

Technical Data Sheet

Polyfort RPP40EB81HB-BK GAPEX HPBLK

Polypropylene, Homopolymer

Product Description

Polyfort RPP40EB81HB-BK GAPEX HPBLK is a Polypropylene Homopolymer Glass Fiber, 40% filled material. Features include: UV Stabilized.

| | |
|-----------------------------|------------------|
| Attribute | UV Stabilized |
| Forms | Pellets |
| Appearance | Black |
| Filler/Reinforcement | Glass Fiber, 40% |

| Typical Properties | Nominal Value | Units | Test Method |
|--|----------------------|-------------------|--------------------|
| Physical | | | |
| Melt Flow Rate, (230 °C/2.16 kg) | 3.0 | g/10 min | ASTM D1238 |
| Density - Specific Gravity | 1.23 | g/cm ³ | ASTM D792 |
| Mechanical | | | |
| Tensile Strength, (23 °C) | 100 | MPa | ASTM D638 |
| Flexural Modulus | | | |
| (23 °C, 1% Secant) | 7190 | MPa | ASTM D790 |
| (23 °C, Tangent) | 7590 | MPa | ASTM D790 |
| Tensile Elongation at Break, (23 °C) | 5.0 | % | ASTM D638 |
| Flexural Strength, (23 °C) | 149 | MPa | ASTM D790 |
| Impact | | | |
| Gardner Impact, (23 °C) | 0.452 | J | ASTM D5420 |
| Unnotched Izod Impact, (23 °C) | 650 | J/m | ASTM D4812 |
| Notched Izod Impact, (23 °C) | 110 | J/m | ASTM D256 |
| Thermal | | | |
| Deflection Temperature Under Load Unannealed (264 psi) | 154 | °C | ASTM D648 |
| Deflection Temperature Under Load Unannealed (66 psi) | 163 | °C | ASTM D648 |

| Injection Parameters | Nominal Value | Units |
|-----------------------------|----------------------|--------------|
| Drying Time | 2.0 to 4.0 | hr |
| Drying Temperature | 71 to 82 | °C |
| Nozzle Temperature | 232 to 260 | °C |
| Processing (Melt) Temp | 221 to 238 | °C |
| Front Temperature | 232 to 260 | °C |
| Middle Temperature | 227 to 243 | °C |
| Rear Temperature | 221 to 238 | °C |
| Injection Rate | Slow-Moderate | |
| Back Pressure | 0.138 to 0.345 | MPa |
| Mold Temperature | 38 to 66 | °C |
| Cushion | 5.08 to 12.7 | mm |