Polyflam RIPP 374 ND CS1 5V BLK7103

LyondellBasell Industries - Polypropylene Copolymer

General Information

Product Description		
20% talc filled flame-retardant PP-Copolymer; UL94 5VA rated		
General		
Filler / Reinforcement	• Talc, 20% Filler by Weight	
Additive	• Copper Stabilizer	• Flame Retardant
Features	• Copper Contact Stabilized	• Flame Retardant
Processing Method	• Injection Molding	
Resin ID	• PP TD20 FR(17)	

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.39	g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (230°C/2.16 kg)	5.0	cm³/10min	ISO 1133
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	348000	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	2900	psi	ISO 527-2/1A/50
Tensile Stress (Break)	1310	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	2.0	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	15	%	ISO 527-2/1A/50
Flexural Modulus [2]	363000	psi	ISO 178
Flexural Stress [2]			ISO 178
3.5% Strain	4210	psi	
3.0% Strain	4350	psi	
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	0.95	ft·lb/in²	
73°F	4.8	ft·lb/in²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	6.2	ft·lb/in²	
73°F	17	ft·lb/in²	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	181	°F	ISO 75-2/Bf
Deflection Temperature Under Load			ISO 75-2/Af
264 psi, Unannealed	127	°F	
Vicat Softening Temperature			
--	138	°F	ISO 306/B50
--	279	°F	ISO 306/A50
Ball Pressure Test (212°F)	Pass		IEC 60695-10-2

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Thermal	Nominal Value	Unit	Test Method
RTI Elec			UL 746B
0.030 in	149	°F	
0.06 in	149	°F	
0.08 in	149	°F	
0.12 in	149	°F	
RTI Imp			UL 746B
0.030 in	149	°F	
0.06 in	149	°F	
0.08 in	149	°F	
0.12 in	149	°F	
RTI Str			UL 746B
0.030 in	149	°F	
0.06 in	149	°F	
0.08 in	149	°F	
0.12 in	149	°F	

Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+15	ohms	IEC 60093
Volume Resistivity	> 1.0E+13	ohms·m	IEC 62631-3-1
Comparative Tracking Index	600	V	IEC 60112

Flammability	Nominal Value	Unit	Test Method
Burning Rate [3]			
0.0787 in	0.0	in/min	ISO 3795
0.0787 in	0.0	in/min	FMVSS 302
Flame Rating			UL 94
0.030 in	V-0		
0.06 in	V-0		
0.08 in	5VA		
0.12 in	5VA		
Flammability Classification			IEC 60695-11-10, -20
0.030 in	V-0		
0.06 in	V-0		
0.08 in	5VA		
0.12 in	5VA		
Glow Wire Flammability Index			IEC 60695-2-12
0.030 in	1760	°F	
0.06 in	1760	°F	
0.12 in	1760	°F	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.030 in	1560	°F	
0.06 in	1470	°F	
0.12 in	1470	°F	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	158 to 176	°F
Drying Time	2.0 to 4.0	hr
Rear Temperature	356	°F
Middle Temperature	392	°F
Front Temperature	410	°F

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Injection	Nominal Value	Unit
Nozzle Temperature	428	°F
Processing (Melt) Temp	356 to 410	°F
Mold Temperature	104 to 176	°F
Injection Pressure	11600 to 17400	psi
Injection Rate	Slow-Moderate	
Holding Pressure	5800 to 13100	psi
Back Pressure	725 to 1450	psi
Screw Speed	< 709	in/min
Cushion	< 0.197	in

Notes

[1] Typical properties: these are not to be construed as specifications.

[2] 0.079 in/min

[3] Self-Extinguishing