Technical Data Sheet

Polyflam RPP 2000 E S CS1

Polypropylene Homopolymer
LyondellBasell Industries
Engineering Plastics

Product Description
Flame retardant polypropylene homopolymer compound, UV stabilized for outdoor applications, free of halogens

General			
Additive	• UV Stabilizer		
Features	• Flame Retardant	• Halogen Free	• Homopolymer
Uses	• Outdoor Applications	• Seats	
Processing Method	• Extrusion		
Resin ID (ISO 1043)	• PP FR(40)		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.940 g/cm³	0.940 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (190°c/10.0 Kg)	10 cm³/10min	10 cm³/10min	ISO 1133
Water Absorption			ISO 62
Equilibrium, 73°f (23°c), 50% Rh	0.16 %	0.16 %	
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus	218000 psi	1500 MPa	ISO 527-1/1A/1
Tensile Stress (Yield)	4640 psi	32.0 MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	9.0 %	9.0 %	ISO 527-2/1A/50
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Charpy Notched Impact Strength (73°f (23°c))	3.8 ft·lb/in²	8.0 kJ/m²	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
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	189 °F	87.0 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	111 °F	44.0 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	180 °F	82.0 °C	ISO 306/B50
--	300 °F	149 °C	ISO 306/A120
Ball Pressure Test (284°f (140°c))	Pass	Pass	IEC 60695-10-2
Electrical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Surface Resistivity	> 1.0E+15 ohms	> 1.0E+15 ohms	IEC 60093
Volume Resistivity	> 1.0E+13 ohms·m	> 1.0E+13 ohms·m	IEC 62631-3-1
Comparative Tracking Index	600 V	600 V	IEC 60112

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Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flammability Classification			IEC 60695-11-10, -20
0.03 In (0.8 Mm)	V-2	V-2	
0.06 In (1.6 Mm)	V-2	V-2	
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	
Oxygen Index	29 %	29 %	ISO 4589-2

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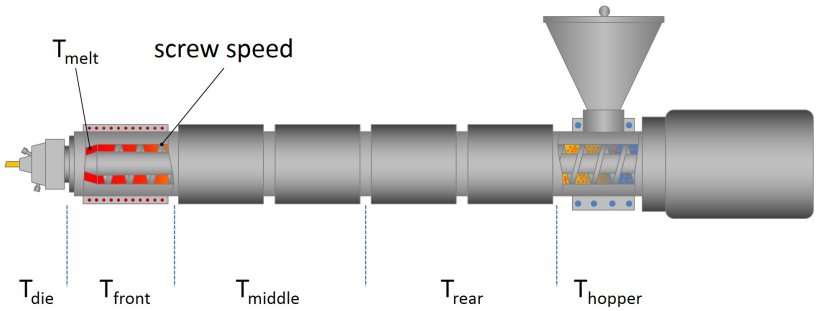

Extrusion	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	158 to 176 °F	70 to 80 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Suggested Max Moisture	< 0.10 %	< 0.10 %
Melt Temperature	338 to 410 °F	170 to 210 °C

Notes

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