

### TDS Polyfort<sup>™</sup> FPP 20 GB Polypropylene Homopolymer

20% glass bead reinforced PP-Homopolymer with high stiffness and dimension stability					
	2	5	5		
General					
Material Status	Commercial: Active				
5		k Middle East	Asia Pacific	Europe	
	Latin A		North America		
Filler / Reinforcement	Glass Bead, 20% Filler by Weigh		t		
Processing Method	Injection Molding				
Physical		Nominal Value (English)	Nominal Value (SI)	Test Method	
			1 0 1 / 0		
Density		1.04g/cm <sup>3</sup>	1.04g/cm <sup>3</sup>	ISO 1183/A	
Density Melt Volume-Flow Rate (MVR) (230°C/	2.16 kg)	1.04g/cm <sup>3</sup> 0.610 in <sup>3</sup> /10min	1.04g/cm <sup>3</sup> 10.0 cm <sup>3</sup> /10min	ISO 1183/A ISO 1133	
	'2.16 kg)	-	0		
	'2.16 kg)	-	0		
	'2.16 kg)	-	10.0 cm <sup>3</sup> /10min		
Melt Volume-Flow Rate (MVR) (230°C/	'2.16 kg)	0.610 in <sup>3</sup> /10min	10.0 cm <sup>3</sup> /10min	ISO 1133	
Melt Volume-Flow Rate (MVR) (230°C/	2.16 kg)	0.610 in <sup>3</sup> /10min Nominal Value (English)	10.0 cm <sup>3</sup> /10min Nominal Value (SI)	ISO 1133 Test Method ISO 527-2/1A/1	
Melt Volume-Flow Rate (MVR) (230°C/ Mechanical Tensile Modulus	2.16 kg)	0.610 in <sup>3</sup> /10min Nominal Value (English) 247000 psi	10.0 cm <sup>3</sup> /10min Nominal Value (SI) 1700 MPa	ISO 1133 Test Method ISO 527-2/1A/1 ISO 527-2/1A/50	
Melt Volume-Flow Rate (MVR) (230°C/ Mechanical Tensile Modulus Tensile Stress (Yield)	2.16 kg)	0.610 in <sup>3</sup> /10min Nominal Value (English) 247000 psi 3480 psi	10.0 cm <sup>3</sup> /10min Nominal Value (SI) 1700 MPa 24.0 MPa	ISO 1133 Test Method	
Melt Volume-Flow Rate (MVR) (230°C/ Mechanical Tensile Modulus Tensile Stress (Yield) Tensile Strain (Yield)	2.16 kg)	0.610 in <sup>3</sup> /10min Nominal Value (English) 247000 psi 3480 psi 8.0 %	10.0 cm <sup>3</sup> /10min Nominal Value (SI) 1700 MPa 24.0 MPa 8.0 %	ISO 1133 Test Method ISO 527-2/1A/1 ISO 527-2/1A/50 ISO 527-2/1A/50	
Melt Volume-Flow Rate (MVR) (230°C/ Mechanical Tensile Modulus Tensile Stress (Yield) Tensile Strain (Yield) Impact	2.16 kg)	0.610 in <sup>3</sup> /10min Nominal Value (English) 247000 psi 3480 psi	10.0 cm <sup>3</sup> /10min Nominal Value (SI) 1700 MPa 24.0 MPa 8.0 %	ISO 1133 Test Method ISO 527-2/1A/1 ISO 527-2/1A/50 ISO 527-2/1A/50 Test Method	
Melt Volume-Flow Rate (MVR) (230°C/ Mechanical Tensile Modulus Tensile Stress (Yield) Tensile Strain (Yield) Impact Charpy Notched Impact Strength	2.16 kg)	0.610 in <sup>3</sup> /10min Nominal Value (English) 247000 psi 3480 psi 8.0 % Nominal Value (English)	10.0 cm <sup>3</sup> /10min Nominal Value (SI) 1700 MPa 24.0 MPa 8.0 % Nominal Value (SI)	ISO 1133 Test Method ISO 527-2/1A/1 ISO 527-2/1A/50 ISO 527-2/1A/50	
Melt Volume-Flow Rate (MVR) (230°C/ Mechanical Tensile Modulus Tensile Stress (Yield) Tensile Strain (Yield) Impact Charpy Notched Impact Strength -22°F (-30°C)	2.16 kg)	0.610 in <sup>3</sup> /10min Nominal Value (English) 247000 psi 3480 psi 8.0 % Nominal Value (English) 0.95 ft·lb/in <sup>2</sup>	10.0 cm <sup>3</sup> /10min Nominal Value (SI) 1700 MPa 24.0 MPa 8.0 % Nominal Value (SI) 2.0 kJ/m <sup>2</sup>	ISO 1133 Test Method ISO 527-2/1A/1 ISO 527-2/1A/50 ISO 527-2/1A/50 Test Method	
Melt Volume-Flow Rate (MVR) (230°C/ Mechanical Tensile Modulus Tensile Stress (Yield) Tensile Strain (Yield) Impact Charpy Notched Impact Strength -22°F (-30°C) 73°F (23°C)	2.16 kg)	0.610 in <sup>3</sup> /10min Nominal Value (English) 247000 psi 3480 psi 8.0 % Nominal Value (English)	10.0 cm <sup>3</sup> /10min Nominal Value (SI) 1700 MPa 24.0 MPa 8.0 % Nominal Value (SI)	ISO 1133 Test Method ISO 527-2/1A/1 ISO 527-2/1A/50 ISO 527-2/1A/50 Test Method ISO 179/1eA	
Melt Volume-Flow Rate (MVR) (230°C/ Mechanical Tensile Modulus Tensile Stress (Yield) Tensile Strain (Yield) Impact Charpy Notched Impact Strength -22°F (-30°C)	2.16 kg)	0.610 in <sup>3</sup> /10min Nominal Value (English) 247000 psi 3480 psi 8.0 % Nominal Value (English) 0.95 ft·lb/in <sup>2</sup>	10.0 cm <sup>3</sup> /10min Nominal Value (SI) 1700 MPa 24.0 MPa 8.0 % Nominal Value (SI) 2.0 kJ/m <sup>2</sup>	ISO 1133 Test Method ISO 527-2/1A/1 ISO 527-2/1A/50 ISO 527-2/1A/50 Test Method	

