

Polymer Resources

Classic® Engineering Plastic Compounds

Wednesday, August 30, 2023

PRL TPSF-FR1G30

Units

Polymer Resources Ltd. - Polybutylene Terephthalate

Action

Legend 

General Information

General

Material Status	<ul style="list-style-type: none"> Commercial: Active 		
Availability	<ul style="list-style-type: none"> North America 		
Filler / Reinforcement	<ul style="list-style-type: none"> Glass Fiber, 30% Filler by Weight 		
Additive	<ul style="list-style-type: none"> Flame Retardant 		
Features	<ul style="list-style-type: none"> Chemical Resistant Flame Retardant 	<ul style="list-style-type: none"> Foamable High Heat Resistance 	<ul style="list-style-type: none"> Low Warpage Self Extinguishing
Uses	<ul style="list-style-type: none"> Structural Foam 		
RoHS Compliance	<ul style="list-style-type: none"> RoHS Compliant 		
UL File Number	<ul style="list-style-type: none"> E113219 		
Forms	<ul style="list-style-type: none"> Pellets 		
Processing Method	<ul style="list-style-type: none"> Foam Processing 		

ASTM & ISO Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.62		ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	4.0 to 12	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	3.0E-3 to 5.0E-3	in/in	ASTM D955
Mechanical			
Tensile Strength (Yield, 0.125 in)	16500	psi	ASTM D638
Tensile Strength (Break, 0.125 in)	16500	psi	ASTM D638
Flexural Modulus (0.125 in)	1.05E+6	psi	ASTM D790
Flexural Strength (Break, 0.125 in)	25500	psi	ASTM D790
Impact			
Notched Izod Impact (73°F, 0.125 in)	1.0	ft-lb/in	ASTM D256
Thermal			
Deflection Temperature Under Load (66 psi, Unannealed, 0.125 in)	410	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in)	390	°F	ASTM D648
RTI Elec (0.24 to 0.26 in)	167	°F	UL 746B
RTI Imp (0.24 to 0.26 in)	167	°F	UL 746B
RTI Str (0.24 to 0.26 in)	167	°F	UL 746B
Electrical			
Hot-wire Ignition (HWI) (0.24 to 0.26 in)	PLC 0		UL 746A
Flammability			
Flame Rating (0.24 to 0.26 in, All)	V-0		UL 94

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	240 to 250	°F
Drying Time	3.0 to 4.0	hr
Drying Time, Maximum	8.0	hr
Rear Temperature	460 to 490	°F
Middle Temperature	470 to 500	°F
Front Temperature	480 to 510	°F
Processing (Melt) Temp	450 to 500	°F
Mold Temperature	160 to 190	°F

Notes

¹ Typical properties: these are not to be construed as specifications.

The information contained herein is based on our knowledge and belief of current facts, existing publications and generally accepted good practices. It may not necessarily reflect current conditions and is not a substitute for proper technical advice. The user of this material must make their own evaluations to determine the suitability of this material from a technical as well as health, safety and environmental standpoint. This data is not intended for specification purposes.