Polyflam RIPP 4000 OSD K3014 NAT

LyondellBasell Industries - Polypropylene Copolymer

General Information

Product Description		
Flame-retardant PP-Copolymer, halogenfree, optimized smoke density		
General		
Additive	• Flame Retardant	
Features	• Copolymer • Flame Retardant	• Halogen Free • Low Smoke Emission
Processing Method	• Extrusion	• Injection Molding
Resin ID	• PP FR(51)	

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.07	g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (230°C/2.16 kg)	4.0	cm³/10min	ISO 1133
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	305000	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	2900	psi	ISO 527-2/1A/50
Tensile Stress (Break)	2180	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	3.3	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	50	%	ISO 527-2/1A/50
Flexural Modulus [2]	305000	psi	ISO 178
Flexural Stress [2]			ISO 178
4.0% Strain	5080	psi	
3.5% Strain	5080	psi	
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	0.48	ft·lb/in²	
73°F	1.4	ft·lb/in²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	9.5	ft·lb/in²	
73°F	No Break		
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	208	°F	ISO 75-2/Bf
Deflection Temperature Under Load			ISO 75-2/Af
264 psi, Unannealed	140	°F	
Vicat Softening Temperature			
--	165	°F	ISO 306/B50
--	311	°F	ISO 306/A50
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
Electric Strength [3] (73°F, 0.0394 in, in Oil)	1100	V/mil	IEC 60243-1
Comparative Tracking Index (CTI)	600	V	UL 746A

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Flammability	Nominal Value	Unit	Test Method
Burning Rate [4]			
0.0787 in	0.0	in/min	ISO 3795
0.0787 in	0.0	in/min	FMVSS 302
Flammability Classification			IEC 60695-11-10, -20
0.030 in	V-0		
0.06 in	• V-0 • 5VB		
0.12 in	V-0		
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	1340	°F	
0.06 in	1340	°F	
0.12 in	1340	°F	
Oxygen Index	33	%	ISO 4589-2

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
Nozzle Temperature	428	°F
Processing (Melt) Temp	356 to 428	°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

Extrusion	Nominal Value	Unit
Drying Temperature	158 to 176	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	< 0.10	%
Melt Temperature	338 to 410	°F

Notes

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

[2] 0.079 in/min

[3] 2000 V/sec

[4] Self-Extinguishing