

Technical Data Sheet



Polyflam RPP 2000 E S CS1 GRY 64540

Polypropylene Homopolymer
LyondellBasell Industries
Engineering Plastics

Product Description

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

General

Material Status	• Commercial: Active		
Availability	• Europe		
Features	• Flame Retardant • Halogen Free	• High Viscosity • Homopolymer	
Processing Method	• Extrusion		
Resin ID (ISO 1043)	• PP FR(53)		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.940 g/cm ³	0.940 g/cm ³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (230°C/2.16 kg)	2.0 cm ³ /10min	2.0 cm ³ /10min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	203000 psi	1400 MPa	ISO 527-1/1A/1
Tensile Stress (Yield)	4350 psi	30.0 MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	10 %	10 %	ISO 527-2/1A/50
Flexural Modulus ¹	189000 psi	1300 MPa	ISO 178
Flexural Stress ¹			ISO 178
7.0% Strain	5800 psi	40.0 MPa	
3.5% Strain	4350 psi	30.0 MPa	
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	5.7 ft-lb/in ²	12 kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength 73°F (23°C)	No Break	No Break	ISO 179/1eU
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 psi (0.45 MPa), Unannealed	194 °F	90.0 °C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	113 °F	45.0 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	176 °F	80.0 °C	ISO 306/B50
--	302 °F	150 °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
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	

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Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
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	
Oxygen Index	30 %	30 %	ISO 4589-2

Additional Information

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

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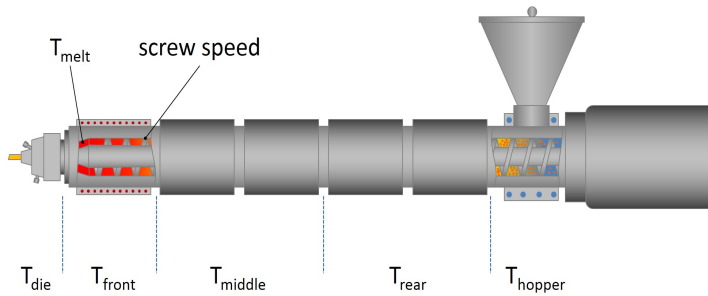
Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	158 to 176 °F	70 to 80 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr

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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

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Notes

¹ 0.079 in/min (2.0 mm/min)

Notes

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

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Product Storage and Handling

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light
- Improper storage may bring damage to the packaging and can negatively affects on the quality of this product
- Keep material completely dry for good processing

Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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