

Polyflam RPP 490 CS1 K2318 NAT

LyondellBasell Industries - Polypropylene Homopolymer

General Information

Product Description

Flame-retardant PP-homopolymer; halogen free

General

Additive	<ul style="list-style-type: none"> Copper Stabilizer Flame Retardant
Features	<ul style="list-style-type: none"> Copper Contact Stabilized Halogen Free Flame Retardant Homopolymer
Processing Method	<ul style="list-style-type: none"> Injection Molding
Resin ID	<ul style="list-style-type: none"> PP FR(51)

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.06	g/cm ³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (230°C/2.16 kg)	10	cm ³ /10min	ISO 1133
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	348000	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	3770	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	3.0	%	ISO 527-2/1A/50
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	0.71	ft-lb/in ²	
73°F	0.95	ft-lb/in ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	4.8	ft-lb/in ²	
73°F	9.5	ft-lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	221	°F	ISO 75-2/Bf
Deflection Temperature Under Load 264 psi, Unannealed	140	°F	ISO 75-2/Af
Vicat Softening Temperature			
--	208	°F	ISO 306/B50
--	304	°F	ISO 306/A50
Ball Pressure Test (284°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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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	ISO 3795
0.0787 in	0.0	in/min	FMVSS 302
Flame Rating			UL 94
0.06 in	V-0		
0.12 in	V-0		
Flammability Classification			IEC 60695-11-10, -20
0.06 in	V-0		
0.12 in	V-0		
Glow Wire Flammability Index			IEC 60695-2-12
0.06 in	1760	°F	
0.12 in	1760	°F	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.06 in	1380	°F	
0.12 in	1380	°F	
Oxygen Index	37	%	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

Notes

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

² Self-Extinguishing