

## Polymer Resources TPSF-FR1 PBT, 30% Glass Reinforced Structural Foam Grade, Flame Retardant

Category : Polymer , Thermoplastic , Polyester, TP , Polybutylene Terephthalate (PBT) , Polybutylene Terephthalate (PBT), 30% Glass Fiber Filled

### Material Notes:

Process: Foam Molding Notes: All physical, mechanical and thermal testing conducted on 1/8-inch thick, un-pigmented, test samples. Foam grades tested with foamed parts with a 10% weight reduction relative to unfoamed parts. Information provided by Polymer Resources Corporation.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Polymer-Resources-TPSF-FR1-PBT-30-Glass-Reinforced-Structural-Foam-Grade-Flame-Retardant.php](http://www.lookpolymers.com/polymer_Polymer-Resources-TPSF-FR1-PBT-30-Glass-Reinforced-Structural-Foam-Grade-Flame-Retardant.php)

Physical Properties	Metric	English	Comments
Density	1.60 g/cc	0.0578 lb/in <sup>3</sup>	ASTM D792
Linear Mold Shrinkage	0.0020 - 0.0050 cm/cm	0.0020 - 0.0050 in/in	ASTM D955
Melt Flow	8.0 - 18 g/10 min	8.0 - 18 g/10 min	ASTM D1238

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	103 MPa	15000 psi	ASTM D638
Tensile Strength, Yield	103 MPa	15000 psi	ASTM D638
Flexural Strength	159 MPa	23000 psi	ASTM D790
Flexural Modulus	6.55 GPa	950 ksi	ASTM D790
Izod Impact, Unnotched	6.94 J/cm	13.0 ft-lb/in	ASTM D256

Thermal Properties	Metric	English	Comments
Deflection Temperature at 0.46 MPa (66 psi)	204 °C	400 °F	ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	141 °C	285 °F	ASTM D648
Flammability, UL94	HB	HB	1/16 in
	HB	HB	1/8 in

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	238 - 254 °C	460 - 490 °F	
Middle Barrel Temperature	243 - 260 °C	470 - 500 °F	

Front Barrel Temperature Processing Properties	249 - 266 °C Metric	480 - 510 °F English	Comments
Melt Temperature	232 - 260 °C	450 - 500 °F	
Mold Temperature	71.1 - 87.8 °C	160 - 190 °F	
Drying Temperature	116 - 121 °C	240 - 250 °F	
Dry Time	3 - 4 hour	3 - 4 hour	

## Contact Songhan Plastic Technology Co.,Ltd.

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