



WPP PP PPH3TF2-Natural

Washington Penn Plastic Co. Inc. - Polypropylene Homopolymer

Wednesday, October 9, 2019

General Information

Product Description

Properties shown below for this filled blend are typical for a 20% talc-reinforced polypropylene homopolymer. This basic product satisfies many application needs. Special compounds are available.

General

| | | | |
|------------------------|--|-----------------------------|-----------------|
| Material Status | • Commercial: Active | | |
| Availability | • Africa & Middle East • Asia Pacific | • Europe • Latin America | • North America |
| Filler / Reinforcement | • Talc, 20% Filler by Weight | | |
| Features | • High Flow | • High Heat Resistance | • Homopolymer |
| Uses | • Automotive Applications | • Automotive Interior Trim | |
| Appearance | • Colors Available | • Natural Color | |
| Forms | • Pellets | | |

ASTM & ISO Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|--|---------------|-------------------|-------------|
| Density / Specific Gravity | 1.03 | g/cm ³ | ASTM D792 |
| Melt Mass-Flow Rate (MFR) (230°C/2.16 kg) | 6.0 | g/10 min | ASTM D1238 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Strength ² (Yield) | 34.0 | MPa | ASTM D638 |
| Flexural Modulus ³ | 2300 | MPa | ASTM D790 |
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact (23°C) | 26 | J/m | ASTM D256 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load 1.8 MPa, Unannealed | 74.0 | °C | ASTM D648 |

Additional Information

Tested at 23 ± 2°C (73.4 ± 3.6°F) and 50 ± 5% relative humidity unless otherwise noted.

Processing Information

| Injection | Nominal Value | Unit |
|--------------------|---------------|--------------------|
| Drying Temperature | 71 to 88 | °C |
| Drying Time | 1.0 | hr |
| Rear Temperature | 221 to 227 | °C |
| Middle Temperature | 221 to 227 | °C |
| Front Temperature | 224 to 229 | °C |
| Nozzle Temperature | 229 to 241 | °C |
| Mold Temperature | 16 to 49 | °C |
| Injection Pressure | 4.14 to 7.58 | MPa |
| Holding Pressure | 1.72 to 4.83 | MPa |
| Back Pressure | 0.689 to 1.38 | MPa |
| Clamp Tonnage | 3.4 to 5.5 | kN/cm ² |
| Cushion | 3.18 to 6.35 | mm |

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Injection Notes

Injection Speed: 1.5 to 2.5 in/s

Zone 4 Temperature: 445 to 455°F

Hot Runner Temperature: 445 to 475°F

Hydraulic Oil Temperature: 110 to 125°F

Shot Capacity vs. Barrel Capacity: 2.5 to 4

Screw Decompression: 0.1 to 0.25 in

Notes

¹ Typical properties: these are not to be construed as specifications.

² 50 mm/min

³ 1.3 mm/min
