RTP 1103

Polyethylene Terephthalate

RTP Company

Message:

Warning: The status of this material is 'Commercial: Limited Issue'
The data for this material has not been recently verified.
Please contact RTP Company for current information prior to specifying this grade.
RTP 1100 Series offers an optimum balance of strength, stiffness, toughness, heat resistance and excellent electricals. It offers good surface appearance at a very competitive cost.

General Information			
Filler / Reinforcement	Glass fiber reinforced material, 20% filler by weight		
Features	Rigid, good High strength Good electrical performance Heat resistance, high Good toughness Good appearance		
RoHS Compliance	Contact manufacturer		
Appearance	Black Natural color		
Forms	Particle		
Processing Method	Injection molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.49	g/cm³	ASTM D792
Molding Shrinkage - Flow (3.18 mm)	0.20	%	ASTM D955
Water Absorption (23°C, 24 hr)	0.050	%	ASTM D570
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	120		ASTM D785
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	7580	MPa	ASTM D638
Tensile Strength (Yield)	110	MPa	ASTM D638
Tensile Elongation (Break)	1.8	%	ASTM D638
Flexural Modulus	7580	MPa	ASTM D790
Flexural Strength (Yield)	152	MPa	ASTM D790
Compressive Strength	138	MPa	ASTM D695
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (3.18 mm)	53	J/m	ASTM D256
Unnotched Izod Impact (3.18 mm)	270	J/m	ASTM D4812

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, not annealed	241	°C	ASTM D648
1.8 MPa, not annealed	224	°C	ASTM D648
CLTE - Flow	3.2E-5	cm/cm/°C	ASTM D696
Thermal Conductivity	0.27	W/m/K	ASTM C177
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength	19	kV/mm	ASTM D149
Dielectric Constant (1 MHz)	3.40		ASTM D150
Dissipation Factor (1 MHz)	0.013		ASTM D150
Arc Resistance (1.59 mm)	125	sec	ASTM D495
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (1.59 mm, Values per RTP Company testing.)	HB		UL 94
Additional Information			
Molding Shrinkage, Linear-Flow, ASTM D955, 6.35mm: 3mm/m.F			
Injection	**Nominal Value**	**Unit**	
Drying Temperature	121	°C	
Drying Time	4.0	hr	
Suggested Max Moisture	0.010	%	
Suggested Max Regrind	20	%	
Rear Temperature	260 - 299	°C	
Middle Temperature	260 - 299	°C	
Front Temperature	260 - 299	°C	
Mold Temperature	82.2 - 121	°C	
Injection Pressure	68.9 - 103	MPa	
Back Pressure	0.172 - 0.517	MPa	
Screw Speed	60 - 90	rpm	
Clamp Tonnage	6.9 - 11	kN/cm^2	

Recommended distributors for this material

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