

## Technical Data Sheet

### Polyfort FPP 40GFC LE BLK

Polypropylene Compounds

#### Product Description

40 % glass fibre reinforced PP homopolymer, chemically coupled, low emission

**Processing Method** Injection Molding

**Attribute** Chemically Coupled; Homopolymer; Low Emissions

**Filler/Reinforcement** Glass Fiber, 40%

| Typical Properties                                                  | Nominal Value | Units                   | Test Method   |
|---------------------------------------------------------------------|---------------|-------------------------|---------------|
| <b>Physical</b>                                                     |               |                         |               |
| Melt Volume Flow Rate, (230 °C/2.16 kg)                             | 4.0           | cm <sup>3</sup> /10 min | ISO 1133      |
| Density, (Method A)                                                 | 1.21          | g/cm <sup>3</sup>       | ISO 1183      |
| <b>Mechanical</b>                                                   |               |                         |               |
| Tensile Strain at Break, (Type 1A, 5 mm/min)                        | 3.3           | %                       | ISO 527-2     |
| Tensile Stress at Break, (Type 1A, 5 mm/min)                        | 100           | MPa                     | ISO 527-2     |
| Tensile Modulus, (1 mm/min, Type 1A)                                | 9000          | MPa                     | ISO 527-1     |
| <b>Impact</b>                                                       |               |                         |               |
| Charpy Impact Strength - Notched                                    |               |                         |               |
| (23 °C, Type 1, Edgewise, Notch A)                                  | 10            | kJ/m <sup>2</sup>       | ISO 179       |
| (-30 °C, Type 1, Edgewise, Notch A)                                 | 8.0           | kJ/m <sup>2</sup>       | ISO 179       |
| Charpy Impact Strength - Unnotched                                  |               |                         |               |
| (23 °C, Type 1, Edgewise)                                           | 52            | kJ/m <sup>2</sup>       | ISO 179       |
| (-30 °C, Type 1, Edgewise)                                          | 50            | kJ/m <sup>2</sup>       | ISO 179       |
| <b>Hardness</b>                                                     |               |                         |               |
| Ball Indentation Hardness, (H 358/30)                               | 147           | MPa                     | ISO 2039-1    |
| <b>Thermal</b>                                                      |               |                         |               |
| Vicat Softening Temperature                                         |               |                         |               |
| (B (50N), 50 °C/h)                                                  | 141           | °C                      | ISO 306       |
| (A (10N), 120 °C/h)                                                 | 166           | °C                      | ISO 306       |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise) | 147           | °C                      | ISO 75-2/A    |
| <b>Electrical</b>                                                   |               |                         |               |
| Volume Resistivity                                                  | >1.0E+13      | ohm*m                   | IEC 62631-3-1 |
| Surface Resistivity                                                 | >1.0E+15      | ohm                     | IEC 60093     |
| <b>Flammable</b>                                                    |               |                         |               |
| Burning Rate                                                        |               |                         |               |
| (2.00 mm)                                                           | 60            | mm/min                  | FMVSS 302     |
| (2.00 mm)                                                           | 60            | mm/min                  | ISO 3795      |
| <b>Additional Information</b>                                       |               |                         |               |
| Water Absorption 23C/50RH                                           | 0.03          | %                       | ISO 62        |
| <b>UL Information</b>                                               |               |                         |               |

|                                       |    |                          |
|---------------------------------------|----|--------------------------|
| Flammability Classification, (1.5 mm) | HB | IEC 60695-11-10, -<br>20 |
|---------------------------------------|----|--------------------------|

| Injection Parameters   | Nominal<br>Value  | Units |
|------------------------|-------------------|-------|
| Drying Time            | 2.0 to 3.0        | hr    |
| Drying Temperature     | 80                | °C    |
| Processing (Melt) Temp | 220 to 260        | °C    |
| Injection Rate         | Moderate-<br>Fast |       |
| Mold Temperature       | 30 to 60          | °C    |