

# INSTRUC PESGF20

Polyethersulfone

Infinity LTL Engineered Compounds

Message:

Instruc glass and carbon fiber reinforced, mineral and process additive filled structural compounds - Offered in all Infinity base resins  
Provide significant improvements in strength, stiffness, creep resistance, fatigue endurance and impact & dimensional stability  
Increased thermal HDTUL and long term heat resistance

| General Information                                     |                                  |                    |             |
|---|----------------------------------|--------------------|-------------|
| Filler / Reinforcement                                  | Glass Fiber,20% Filler by Weight |                    |             |
| Features  | Fatigue Resistant                |                    |             |
|   | Good Creep Resistance            |                    |             |
|   | Good Dimensional Stability       |                    |             |
|   | Good Heat Aging Resistance       |                    |             |
|   | Good Impact Resistance           |                    |             |
|   | High Flow                        |                    |             |
|   | High Stiffness                   |                    |             |
|   | High Strength                    |                    |             |
|   | Medium Heat Resistance           |                    |             |
| Uses  | Structural Parts                 |                    |             |
| Physical  | Nominal Value                    | Unit               | Test Method |
| Specific Gravity  | 1.51                             | g/cm <sup>3</sup>  | ASTM D792   |
| Specific Volume   | 0.661                            | cm <sup>3</sup> /g |             |
| Molding Shrinkage - Flow                                | 0.30 to 0.40                     | %                  | ASTM D955   |
| Water Absorption (24 hr)                                | 0.35                             | %                  | ASTM D570   |
| Mechanical  | Nominal Value                    | Unit               | Test Method |
| Tensile Strength (Yield)                                | 131                              | MPa                | ASTM D638   |
| Tensile Elongation (Yield)                              | 2.0 to 4.0                       | %                  | ASTM D638   |
| Flexural Modulus  | 6210                             | MPa                | ASTM D790   |
| Flexural Strength                                       | 193                              | MPa                | ASTM D790   |
| Impact  | Nominal Value                    | Unit               | Test Method |
| Notched Izod Impact (3.18 mm)                           | 75                               | J/m                | ASTM D256   |
| Unnotched Izod Impact (3.18 mm)                         | 530                              | J/m                | ASTM D256   |
| Thermal   | Nominal Value                    | Unit               | Test Method |
| Deflection Temperature Under Load (1.8 MPa, Unannealed) | 216                              | °C                 | ASTM D648   |
| CLTE - Flow   | 2.5E-5                           | cm/cm/°C           | ASTM D696   |
| Electrical  | Nominal Value                    | Unit               | Test Method |
| Surface Resistivity                                     | 1.0E+17                          | ohms               | ASTM D257   |

| Flammability           | Nominal Value  | Unit | Test Method |
|------------------------|----------------|------|-------------|
| Flame Rating (1.59 mm) | V-0            |      | UL 94       |
| Injection              | Nominal Value  | Unit |             |
| Drying Temperature     | 149            | °C   |             |
| Drying Time            | 4.0            | hr   |             |
| Processing (Melt) Temp | 343 to 379     | °C   |             |
| Mold Temperature       | 149            | °C   |             |
| Back Pressure          | 0.345 to 0.689 | MPa  |             |
| Screw Speed            | 40 to 70       | rpm  |             |
| Vent Depth             | 0.038 to 0.076 | mm   |             |

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

