

Nilit Nilitop BT G2 FR C3 is a 10% Glass Fiber Reinforced, Flame Retardant PBT

Category : Polymer , Thermoplastic , Polyester, TP , Polybutylene Terephthalate (PBT) , Polybutylene Terephthalate (PBT), 10% Glass Fiber Filled

Material Notes:

Description: Nilitop BT G2 FR C3 is a 10% glass fiber reinforced, flame retardant PBT with halogens. The flame retardant does not contain PBB and PBDE, so it is compliant with the WEEE directive. It is widely used for applications like connectors and components for appliances. Key characteristics: High stiffness High strength 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-G2-FR-C3-is-a-10-Glass-Fiber-Reinforced-Flame-Retardant-PBT.php

| Physical Properties | Metric | English | Comments |
|-----------------------------------|--------------|---------------------------|--|
| Density | 1.49 g/cc | 0.0538 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 | 0.40 % | 0.40 % | sim. ISO 62 |
| Linear Mold Shrinkage, Flow | 0.0060 cm/cm | 0.0060 in/in | Euronil |
| Linear Mold Shrinkage, Transverse | 0.0090 cm/cm | 0.0090 in/in | Euronil |

| Mechanical Properties | Metric | English | Comments |
|----------------------------|-------------------------|----------------------------|--------------------|
| Tensile Strength, Yield | 85.0 MPa | 12300 psi | ISO 527, ASTM D638 |
| Elongation at Break | 3.0 % | 3.0 % | ISO 527, ASTM D638 |
| Flexural Yield Strength | 120 MPa | 17400 psi | ISO 178, ASTM D790 |
| | 50.0 MPa | 7250 psi | ISO 178, ASTM D790 |
| | @Temperature 90.0 °C | @Temperature 194 °F | |
| Flexural Modulus | 5.00 GPa | 725 ksi | ISO 178, ASTM D790 |
| Izod Impact, Notched (ISO) | 3.00 kJ/m ² | 1.43 ft-lb/in ² | ISO 180/1A |
| | @Temperature -30.0 °C | @Temperature -22.0 °F | |
| | 4.00 kJ/m ² | 1.90 ft-lb/in ² | ISO 180/1A |
| | @Temperature 23.0 °C | @Temperature 73.4 °F | |
| Charpy Impact Unnotched | 3.50 J/cm ² | 16.7 ft-lb/in ² | ISO 179 |
| | 3.00 J/cm ² | 14.3 ft-lb/in ² | ISO 179 |
| | @Temperature -30.0 °C | @Temperature -22.0 °F | |
| Charpy Impact, Notched | 0.500 J/cm ² | 2.38 ft-lb/in ² | ISO 179 |

| Mechanical Properties | Metric | English | Comments |
|-----------------------|-------------------------|---|----------|
| | 0.310 J/cm ² | 1.210 ft ² /lb/in ² | ISO 179 |
| | @Temperature -30.0 °C | @Temperature -22.0 °F | |

| Thermal Properties | Metric | English | Comments |
|---|---------------------|----------------------|--|
| Maximum Service Temperature, Air | 130 °C | 266 °F | 20,000 hr; IEC 216 |
| Deflection Temperature at 0.46 MPa (66 psi) | 210 °C | 410 °F | ISO 75, ASTM D648 |
| Deflection Temperature at 1.8 MPa (264 psi) | 180 °C | 356 °F | ISO 75, ASTM D648 |
| Vicat Softening Point | 190 °C | 374 °F | 49 N; ISO 306, ASTM D1525 |
| | 215 °C | 419 °F | 9.8 N; ISO 306, ASTM D1525 |
| Flammability, UL94 | V-0 | V-0 | |
| | @Thickness 0.800 mm | @Thickness 0.0315 in | |
| | V-0 | V-0 | |
| | @Thickness 1.60 mm | @Thickness 0.0630 in | |
| | V-0 | V-0 | |
| | @Thickness 3.20 mm | @Thickness 0.126 in | |
| Oxygen Index | 34 % | 34 % | ASTM D2863 |
| Glow Wire Test | 960 °C | 1760 °F | Glow Wire Flammability Index; IEC 694-2-12 |
| | @Thickness 3.20 mm | @Thickness 0.126 in | |
| | 960 °C | 1760 °F | Glow Wire Flammability Index; IEC 694-2-12 |
| | @Thickness 0.800 mm | @Thickness 0.0315 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 | 125 V | 125 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 |

| Descriptive Properties | Value | Comments |
|-----------------------------|-------|------------------------|
| 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