

Premix Thermoplastics PRE-ELEC® PBT 1455

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

Material Notes:

PRE-ELEC PBT 1455 is a conductive thermoplastic compound based on PBT. Conductivity is achieved by using special conductive carbon black. PRE-ELEC PBT 1455 has excellent mechanical properties as well as good chemical and wear resistance. Typical applications include injection molded technical parts. Information provided by Premix Thermoplastics Inc.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Premix-Thermoplastics-PRE-ELEC-PBT-1455.php

| Physical Properties | Metric | English | Comments |
|-----------------------|---|---|-----------|
| Density | 1.32 g/cc | 0.0477 lb/in ³ | |
| Linear Mold Shrinkage | 0.022 cm/cm | 0.022 in/in | ISO 294-4 |
| Melt Flow | 14 g/10 min @Load 10.0 kg, Temperature 240 °C | 14 g/10 min @Load 22.0 lb, Temperature 464 °F | ISO 1133 |
| High Load Melt Index | 60 g/10 min @Load 21.6 kg, Temperature 240 °C | 60 g/10 min @Load 47.6 lb, Temperature 464 °F | ISO 1133 |

| Mechanical Properties | Metric | English | Comments |
|----------------------------|---|--|----------|
| Hardness, Shore D | 84 | 84 | ISO 868 |
| Tensile Strength, Ultimate | 37.0 MPa | 5370 psi | ISO 527 |
| Tensile Strength, Yield | 39.0 MPa | 5660 psi | ISO 527 |
| Elongation at Break | 14 % | 14 % | ISO 527 |
| Elongation at Yield | 7.0 % | 7.0 % | ISO 527 |
| Modulus of Elasticity | 2.00 GPa | 290 ksi | ISO 178 |
| Izod Impact, Notched | 0.350 J/cm @Thickness 4.00 mm, Temperature -20.0 °C | 0.656 ft-lb/in @Thickness 0.157 in, Temperature -4.00 °F | ISO 180 |
| | 0.750 J/cm @Thickness 4.00 mm, Temperature 23.0 °C | 1.41 ft-lb/in @Thickness 0.157 in, Temperature 73.4 °F | ISO 180 |
| Izod Impact, Unnotched | 5.00 J/cm @Thickness 4.00 mm, Temperature -20.0 °C | 9.37 ft-lb/in @Thickness 0.157 in, Temperature -4.00 °F | ISO 180 |

| Mechanical Properties | Metric | English | Comments |
|-----------------------|--|---|----------|
| | @Thickness 4.00 mm, Temperature 23.0 °C | @Thickness 0.157 in, Temperature 73.4 °F | ISO 180 |

| Thermal Properties | Metric | English | Comments |
|--|---------|---------|---------------------|
| Deflection Temperature at 0.46 MPa (66 psi) | 141 °C | 286 °F | ISO 75/Method Bf |
| Deflection Temperature at 1.8 MPa (264 psi) | 47.0 °C | 117 °F | ISO 75/Method Af |
| Vicat Softening Point | 188 °C | 370 °F | Rate B; ISO 306/B50 |
| | 219 °C | 426 °F | Rate A; ISO 306/A50 |

| Electrical Properties | Metric | English | Comments |
|-----------------------|----------------|----------------|-----------|
| Volume Resistivity | <= 1000 ohm-cm | <= 1000 ohm-cm | ISO D-257 |
| Surface Resistance | <= 10000 ohm | <= 10000 ohm | ISO D-257 |

| Processing Properties | Metric | English | Comments |
|-----------------------|-------------------------------------|----------------------------------|------------------------------|
| Melt Temperature | 250 - 280 °C | 482 - 536 °F | |
| Mold Temperature | 80.0 - 90.0 °C | 176 - 194 °F | |
| Drying Temperature | 140 °C @Time 7200 - 14400 sec | 284 °F @Time 2.00 - 4.00 hour | Pre-drying in a dehumidifier |
| Moisture Content | <= 0.15 % | <= 0.15 % | When Produced |
| Injection Pressure | 130.0 - 140.0 MPa | 18850 - 20310 psi | |
| Shelf Life | 12.0 Month | 12.0 Month | Normal Storing Conditions |

| Descriptive Properties | Value | Comments |
|------------------------|------------------|----------|
| Appearance | Granule | |
| Color | Black | |
| Injection Speed | Moderate to High | |
| Post Pressure, psi | 14503 - 15954 | |

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