



# Polyflam RIPP 2000 E S GRY 64540

LyondellBasell Industries - Polypropylene Copolymer

## General Information

### Product Description

Unfilled flame retardant PP-Copolymer grade for extrusion or blow moulding, UV stabilized for outdoor applications, halogen free acc. DIN VDE 0472 part 815

### General

Additive	• Flame Retardant		
Features	• Flame Retardant	• Halogen Free	
	• Good Colorability	• High Viscosity	
Processing Method	• Blow Molding	• Extrusion	• Injection Molding
Resin ID	• PP FR(53)		

## Properties<sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density	0.930	g/cm <sup>3</sup>	ISO 1183/A
Melt Volume-Flow Rate (MVR) (230°C/2.16 kg)	2.5	cm <sup>3</sup> /10min	ISO 1133
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	174000	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	3920	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	10	%	ISO 527-2/1A/50
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	1.4	ft-lb/in <sup>2</sup>	
73°F	10	ft-lb/in <sup>2</sup>	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	29	ft-lb/in <sup>2</sup>	
73°F	No Break		
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	194	°F	ISO 75-2/Bf
Deflection Temperature Under Load 264 psi, Unannealed	118	°F	ISO 75-2/Af
Vicat Softening Temperature			
--	154	°F	ISO 306/B50
--	298	°F	ISO 306/A50
Ball Pressure Test (266°F)	Pass		IEC 60695-10-2
RTI Elec			UL 746B
0.06 in	149	°F	
0.12 in	149	°F	
RTI Imp			UL 746B
0.06 in	149	°F	
0.12 in	149	°F	
RTI Str			UL 746B
0.06 in	149	°F	
0.12 in	149	°F	

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<b>Electrical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
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
<b>Flammability</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Burning Rate <sup>2</sup>			
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-2		
0.06 in	V-2		
0.12 in	V-2		
Flammability Classification			IEC 60695-11-10, -20
0.030 in	V-2		
0.06 in	V-2		
0.12 in	V-2		
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	1290	°F	
0.06 in	1560	°F	
0.12 in	1470	°F	
Oxygen Index	25	%	ISO 4589-2

**Processing Information**

<b>Injection</b>	<b>Nominal Value</b>	<b>Unit</b>
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 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
<b>Extrusion</b>	<b>Nominal Value</b>	<b>Unit</b>
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