

RTP 177

Polypropylene

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 170 Series materials were developed to combine good physical properties and moldability where straight glass filled, talc filled or mineral filled materials will not do the job. RTP 177 is rigid, has reasonable strength, and low cost.

General Information			
Filler / Reinforcement	Glass \Mineral		
	Glass beads		
Features	Rigidity, high		
	Chemical coupling		
	Bending resistance		
	Good formability		
RoHS Compliance	Contact manufacturer		
Appearance	Black		
	Natural color		
Forms	Particle		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.24	g/cm ³	ASTM D792
Molding Shrinkage - Flow (3.18 mm)	0.50	%	ASTM D955
Water Absorption (23°C, 24 hr)	0.080	%	ASTM D570
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	100		ASTM D785
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	5520	MPa	ASTM D638
Tensile Strength (Yield)	40.0	MPa	ASTM D638
Tensile Elongation (Break)	2.0	%	ASTM D638
Flexural Modulus	3790	MPa	ASTM D790
Flexural Strength (Yield)	55.2	MPa	ASTM D790
Compressive Strength	39.3	MPa	ASTM D695
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (3.18 mm)	43	J/m	ASTM D256
Unnotched Izod Impact (3.18 mm)	160	J/m	ASTM D4812

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, not annealed	149	°C	ASTM D648
1.8 MPa, not annealed	138	°C	ASTM D648
CLTE - Flow	3.8E-5	cm/cm/°C	ASTM D696
Thermal Conductivity	0.35	W/m/K	ASTM C177
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+17	ohms·cm	ASTM D257
Dielectric Strength	20	kV/mm	ASTM D149
Dielectric Constant (1 MHz)	3.00		ASTM D150
Dissipation Factor (1 MHz)	6.0E-3		ASTM D150
Arc Resistance (1.59 mm)	120	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: 6mm/m.			
Injection	Nominal Value	Unit	
Drying Temperature	82.2	°C	
Drying Time	2.0	hr	
Suggested Max Regrind	20	%	
Rear Temperature	218 - 274	°C	
Middle Temperature	218 - 274	°C	
Front Temperature	218 - 274	°C	
Mold Temperature	32.0 - 66.0	°C	
Injection Pressure	68.9 - 103	MPa	
Back Pressure	0.345	MPa	
Screw Speed	50 - 90	rpm	
Clamp Tonnage	6.9 - 11	kN/cm ²	

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



WECHAT