

# TDS Polyfort™ FPP 30 GFC

## Polypropylene Homopolymer

### Product

30% glass fiber reinforced PP-Homopolymer chemically coupled

### General

Material Status	Commercial: Active		
Availability	Africa & Middle East Latin America	Asia Pacific North America	Europe
Filler / Reinforcement	Glass Fiber, 30% filler by weight		
Features	Chemically Coupled	Homopolymer	
UL File Number	E86615		
Processing Method	Injection Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.11g/cm <sup>3</sup>	1.11g/cm <sup>3</sup>	ISO 1183/A
Melt Volume-Flow Rate (MVR) (230°C/2.16 kg)	0.305 in <sup>3</sup> /10min	5.00 cm <sup>3</sup> /10min	ISO 1133

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	943000 psi	6500 MPa	ISO 527-2/1A/1
Tensile Stress (Break)	12200 psi	84.0 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	2.8 %	2.8 %	ISO 527-2/1A/5
Flexural Modulus <sup>1</sup>	870000 psi	6000 MPa	ISO 178
Flexural Stress			ISO 178
3.4% Strain <sup>1</sup>	18600 psi	128 MPa	
3.6% Strain <sup>2</sup>	18300 psi	126 MPa	

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	3.8 ft·lb/in <sup>2</sup>	8.0 kJ/m <sup>2</sup>	
73°F (23°C)	4.3 ft·lb/in <sup>2</sup>	9.0 kJ/m <sup>2</sup>	

### Notes

<sup>1</sup> 0.079 in/min (2.0 mm/min)

<sup>2</sup> at Break

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Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	21 ft·lb/in <sup>2</sup>	45 kJ/m <sup>2</sup>	
73°F (23°C)	23 ft·lb/in <sup>2</sup>	48 kJ/m <sup>2</sup>	

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Ball Indentation Hardness (H 358/30)	17400 psi	120 MPa	ISO 2039-1

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature			
66 psi (0.45 MPa), Unannealed	318°F	159°C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	266°F	145°C	ISO 75-2/Af
Vicat Softening Temperature			
--	329°F	165°C	ISO 306/A50
--	266°F	130°C	ISO 306/B50
Ball Pressure Test (293°F (145°C))	Pass	Pass	IEC 60695-10-2

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·cm	> 1.0E+13 ohms·cm	IEC 60093

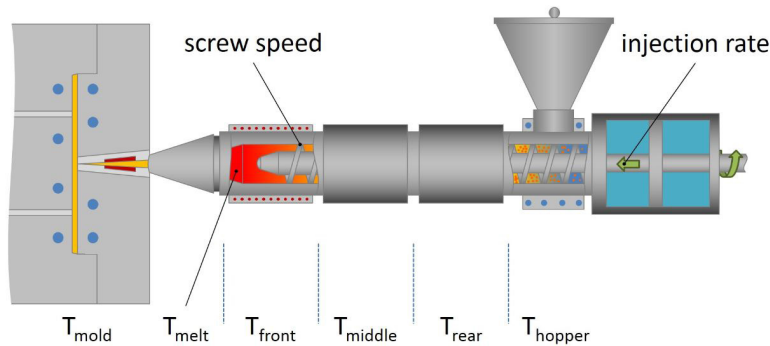
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate (0.0787 in (2.00 mm))	< 2.4 in/min	< 60 mm/min	FMVSS
Flammability Classification 0.06 in (1.5 mm)			IEC 60695-11-10, -20
0.06 in (1.5 mm)	HB	HB	
0.12 in (3.0 mm)	HB	HB	

## TDS Polyfort™ FPP 30 GFC Polypropylene Homopolymer

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
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	

### 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