0.0513 lb/in ³	ASTM D792, ISO 1183
Water Absorption	0.20 %	0.20 %	23°C, 24h in H ₂ O; sim. ISO 62
Water Absorption at Saturation	0.50 %	0.50 %	sim. ISO 62
Linear Mold Shrinkage, Flow	0.018 cm/cm	0.018 in/in	Euronil
Linear Mold Shrinkage, Transverse	0.018 cm/cm	0.018 in/in	Euronil

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	55.0 MPa	7980 psi	ISO 527, ASTM D638
Elongation at Break	4.5 %	4.5 %	ISO 527, ASTM D638
Flexural Yield Strength	70.0 MPa	10200 psi	ISO 178, ASTM D790
	35.0 MPa @Temperature 90.0 °C	5080 psi @Temperature 194 °F	ISO 178, ASTM D790
Flexural Modulus	2.50 GPa	363 ksi	ISO 178, ASTM D790
	0.600 GPa @Temperature 90.0 °C	87.0 ksi @Temperature 194 °F	ISO 178, ASTM D790
Izod Impact, Notched (ISO)	2.00 kJ/m ² @Temperature -30.0 °C	0.952 ft-lb/in ² @Temperature -22.0 °F	ISO 180/1A
	4.00 kJ/m ² @Temperature 23.0 °C	1.90 ft-lb/in ² @Temperature 73.4 °F	ISO 180/1A
Charpy Impact Unnotched	3.00 J/cm ²	14.3 ft-lb/in ²	ISO 179
	2.50 J/cm ²	11.9 ft-lb/in ²	ISO 179

Mechanical Properties	@Temperature -30.0 °C Metric	@Temperature -22.0 °F English	Comments
Charpy Impact, Notched	0.500 J/cm ²	2.38 ft-lb/in ²	ISO 179
	0.300 J/cm ²	1.43 ft-lb/in ²	ISO 179
	@Temperature -30.0 °C	@Temperature -22.0 °F	

Thermal Properties	Metric	English	Comments
Maximum Service Temperature, Air	120 °C	248 °F	20,000 hr; IEC 216
Deflection Temperature at 0.46 MPa (66 psi)	170 °C	338 °F	ISO 75, ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	58.0 °C	136 °F	ISO 75, ASTM D648
Vicat Softening Point	183 °C	361 °F	49 N; ISO 306, ASTM D1525
	205 °C	401 °F	9.8 N; ISO 306, ASTM D1525
Flammability, UL94	V-0	V-0	
	@Thickness 1.60 mm	@Thickness 0.0630 in	
	V-0	V-0	
	@Thickness 0.800 mm	@Thickness 0.0315 in	
	V-0	V-0	
	@Thickness 3.20 mm	@Thickness 0.126 in	
Oxygen Index	31 %	31 %	ASTM D2863
Glow Wire Test	960 °C	1760 °F	Glow Wire Flammability Index; IEC 694-2-12
	@Thickness 0.800 mm	@Thickness 0.0315 in	
	960 °C	1760 °F	Glow Wire Flammability Index; IEC 694-2-12
	@Thickness 3.20 mm	@Thickness 0.126 in	

Electrical Properties	Metric	English	Comments
Dielectric Strength	19.0 kV/mm	483 kV/in	ASTM D149
	@Thickness 2.00 mm	@Thickness 0.0787 in	
Comparative Tracking Index	150 V	150 V	Sol. B; IEC 112, UL 746A
	@Thickness 3.20 mm	@Thickness 0.126 in	
	250 V	250 V	Sol. A; IEC 112, UL 746A
	@Thickness 3.20 mm	@Thickness 0.126 in	

Descriptive Properties	Value	Comments
Flammability Rating	SE	FMVSS No. 302, 355x100x1 mm
Heat Resistance - Ball Test	OK	at 125°C, IEC 309
	OK	at 165°C, IEC 309
Needle Test	OK	IEC 695-2-2, 1 or 2 mm

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