Polyflam RPP 4000 NAT

LyondellBasell Industries - Polypropylene Homopolymer

General Information

Product Description		
Unfilled flame-retardant PP-Homopolymer, halogenfree		
General		
Additive	• Flame Retardant	
Features	• Flame Retardant • Good Processability	• Halogen Free • Homopolymer
Processing Method	• Injection Molding	
Resin ID	• PP FR(51)	

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.06	g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (230°C/2.16 kg)	16	cm³/10min	ISO 1133
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	377000	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	3630	psi	ISO 527-2/1A/50
Tensile Stress (Break)	2900	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	3.3	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	15	%	ISO 527-2/1A/50
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	0.95	ft·lb/in²	
73°F	1.4	ft·lb/in²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	5.7	ft·lb/in²	
73°F	13	ft·lb/in²	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	223	°F	ISO 75-2/B
Deflection Temperature Under Load			ISO 75-2/Af
264 psi, Unannealed	138	°F	
Vicat Softening Temperature			
--	214	°F	ISO 306/B50
--	307	°F	ISO 306/A50
Ball Pressure Test (293°F, 0.0709 in)	Pass		IEC 60695-10-2
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 [2]			
0.0787 in	0.0	in/min	FMVSS 302
0.0787 in	0.0	in/min	ISO 3795

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Flammability	Nominal Value	Unit	Test Method
Flammability Classification			IEC 60695-11-10, -20
0.030 in	V-0		
0.06 in	V-0		
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	1380	°F	
0.06 in	1340	°F	
0.12 in	1380	°F	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	158 to 176	°F
Drying Time	2.0 to 4.0	hr
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

Notes

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

[2] Self-Extinguishing