

Technical Data Sheet

Polyflam RIPP 2000

Polypropylene Copolymer
LyondellBasell Industries
Engineering Plastics

Product Description

Unfilled flame retardant PP-Copolymer grade, halogen free acc. DIN VDE 0472 part 815, fulfills french norm NF P 92 - 501/505 class M2

General

Features	• Flame Retardant	• Good Colorability	• Halogen Free
UL File Number	• E86615		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PP FR(40)		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
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Density	0.910 g/cm ³	0.910 g/cm ³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (230°C/2.16 Kg)	13 cm ³ /10min	13 cm ³ /10min	ISO 1133

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
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Tensile Modulus	160000 psi	1100 MPa	ISO 527-1/1A/1
Tensile Stress (Yield)	3480 psi	24.0 MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	10 %	10 %	ISO 527-2/1A/50

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
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Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	1.2 ft·lb/in ²	2.5 kJ/m ²	
73°F (23°C)	6.2 ft·lb/in ²	13 kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	22 ft·lb/in ²	46 kJ/m ²	
73°F (23°C)	No Break	No Break	

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
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Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	172 °F	78.0 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	127 °F	53.0 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	147 °F	64.0 °C	ISO 306/B50
--	286 °F	141 °C	ISO 306/A50
Ball Pressure Test (248°F (120°C))	Pass	Pass	IEC 60695-10-2
RTI Elec			UL 746B
0.06 In (1.5 Mm)	149 °F	65.0 °C	
0.12 In (3.0 Mm)	149 °F	65.0 °C	
RTI Imp			UL 746B
0.06 In (1.5 Mm)	149 °F	65.0 °C	
0.12 In (3.0 Mm)	149 °F	65.0 °C	
RTI Str			UL 746B
0.06 In (1.5 Mm)	149 °F	65.0 °C	
0.12 In (3.0 Mm)	149 °F	65.0 °C	

Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
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Comparative Tracking Index	600 V	600 V	IEC 60112
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Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
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Burning Rate			ISO 3795
0.0591 In (1.50 Mm), Self-extinguishing	0.0 in/min	0.0 mm/min	
0.118 In (3.00 Mm), Self-extinguishing	0.0 in/min	0.0 mm/min	



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Flame Rating			
0.06 In (1.5 Mm)	V-2	V-2	UL 94 IEC 60695-11-10, -20
0.12 In (3.0 Mm)	V-2	V-2	UL 94 IEC 60695-11-10, -20
0.030 In (0.75 Mm)	V-2	V-2	IEC 60695-11-10, -20
Glow Wire Flammability Index			IEC 60695-2-12
0.030 In (0.75 Mm)	1760 °F	960 °C	
0.06 In (1.5 Mm)	1760 °F	960 °C	
0.12 In (3.0 Mm)	1760 °F	960 °C	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.030 In (0.75 Mm)	1290 °F	700 °C	
0.06 In (1.5 Mm)	1560 °F	850 °C	
0.12 In (3.0 Mm)	1470 °F	800 °C	
Oxygen Index	26 %	26 %	ISO 4589-2

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	158 to 176 °F	70 to 80 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Processing (Melt) Temp	356 to 428 °F	180 to 220 °C
Mold Temperature	104 to 176 °F	40 to 80 °C
Back Pressure	725 to 1450 psi	5.00 to 10.0 MPa
Screw Speed	< 709 in/min	< 18 m/min

Notes

These are typical property values not to be construed as specification limits.