

PRL TP-FR-IM

Polybutylene Terephthalate

Polymer Resources Ltd.

Message:

PRL TP-FR-IM is a Polybutylene Terephthalate (PBT) product. It can be processed by injection molding and is available in North America. Typical application: Outdoor Applications.

Characteristics include:

- Flame Rated
- RoHS Compliant
- Flame Retardant
- Heat Resistant
- Impact Modified

General Information			
UL YellowCard	E113219-219235		
Additive	Flame Retardant		
	Impact Modifier		
Features	Flame Retardant		
	High Impact Resistance		
	Impact Modified		
	Medium Heat Resistance		
	Self Extinguishing		
RoHS Compliance	RoHS Compliant		
UL File Number	E113219		
Forms	Pellets		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.34	g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	3.0 to 9.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow	1.0 to 1.4	%	ASTM D955
Outdoor Suitability	f2		UL 746C
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength			ASTM D638
Yield, 3.18 mm	44.8	MPa	
Break, 3.18 mm	44.8	MPa	
Flexural Modulus (3.18 mm)	2070	MPa	ASTM D790
Flexural Strength (Break, 3.18 mm)	77.9	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C, 3.18 mm)	530	J/m	ASTM D256
Gardner Impact (3.18 mm)	> 36.2	J	ASTM D3029

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed, 3.18 mm	132	°C	
1.8 MPa, Unannealed, 3.18 mm	87.8	°C	
RTI Elec			UL 746
0.850 mm	130	°C	
1.60 mm	130	°C	
3.00 mm	130	°C	
RTI Imp			UL 746
0.850 mm	85.0	°C	
1.60 mm	85.0	°C	
3.00 mm	110	°C	
RTI Str			UL 746
0.850 mm	130	°C	
1.60 mm	130	°C	
3.00 mm	130	°C	
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+14	ohms · cm	ASTM D257
Dielectric Strength (0.850 mm)	27	kV/mm	ASTM D149
Arc Resistance (0.850 mm)	PLC 6		ASTM D495
Comparative Tracking Index (CTI) (0.850 mm)	PLC 0		UL 746
High Amp Arc Ignition (HAI)			UL 746
0.850 mm	PLC 0		
1.60 mm	PLC 0		
3.00 mm	PLC 0		
High Voltage Arc Tracking Rate (HVTR) (0.850 mm)	PLC 3		UL 746
Hot-wire Ignition (HWI)			UL 746
0.850 mm	PLC 4		
1.60 mm	PLC 3		
3.00 mm	PLC 2		
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.850 mm	V-0		
1.60 mm	V-0		
3.00 mm	V-0		
Injection	Nominal Value	Unit	
Drying Temperature	116 to 121	°C	
Drying Time	3.0 to 4.0	hr	
Drying Time, Maximum	8.0	hr	
Rear Temperature	238 to 254	°C	
Middle Temperature	243 to 260	°C	

Front Temperature	249 to 266	°C
Processing (Melt) Temp	232 to 260	°C
Mold Temperature	43.3 to 82.2	°C

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519
Phone: +86 13424755533
Email: sales@su-jiao.com
No. 215, Lianhe North Road, Fengxian District, Shanghai, China

