

## Technical Data Sheet

### Polyfort FIPP 15 GFC BM K2258 BLK



Polypropylene Copolymer

#### Product Description

15% glass fibre reinforced PP copolymer compound; chemically coupled; blow molding grade; contains metal deactivator; heat stabilised

**Processing Method** Blow Molding; Extrusion; Injection Molding

**Filler/Reinforcement** Glass Fiber, 15%

**Resin ID** PP-C 15 GFC BM

| Typical Properties                                                  | Nominal Value | Units                   | Test Method |
|---------------------------------------------------------------------|---------------|-------------------------|-------------|
| <b>Physical</b>                                                     |               |                         |             |
| Melt Volume Flow Rate, (230 °C/2.16 kg)                             | 1.0           | cm <sup>3</sup> /10 min | ISO 1133    |
| Density, (Method A)                                                 | 1.01          | g/cm <sup>3</sup>       | ISO 1183    |
| <b>Mechanical</b>                                                   |               |                         |             |
| Tensile Strain at Break, (Type 1A, 5 mm/min)                        | 11            | %                       | ISO 527-2   |
| Flexural Modulus, (2.0 mm/min)                                      | 2600          | MPa                     | ISO 178     |
| Tensile Stress at Break, (Type 1A, 5 mm/min)                        | 35.0          | MPa                     | ISO 527-2   |
| Tensile Modulus, (1 mm/min, Type 1A)                                | 3050          | MPa                     | ISO 527-1   |
| Flexural Stress                                                     |               |                         |             |
| (2.0 mm/min, 3.5%)                                                  | 51.0          | MPa                     | ISO 178     |
| (2.0 mm/min, 6.0%)                                                  | 57.0          | MPa                     | ISO 178     |
| <b>Impact</b>                                                       |               |                         |             |
| Charpy Impact Strength - Notched                                    |               |                         |             |
| (23 °C, Type 1, Edgewise, Notch A)                                  | 18            | kJ/m <sup>2</sup>       | ISO 179     |
| (-30 °C, Type 1, Edgewise, Notch A)                                 | 7.0           | 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)                                          | 40            | kJ/m <sup>2</sup>       | ISO 179     |
| <b>Hardness</b>                                                     |               |                         |             |
| Ball Indentation Hardness, (H 358/10)                               | 70.0          | MPa                     | ISO 2039-1  |
| <b>Thermal</b>                                                      |               |                         |             |
| Vicat Softening Temperature                                         |               |                         |             |
| (B (50N), 50 °C/h)                                                  | 81.0          | °C                      | ISO 306     |
| (A (10N), 50 °C/h)                                                  | 160           | °C                      | ISO 306     |
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise) | 145           | °C                      | ISO 75-2/B  |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise) | 100           | °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)                   | <100     | mm/min | FMVSS 302            |
| (2.00 mm)                   | <100     | mm/min | ISO 3795             |
| <b>UL Information</b>       |          |        |                      |
| Flammability Classification |          |        |                      |
| (1.5 mm)                    | HB       |        | IEC 60695-11-10, -20 |
| (3.0 mm)                    | HB       |        | IEC 60695-11-10, -20 |

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