

TDS Polyfort™ FPP 20 GFC

Polypropylene Homopolymer

Product

20% chemical coupled glass fiber reinforced PP-homopolymer

General

Material Status	Commercial: Active		
Availability	Africa & Middle East Latin America	Asia Pacific North America	Europe
Filler / Reinforcement	Glass Fiber, 20% filler by weight		
Features	Chemically Coupled	Homopolymer	
Automotive Specifications	GM GMW15702 -024151 PP-GF20	GM QK 003822 Color: Natural	
Processing Method	Injection Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.05g/cm ³	1.05g/cm ³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (230°C/2.16 kg)	0.305 in ³ /10min	5.00 cm ³ /10min	ISO 1133

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	667000 psi	4600 MPa	ISO 527-2/1A/1
Tensile Stress (Break)	9860 psi	68.0 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	3.0 %	3.0 %	ISO 527-2/1A/5

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	3.3 ft·lb/in ²	7.0 kJ/m ²	
73°F (23°C)	3.8 ft·lb/in ²	8.0 kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	12 ft·lb/in ²	25 kJ/m ²	
73°F (23°C)	14 ft·lb/in ²	30 kJ/m ²	

TDS Polyfort™ FPP 20 GFC

Polypropylene Homopolymer

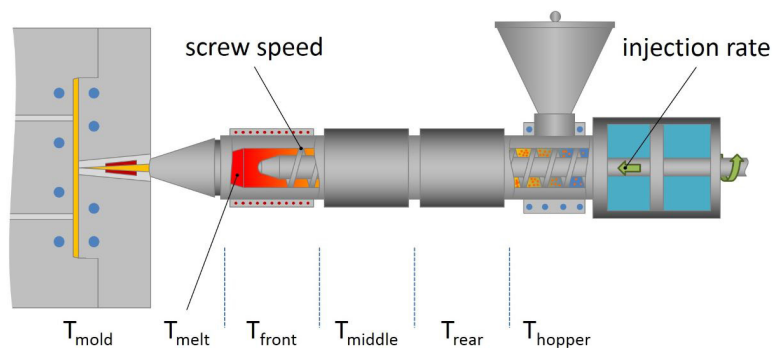
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Ball Indentation Hardness (H 358/30)	14500 psi	100 MPa	ISO 2039-1

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature			
66 psi (0.45 MPa), Unannealed	307°F	153°C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	277°F	136°C	ISO 75-2/Af
Vicat Softening Temperature			
--	320°F	160°C	ISO 306/A50
--	239°F	115°C	ISO 306/B50

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))	< 3.1 in/min	< 80 mm/min	FMVSS
Flammability Classification 0.06 in (1.5 mm)	HB	HB	IEC 60695-11-10, -20

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





TDS Polyfort™ FPP 20 GFC

Polypropylene Homopolymer

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