Technical Data Sheet

Polyflam RPP 2120 G

Polypropylene Homopolymer
LyondellBasell Industries
Engineering Plastics

Product Description	
20% mineral filled flame-retardant PP-Homopolymer; high gloss; halogen free	

General		
Filler / Reinforcement	• Mineral, 20% Filler by Weight	
Features	• Flame Retardant • Good Color Stability	• Halogen Free • High Strength
Processing Method	• Injection Molding	
Resin ID (ISO 1043)	• PP MD20 FR(40)	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.06 g/cm³	1.06 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (230°c/2.16 Kg)	25 cm³/10min	25 cm³/10min	ISO 1133
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus	406000 psi	2800 MPa	ISO 527-1/1A/1
Tensile Stress (Yield)	4640 psi	32.0 MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	5.0 %	5.0 %	ISO 527-2/1A/50
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°f (-30°c)	0.62 ft·lb/in²	1.3 kJ/m²	
73°f (23°c)	1.1 ft·lb/in²	2.4 kJ/m²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°f (-30°c)	7.6 ft·lb/in²	16 kJ/m²	
73°f (23°c)	25 ft·lb/in²	52 kJ/m²	
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	225 °F	107 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	154 °F	68.0 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	194 °F	90.0 °C	ISO 306/B50
--	302 °F	150 °C	ISO 306/A50
Ball Pressure Test (293°f (145°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
Flammability	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Burning Rate			
0.0787 In (2.00 Mm), Self-extinguishing	0.0 in/min	0.0 mm/min	FMVSS 302
0.0787 In (2.00 Mm), Self-extinguishing	0.0 in/min	0.0 mm/min	ISO 3795
Flame Rating			UL 94 IEC 60695-11-10, -20
0.030 In (0.75 Mm)	V-2	V-2	
0.06 In (1.5 Mm)	V-2	V-2	
0.12 In (3.0 Mm)	V-2	V-2	

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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	
Oxygen Index	27 %	27 %	ISO 4589-2

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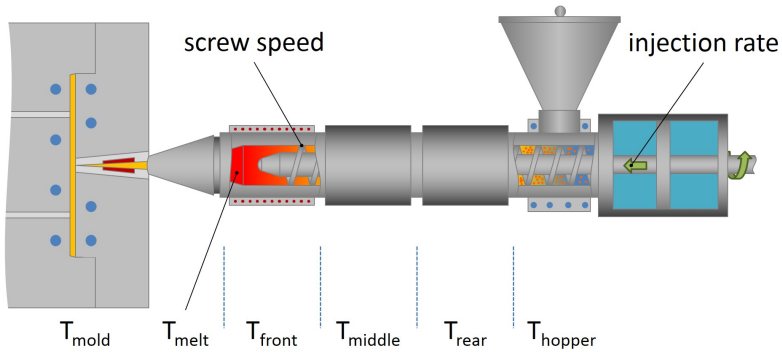

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	158 to 176 °F	70 to 80 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Rear Temperature	356 °F	180 °C
Middle Temperature	392 °F	200 °C
Front Temperature	410 °F	210 °C
Nozzle Temperature	428 °F	220 °C
Processing (Melt) Temp	356 to 410 °F	180 to 210 °C
Mold Temperature	104 to 176 °F	40 to 80 °C
Injection Pressure	11600 to 17400 psi	80.0 to 120 MPa
Injection Rate	Slow-Moderate	Slow-Moderate
Holding Pressure	5800 to 13100 psi	40.0 to 90.0 MPa
Back Pressure	725 to 1450 psi	5.00 to 10.0 MPa
Cushion	< 0.197 in	< 5.00 mm
Screw Speed	< 709 in/min	< 18 m/min

Notes

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