RTP 2100 AR 5

Polyether Imide

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 2100 AR Series are aramid fiber reinforced polyetherimide composites designed for exceptional wear and abrasion resistance along with isotropic properties at elevated temperatures.

General Information			
Filler / Reinforcement	Aramid fiber, 5.0% filler by weight		
Features	Good wear resistance Good wear resistance		
RoHS Compliance	Contact manufacturer		
Appearance	Black Natural color		
Forms	Particle		
Processing Method	Injection molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.28	g/cm³	ASTM D792
Molding Shrinkage - Flow (3.18 mm)	0.60	%	ASTM D955
Water Absorption (23°C, 24 hr)	0.20	%	ASTM D570
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	125		ASTM D785
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	3790	MPa	ASTM D638
Tensile Strength			ASTM D638
Yield	96.5	MPa	ASTM D638
--	96.5	MPa	ASTM D638
Tensile Elongation (Break)	7.0	%	ASTM D638
Flexural Modulus	3450	MPa	ASTM D790
Flexural Strength			ASTM D790
--	138	MPa	ASTM D790
Yield	138	MPa	ASTM D790
Coefficient of Friction (With Metal-Dynamic)	0.14		ASTM D1894
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (3.18 mm)	53	J/m	ASTM D256
Unnotched Izod Impact (3.18 mm)	530	J/m	ASTM D4812

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, not annealed	210	°C	ASTM D648
1.8 MPa, not annealed	202	°C	ASTM D648
CLTE - Flow	3.1E-5	cm/cm/°C	ASTM D696
Thermal Conductivity	0.23	W/m/K	ASTM C177
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (1.59 mm, RTP Tested)	V-0		UL 94
Additional Information			
Molding Shrinkage, ASTM D955, 0.25in: 6 mil/inWear Factor, K, ASTM D-3702: 150E-10in^3/min/ft/lb/hrThe coefficient of friction was tested on a Falex Model No.6 Wear Testing Machine at 50 FPM, 2000 PV, against C1018 steel of hardness 15-25 Rockwell C, 14-17 micro smoothness.			
Injection	**Nominal Value**	**Unit**	
Rear Temperature	343 - 399	°C	
Middle Temperature	343 - 399	°C	
Front Temperature	343 - 399	°C	
Mold Temperature	93.3 - 177	°C	
Injection Pressure	82.7 - 124	MPa	

Recommended distributors for this material

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