

Technical Data Sheet

Polyfort TPP40AN47BK-BKBLK



Polypropylene, Unspecified (PP, Unspecified)

Product Description

Polyfort TPP40AN47BK-BKBLK is a Polypropylene, Unspecified Talc, 40% filled material and is typically used in Injection Molding applications. Features include: Impact Modified.

| | |
|-----------------------------|-------------------|
| Processing Method | Injection Molding |
| Attribute | Impact Modified |
| Forms | Pellets |
| Appearance | Black |
| Additive | Impact Modifier |
| Filler/Reinforcement | Talc, 40% |

| Typical Properties | Nominal Value | Units | Test Method |
|--|---------------|-------------------|-------------|
| Physical | | | |
| Melt Flow Rate, (230 °C/2.16 kg) | 9.5 | g/10 min | ASTM D1238 |
| Density - Specific Gravity | 1.24 | g/cm ³ | ASTM D792 |
| Mechanical | | | |
| Tensile Strength, (23 °C) | 31.0 | MPa | ASTM D638 |
| Flexural Modulus | | | |
| (23 °C, 1% Secant) | 2950 | MPa | ASTM D790 |
| (23 °C, Tangent) | 3880 | MPa | ASTM D790 |
| Tensile Elongation at Break, (23 °C) | 5.0 | % | ASTM D638 |
| Flexural Strength, (23 °C) | 50.3 | MPa | ASTM D790 |
| Impact | | | |
| Gardner Impact, (23 °C) | 1.69 | J | ASTM D5420 |
| Unnotched Izod Impact, (23 °C) | 250 | J/m | ASTM D4812 |
| Notched Izod Impact, (23 °C) | 27 | J/m | ASTM D256 |
| Hardness | | | |
| Durometer Hardness, (Shore D) | 75 | | ASTM D2240 |
| Thermal | | | |
| Deflection Temperature Under Load Unannealed (264 psi) | 76.7 | °C | ASTM D648 |
| Deflection Temperature Under Load Unannealed (66 psi) | 135 | °C | ASTM D648 |

| Injection Parameters | Nominal Value | Units |
|-----------------------------|----------------------|--------------------|
| Drying Time | 2.0 to 3.0 | hr |
| Drying Temperature | 80 | °C |
| Clamp Tonnage | 2.8 to 4.1 | kN/cm ² |
| Nozzle Temperature | 216 to 218 | °C |
| Screw Speed | 100 to 150 | rpm |
| Processing (Melt) Temp | 220 to 260 | °C |
| Front Temperature | 213 to 216 | °C |
| Screw L/D Ratio | 20.0-1.0 | |
| Screw Compression Ratio | 2.0-1.0 | |
| Middle Temperature | 210 to 213 | °C |
| Rear Temperature | 204 to 210 | °C |
| Back Pressure | 0.138 to 0.345 | MPa |
| Mold Temperature | 30 to 60 | °C |