



TDS Polyfort™ FPP 40 T

Polypropylene Homopolymer

Product

40% talc filled PP-Homopolymer

General

| | | | |
|---------------------------|---------------------------------------|-------------------------------|--------|
| Material Status | Commercial: Active | | |
| Availability | Africa & Middle East Latin America | Asia Pacific North America | Europe |
| Filler / Reinforcement | Talc, 40% Filler by Weight | | |
| Features | Homopolymer | | |
| Automotive Specifications | FORD WSK-M4D643-A2 | | |
| UL File Number | E86615 | | |
| Processing Method | Injection Molding | | |

| Physical | Nominal Value (English) | Nominal Value (SI) | Test Method |
|---|------------------------------|----------------------------|-------------|
| Density | 1.28 g/cm ³ | 1.28g/cm ³ | ISO 1183/A |
| Melt Volume-Flow Rate (MVR) (230°C/2.16 kg) | 0.366 in ³ /10min | 6.0 cm ³ /10min | ISO 1133 |

| Mechanical | Nominal Value (English) | Nominal Value (SI) | Test Method |
|------------------------|-------------------------|--------------------|-----------------|
| Tensile Modulus | 580000 psi | 4000 MPa | ISO 527-2/1A/1 |
| Tensile Stress (Yield) | 4060 psi | 28.0 MPa | ISO 527-2/1A/50 |
| Tensile Strain (Yield) | 2.5 % | 2.5 % | ISO 527-2/1A/50 |

| Impact | Nominal Value (English) | Nominal Value (SI) | Test Method |
|--------------------------------|----------------------------|-----------------------|-------------|
| Charpy Notched Impact Strength | | | ISO 179/1eA |
| -22°F (-30°C) | 0.71 ft·lb/in ² | 1.5 kJ/m ² | |
| 73°F (23°C) | 1.2 ft·lb/in ² | 2.5 kJ/m ² | |

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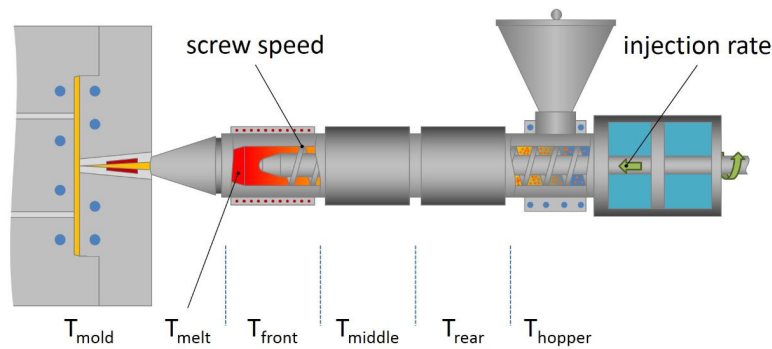
Polypropylene Homopolymer

| Impact | Nominal Value (English) | Nominal Value (SI) | Test Method |
|--------------------------------------|---------------------------|----------------------|----------------------|
| Charpy Unnotched Impact Strength | | | ISO 179/1eU |
| -22°F (-30°C) | 4.8 ft·lb/in ² | 10 kJ/m ² | |
| 73°F (23°C) | 8.6 ft·lb/in ² | 18 kJ/m ² | |
| Hardness | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Ball Indentation Hardness (H 358/30) | 12300 psi | 85.0 MPa | ISO 2039-1 |
| Thermal | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Heat Deflection Temperature | | | |
| 66 psi (0.45 MPa), Unannealed | 244°F | 118°C | ISO 75-2/Bf |
| 264 psi (1.8 MPa), Unannealed | 156°F | 69.0°C | ISO 75-2/Af |
| Vicat Softening Temperature | | | |
| -- | 304°F | 151°C | ISO 306/A50 |
| -- | 198°F | 92.0°C | ISO 306/B50 |
| Ball Pressure Test (257°F (125°C)) | Pass | Pass | IEC 60695-10-2 |
| Flammability | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Burning Rate | <3.9 in/min | <100 mm/min | ISO 3795 |
| Flammability Classification | | | IEC 60695-11-10, -20 |
| 0.06 in (1.5 mm) | HB | HB | |
| 0.12 in (3.0 mm) | HB | HB | |
| Glow Wire Flammability Index | | | IEC 60695-2-12 |
| 0.06 in (1.5 mm) | 1430°F | 775°C | |
| 0.12 in (3.0 mm) | 1430°F | 775°C | |
| Glow Wire Ignition Temperature | | | IEC 60695-2-13 |
| 0.06 in (1.5 mm) | 1470°F | 800°C | |
| 0.12 in (3.0 mm) | 1470°F | 800°C | |

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Additional Information

- 1) Not for use in food contact applications
- 2) Not for use in medical or pharmaceutical applications



| 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