

## Technical Data Sheet

### Polyfort FPP30GFCK1079SN BLK



Polypropylene, Homopolymer

#### Product Description

30% glass fiber reinforced PP-Homopolymer chemically coupled

|                      |                                                  |
|----------------------|--------------------------------------------------|
| Processing Method    | Injection Molding                                |
| Attribute            | Chemically Coupled; Heat Stabilized; Homopolymer |
| Filler/Reinforcement | Glass Fiber, 30%                                 |

| Typical Properties                                                  | Nominal Value | Units                   | Test Method    |
|---------------------------------------------------------------------|---------------|-------------------------|----------------|
| <b>Physical</b>                                                     |               |                         |                |
| Melt Volume Flow Rate, (230 °C/2.16 kg)                             | 5.0           | cm <sup>3</sup> /10 min | ISO 1133       |
| Density, (Method A)                                                 | 1.13          | g/cm <sup>3</sup>       | ISO 1183       |
| <b>Mechanical</b>                                                   |               |                         |                |
| Tensile Strain at Break, (Type 1A, 5 mm/min)                        | 3.0           | %                       | ISO 527-2      |
| Flexural Modulus, (2.0 mm/min)                                      | 6000          | MPa                     | ISO 178        |
| Tensile Stress at Break, (Type 1A, 5 mm/min)                        | 85.0          | MPa                     | ISO 527-2      |
| Tensile Modulus, (1 mm/min, Type 1A)                                | 6500          | MPa                     | ISO 527-1      |
| Flexural Stress                                                     |               |                         |                |
| (2.0 mm/min, 3.6%)                                                  | 126           | MPa                     | ISO 178        |
| (2.0 mm/min, 3.4%)                                                  | 128           | MPa                     | ISO 178        |
| <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)                                           | 48            | kJ/m <sup>2</sup>       | ISO 179        |
| (-30 °C, Type 1, Edgewise)                                          | 45            | kJ/m <sup>2</sup>       | ISO 179        |
| <b>Hardness</b>                                                     |               |                         |                |
| Ball Indentation Hardness, (H 358/30)                               | 128           | MPa                     | ISO 2039-1     |
| Ball Pressure Test, (145 °C)                                        | Pass          |                         | IEC 60695-10-2 |
| <b>Thermal</b>                                                      |               |                         |                |
| Vicat Softening Temperature                                         |               |                         |                |
| (B (50N), 50 °C/h)                                                  | 130           | °C                      | ISO 306        |
| (A (10N), 50 °C/h)                                                  | 165           | °C                      | ISO 306        |
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise) | 159           | °C                      | ISO 75-2/B     |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise) | 145           | °C                      | ISO 75-2/A     |

**Electrical**

|                     |          |       |               |
|---------------------|----------|-------|---------------|
| Volume Resistivity  | >1.0E+13 | ohm*m | IEC 62631-3-1 |
| Surface Resistivity | >1.0E+15 | ohm   | IEC 60093     |

**Flammable**

|                                |     |        |                |
|--------------------------------|-----|--------|----------------|
| Burning Rate                   |     |        |                |
| (2.00 mm)                      | 58  | mm/min | FMVSS 302      |
| (2.00 mm)                      | 58  | mm/min | ISO 3795       |
| Glow Wire Flammability Index   |     |        |                |
| (1.5 mm)                       | 725 | °C     | IEC 60695-2-12 |
| (3.0 mm)                       | 750 | °C     | IEC 60695-2-12 |
| Glow Wire Ignition Temperature |     |        |                |
| (1.5 mm, Passes)               | 750 | °C     | IEC 60695-2-13 |
| (3.0 mm, Passes)               | 775 | °C     | IEC 60695-2-13 |

**UL Information**

|                             |    |                      |
|-----------------------------|----|----------------------|
| 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    |