RTP 305 TFE 15 SI

Polycarbonate

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.

General Information			
Filler / Reinforcement	Glass fiber reinforced material, 30% filler by weight		
Additive	PTFE lubricant (15%) Silicone lubricant		
Features	Lubrication		
RoHS Compliance	Contact manufacturer		
Appearance	Black Natural color		
Forms	Particle		
Processing Method	Injection molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.54	g/cm³	ASTM D792
Molding Shrinkage - Flow (3.18 mm)	0.10	%	ASTM D955
Water Absorption (23°C, 24 hr)	0.060	%	ASTM D570
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	118		ASTM D785
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	8960	MPa	ASTM D638
Tensile Strength	103	MPa	ASTM D638
Tensile Elongation (Break)	1.0	%	ASTM D638
Flexural Modulus	7580	MPa	ASTM D790
Flexural Strength	152	MPa	ASTM D790
Compressive Strength	93.1	MPa	ASTM D695
Coefficient of Friction (With Metal-Dynamic)	0.20		ASTM D1894
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (6.35 mm)	110	J/m	ASTM D256
Unnotched Izod Impact (6.35 mm)	270	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	143	°C	ASTM D648
CLTE - Flow	2.9E-5	cm/cm/°C	ASTM D696
Thermal Conductivity	0.32	W/m/K	ASTM C177
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength	18	kV/mm	ASTM D149
Dielectric Constant (1 MHz)	3.40		ASTM D150
Dissipation Factor (1 MHz)	7.0E-3		ASTM D150
Arc Resistance	120	sec	ASTM D495
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating	V-0		UL 94

Additional Information

Mold Shrinkage, Linear-Flow, ASTM D-955, 0.25in.: 2mil/in.Tensile Elongation, ASTM D-638: 1-2%Flammability, ASTM D-635: SE in/min.Wear Factor, K, ASTM D-3702: 30E-10in³/min/ft/lb/hrCoefficient of Friction, Dynamic, ASTM D-3702: 0.20The wear factor and dynamic coefficient of friction were both tested on thrust washer apparatus at 300 FPM, 8500 PV, against 1141 Ryex steel of hardness 18-22 Rockwell C, 12-16 micro smoothness.

Injection	Nominal Value	Unit
Drying Temperature	121	°C
Drying Time	4.0	hr
Suggested Max Moisture	0.020	%
Suggested Max Regrind	20	%
Rear Temperature	288 - 343	°C
Middle Temperature	288 - 343	°C
Front Temperature	288 - 343	°C
Mold Temperature	65.6 - 121	°C
Injection Pressure	103 - 138	MPa

Recommended distributors for this material

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