

# HiFill® PEI GF30

Polyether Imide

Techmer Engineered Solutions

## Message:

HiFill® PEI GF30 is a Polyether Imide (PEI) product filled with 30% glass fiber. It can be processed by injection molding and is available in North America.

| General Information                 |                                  |                   |             |
|-------------------------------------|----------------------------------|-------------------|-------------|
| Filler / Reinforcement              | Glass Fiber,30% Filler by Weight |                   |             |
| Appearance                          | Colors Available                 |                   |             |
| Forms                               | Pellets                          |                   |             |
| Processing Method                   | Injection Molding                |                   |             |
| Physical                            | Nominal Value                    | Unit              | Test Method |
| Specific Gravity                    | 1.51                             | g/cm <sup>3</sup> | ASTM D792   |
| Molding Shrinkage - Flow (3.18 mm)  | 0.20                             | %                 | ASTM D955   |
| Water Absorption (24 hr)            | 0.16                             | %                 | ASTM D570   |
| Hardness                            | Nominal Value                    | Unit              | Test Method |
| Rockwell Hardness (R-Scale)         | 121                              |                   | ASTM D785   |
| Mechanical                          | Nominal Value                    | Unit              | Test Method |
| Tensile Strength (Break)            | 161                              | MPa               | ASTM D638   |
| Tensile Elongation (Break)          | 3.0                              | %                 | ASTM D638   |
| Flexural Modulus                    | 8960                             | MPa               | ASTM D790   |
| Flexural Strength                   | 228                              | MPa               | ASTM D790   |
| Impact                              | Nominal Value                    | Unit              | Test Method |
| Notched Izod Impact (23°C, 3.18 mm) | 85                               | J/m               | ASTM D256   |
| Unnotched Izod Impact (3.18 mm)     | 480                              | J/m               | ASTM D256   |
| Thermal                             | Nominal Value                    | Unit              | Test Method |
| Deflection Temperature Under Load   |                                  |                   | ASTM D648   |
| 0.45 MPa, Unannealed                | 213                              | °C                |             |
| 1.8 MPa, Unannealed                 | 210                              | °C                |             |
| CLTE - Flow                         | 2.0E-5                           | cm/cm/°C          | ASTM D696   |
| Electrical                          | Nominal Value                    | Unit              | Test Method |
| Volume Resistivity                  | 1.0E+16                          | ohms · cm         | ASTM D257   |
| Dielectric Strength <sup>1</sup>    | 25                               | kV/mm             | ASTM D149   |
| Injection                           | Nominal Value                    | Unit              |             |
| Drying Temperature                  | 141                              | °C                |             |
| Drying Time                         | 3.0                              | hr                |             |
| Rear Temperature                    | 357 to 391                       | °C                |             |
| Middle Temperature                  | 357 to 391                       | °C                |             |
| Front Temperature                   | 357 to 391                       | °C                |             |
| Processing (Melt) Temp              | 354 to 388                       | °C                |             |

|                  |                |     |
|------------------|----------------|-----|
| Mold Temperature | 135 to 163     | °C  |
| Back Pressure    | 0.345 to 0.689 | MPa |
| Screw Speed      | 50 to 100      | rpm |

NOTE

1. Method A (Short-Time)

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

