

# Electrafil® PBT CF30 BK

Polybutylene Terephthalate

Techmer Engineered Solutions

## Message:

Electrafil® PBT CF30 BK is a Polybutylene Terephthalate (PBT) product filled with glass fiber. It can be processed by injection molding and is available in North America.

Characteristics include:

Flame Rated

Conductive

ESD Protection

| General Information                 |                       |                   |                |
|-------------------------------------|-----------------------|-------------------|----------------|
| Filler / Reinforcement              | Glass Fiber           |                   |                |
| Features                            | Antistatic            |                   |                |
|                                     | ESD Protection        |                   |                |
|                                     | Statically Conductive |                   |                |
| Appearance                          | Colors Available      |                   |                |
| Forms                               | Pellets               |                   |                |
| Processing Method                   | Injection Molding     |                   |                |
| Physical                            | Nominal Value         | Unit              | Test Method    |
| Specific Gravity                    | 1.43                  | g/cm <sup>3</sup> | ASTM D792      |
| Molding Shrinkage - Flow (3.18 mm)  | 0.40                  | %                 | ASTM D955      |
| Water Absorption (24 hr)            | 0.12                  | %                 | ASTM D570      |
| Hardness                            | Nominal Value         | Unit              | Test Method    |
| Rockwell Hardness (R-Scale)         | 118                   |                   | ASTM D785      |
| Mechanical                          | Nominal Value         | Unit              | Test Method    |
| Tensile Strength (Yield)            | 141                   | MPa               | ASTM D638      |
| Tensile Elongation (Break)          | 1.0                   | %                 | ASTM D638      |
| Flexural Modulus                    | 15900                 | MPa               | ASTM D790      |
| Flexural Strength                   | 207                   | MPa               | ASTM D790      |
| Impact                              | Nominal Value         | Unit              | Test Method    |
| Notched Izod Impact (23°C, 3.18 mm) | 59                    | J/m               | ASTM D256      |
| Thermal                             | Nominal Value         | Unit              | Test Method    |
| Deflection Temperature Under Load   |                       |                   | ASTM D648      |
| 0.45 MPa, Unannealed                | 220                   | °C                |                |
| 1.8 MPa, Unannealed                 | 215                   | °C                |                |
| CLTE - Flow                         | 4.0E-5                | cm/cm/°C          | ASTM D696      |
| Electrical                          | Nominal Value         | Unit              | Test Method    |
| Surface Resistivity                 | < 10                  | ohms              | ASTM D257      |
| Volume Resistivity                  | < 10                  | ohms · cm         | ASTM D257      |
| Static Decay                        | < 2.0                 | sec               | MIL PRF-81705D |

| Flammability           | Nominal Value  | Unit | Test Method |
|------------------------|----------------|------|-------------|
| Flame Rating (1.50 mm) | HB             |      | UL 94       |
| Injection              | Nominal Value  | Unit |             |
| Drying Temperature     | 121            | °C   |             |
| Drying Time            | 4.0            | hr   |             |
| Rear Temperature       | 232 to 274     | °C   |             |
| Middle Temperature     | 232 to 274     | °C   |             |
| Front Temperature      | 232 to 274     | °C   |             |
| Processing (Melt) Temp | 232 to 246     | °C   |             |
| Mold Temperature       | 65.6 to 82.2   | °C   |             |
| Back Pressure          | 0.345 to 0.689 | MPa  |             |
| Screw Speed            | 30 to 60       | rpm  |             |

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

