

# Polyflam RIPP 4000 BLK70400

## LyondellBasell Industries - Polypropylene Copolymer

### General Information

#### Product Description

Unfilled flame-retardant PP-Copolymer, halogenfree

#### General

Additive	• Flame Retardant
Features	• Copolymer • Flame Retardant
Processing Method	• Injection Molding
Resin ID	• PP FR(51)
	• Good Processability • Halogen Free

### Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density	1.05	g/cm <sup>3</sup>	ISO 1183/A
Melt Volume-Flow Rate (MVR) (230°C/2.16 kg)	13	cm <sup>3</sup> /10min	ISO 1133
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	319000	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	2900	psi	ISO 527-2/1A/50
Tensile Stress (Break)	2280	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	3.2	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	27	%	ISO 527-2/1A/50
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	1.1	ft-lb/in <sup>2</sup>	
73°F	1.9	ft-lb/in <sup>2</sup>	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	7.6	ft-lb/in <sup>2</sup>	
73°F	26	ft-lb/in <sup>2</sup>	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	207	°F	ISO 75-2/B
Deflection Temperature Under Load 264 psi, Unannealed	126	°F	ISO 75-2/Af
Vicat Softening Temperature			
--	171	°F	ISO 306/B50
--	304	°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
Comparative Tracking Index	600	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Burning Rate <sup>2</sup>			
0.0787 in	0.0	in/min	ISO 3795
0.0787 in	0.0	in/min	FMVSS 302

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Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.030 in		V-0	
0.06 in		V-0	
0.12 in		V-0	
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	1340	°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**

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> Self-Extinguishing