Page: 1 of 3

```
www.aschulman.com
Publish Date: 2017-06-15
```

The information and recommendations contained in this document are based upon data collected by A. Schulman and are believed to be reliable; however, because A. Schulman cannot anticipate or control the many different conditions under which this information and/or product may be used, no representation is made and no warranty is given of any kind, express or implied, for completeness, accuracy, availability, suitability, usefulness, commercial value, or non-violation of intellectual property rights of information, recommendations, and products and services directly or indirectly provided. A. Schulman assumes no responsibility for the results of the use of products and processes described herein and expressly disclaims the implied warranties of merchantability and fitness for a particular use.



## TDS Polyfort<sup>™</sup> FPP 20 GB Polypropylene Homopolymer

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Ball Indentation Hardness (H 358/30)	10600 psi	73.0 MPa	ISO 2039-1
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature			
66 psi (0.45 MPa), Unannealed	246°F	119°C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	178°F	81.0°C	ISO 75-2/Af
Vicat Softening Temperature			
	302°F	150°C	ISO 306/A50
	185°F	85.0°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∙cr	mIEC 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 (1.6 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

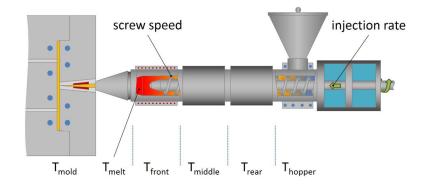
Page: 2 of 3 Copyright ©, 2017 A. Schulman

www.aschulman.com Publish Date: 2017-06-15

The information and recommendations contained in this document are based upon data collected by A. Schulman and are believed to be reliable; however, because A. Schulman cannot anticipate or control the many different conditions under which this information and/or product may be used, no representation is made and no warranty is given of any kind, express or implied, for completeness, accuracy, availability, suitability, usefulness, commercial value, or non-violation of intellectual property rights of information, recommendations, and products and services directly or indirectly provided. A. Schulman assumes no responsibility for the results of the use of products and processes described herein and expressly disclaims the implied warranties of merchantability and fitness for a particular use.



# TDS Polyfort<sup>™</sup> FPP 20 GB 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

Page: 3 of 3 Copyright ©, 2017 A. Schulman

www.aschulman.com Publish Date: 2017-06-15

The information and recommendations contained in this document are based upon data collected by A. Schulman and are believed to be reliable; however, because A. Schulman cannot anticipate or control the many different conditions under which this information and/or product may be used, no representation is made and no warranty is given of any kind, express or implied, for completeness, accuracy, availability, suitability, usefulness, commercial value, or non-violation of intellectual property rights of information, recommendations, and products and services directly or indirectly provided. A. Schulman assumes no responsibility for the results of the use of products and processes described herein and expressly disclaims the implied warranties of merchantability and fitness for a particular use.