

Technical Data Sheet

Polyflam RPP 2000 E NATUR K2043

Polypropylene Homopolymer

LyondellBasell Industries

Engineering Plastics

Product Description

Flame-retardant PP-Compound; halogenfree according to DIN VDE 0472 part 815; for extrusion, CU-stabilized

General

Features	- Flame Retardant - Halogen Free	- High Viscosity - Homopolymer
Processing Method	Extrusion	
Resin ID (ISO 1043)	PP FR(40)	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.910 g/cm ³	0.910 g/cm ³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (230°C/2.16 Kg)	3.0 cm ³ /10min	3.0 cm ³ /10min	ISO 1133

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	218000 psi	1500 MPa	ISO 527-1/1A/1
Tensile Stress (Yield)	5080 psi	35.0 MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	10 %	10 %	ISO 527-2/1A/50
Flexural Modulus ¹	218000 psi	1500 MPa	ISO 178
Flexural Stress ¹			ISO 178
7.0% Strain	5800 psi	40.0 MPa	
3.5% Strain	4790 psi	33.0 MPa	

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	1.4 ft·lb/in ²	3.0 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)	14 ft·lb/in ²	30 kJ/m ²	
73°F (23°C)	No Break	No Break	

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	196 °F	91.0 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	142 °F	61.0 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	189 °F	87.0 °C	ISO 306/B50
--	306 °F	152 °C	ISO 306/A50

Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Comparative Tracking Index	600 V	600 V	IEC 60112

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating			
0.031 In (0.8 Mm)	V-2	V-2	UL 94
0.06 In (1.6 Mm)	V-2	V-2	UL 94 IEC 60695-11-10, -20
0.13 In (3.2 Mm)	V-2	V-2	UL 94 IEC 60695-11-10, -20
0.03 In (0.8 Mm)	V-2	V-2	IEC 60695-11-10, -20

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Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
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)	1380 °F	750 °C	
0.06 In (1.5 Mm)	1380 °F	750 °C	
0.12 In (3.0 Mm)	1380 °F	750 °C	

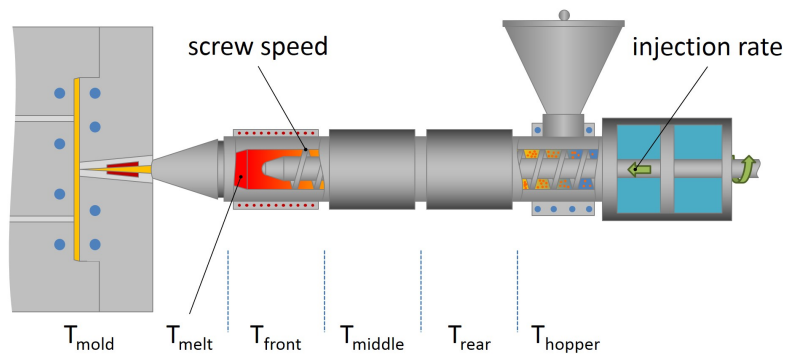
Additional Information

- 1.) Not for use in food contact applications
- 2.) Not for use in medical or pharmaceutical applications

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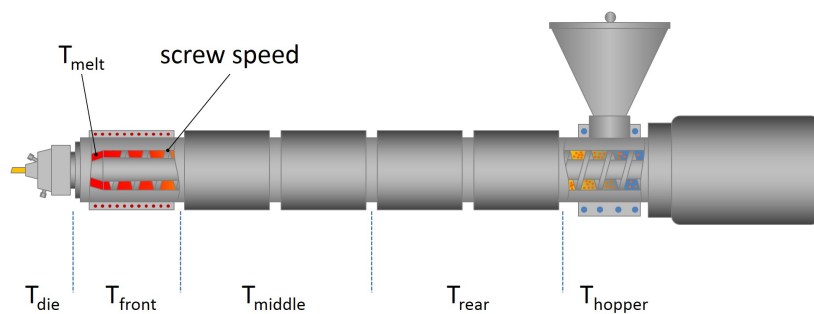


Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	158 to 176 °F	70 to 80 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr

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Extrusion	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
Suggested Max Moisture	< 0.10 %	< 0.10 %
Melt Temperature	338 to 410 °F	170 to 210 °C