HK:+852-69575415 China GuangDong:+13538586433 ShangHai:+18816996168

**Technical Data Sheet**

# POLYFORT® PPH GF10 SF

Polypropylene Homopolymer
Engineering Plastics

| Product Description |
|---|
| 10% glass fibre reinforced PP homopolymer with high flowability |

| General | | |
|---|---|---|
| Filler / Reinforcement | • Glass Fiber, 10% Filler by Weight | |
| Features | • Chemically Coupled<br>• High Flow | • Homopolymer<br>• Low Emissions |
| Processing Method | • Injection Molding | |
| Resin ID (ISO 1043) | • PP-H 10 GF | |

| Physical | Nominal Value (English) | Nominal Value (SI) | Test Method |
|---|---|---|---|
| Density | 0.970 g/cm³ | 0.970 g/cm³ | ISO 1183/A |
| Melt Volume-Flow Rate (MVR) (230°C/2.16 kg) | 30 cm³/10min | 30 cm³/10min | ISO 1133 |
| **Mechanical** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Tensile Modulus | 435000 psi | 3000 MPa | ISO 527-2/1A/1 |
| Tensile Stress (Break) | 7540 psi | 52.0 MPa | ISO 527-2/1A/5 |
| Tensile Strain (Break) | 4.0 % | 4.0 % | ISO 527-2/1A/5 |
| Flexural Modulus | 450000 psi | 3100 MPa | ISO 178 |
| Flexural Stress [1] (73°F (23°C)) | 12000 psi | 83.0 MPa | ISO 178 |
| **Impact** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Charpy Notched Impact Strength | | | ISO 179/1eA |
| -22°F (-30°C) | 2.5 ft·lb/in² | 5.2 kJ/m² | |
| 73°F (23°C) | 2.4 ft·lb/in² | 5.0 kJ/m² | |
| Charpy Unnotched Impact Strength | | | ISO 179/1eU |
| -22°F (-30°C) | 7.1 ft·lb/in² | 15 kJ/m² | |
| 73°F (23°C) | 17 ft·lb/in² | 35 kJ/m² | |
| **Thermal** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Heat Deflection Temperature | | | |
| 66 psi (0.45 MPa), Unannealed | 313 °F | 156 °C | ISO 75-2/Bf |
| 264 psi (1.8 MPa), Unannealed | 255 °F | 124 °C | ISO 75-2/Af |
| Vicat Softening Temperature | | | |
| -- | 322 °F | 161 °C | ISO 306/A50 |
| -- | 244 °F | 118 °C | ISO 306/B50 |
| **Electrical** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Surface Resistivity | > 1.0E+15 ohms | > 1.0E+15 ohms | IEC 60093 |
| Volume Resistivity | > 1.0E+13 ohms·m | > 1.0E+13 ohms·m | IEC 62631-3-1 |
| **Flammability** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Burning Rate | | | |
| 0.0787 in (2.00 mm) | 2.4 in/min | 60 mm/min | ISO 3795 |
| 0.0787 in (2.00 mm) | 2.4 in/min | 60 mm/min | FMVSS 302 |
| Flammability Classification | | | IEC 60695-11-10, -20 |
| 0.06 in (1.5 mm) | HB | HB | |
| 0.12 in (3.0 mm) | HB | HB | |

| Additional Information |
|---|
| 1.) Not for use in food contact applications |
| 2.) Not for use in medical or pharmaceutical applications |

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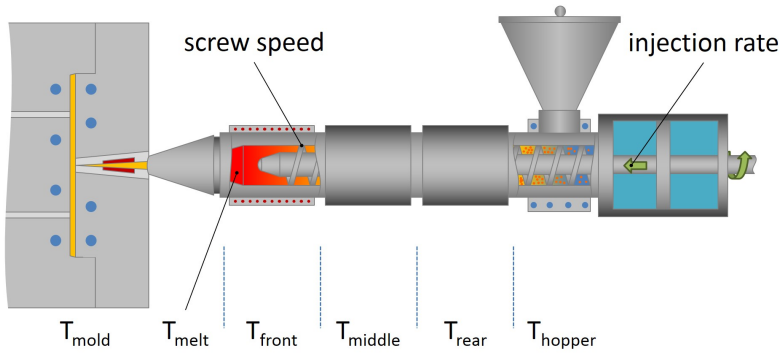


| Injection | Nominal Value (English) | Nominal Value (SI) |
|---|---|---|
| Drying Temperature | 176 °F | 80 °C |
| Drying Time | 2.0 to 3.0 hr | 2.0 to 3.0 hr |
| Suggested Max Regrind | 20 % | 20 % |
| Processing (Melt) Temp | 446 to 518 °F | 230 to 270 °C |
| Mold Temperature | 104 to 158 °F | 40 to 70 °C |

**Injection Notes**

Drying normally not necessary.
Injection molding parameters also influence emission properties, which are often required for automotive interior applications. Generally speaking, the emission, odor and fogging behavior of finished parts is improved by lowering the melt temperature, reducing residence time and avoiding high shear stress.