Technical Data Sheet

Polyflam RPP 60335 CS1 5V

Polypropylene Homopolymer
LyondellBasell Industries
Engineering Plastics

Product Description		
25% mineral filled flame-retardant PP-Homopolymer; without PBDE		
General		
Filler / Reinforcement	• Mineral, 25% Filler by Weight	
Features	• Copper Contact Stabilized • Flame Retardant	• Good Strength • Homopolymer
UL File Number	• E86615	
Processing Method	• Injection Molding	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.41 g/cm³	1.41 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (230°c/2.16 Kg)	1.5 cm³/10min	1.5 cm³/10min	ISO 1133
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus	334000 psi	2300 MPa	ISO 527-1/1A/1
Tensile Stress (Yield)	3480 psi	24.0 MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	2.5 %	2.5 %	ISO 527-2/1A/50
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°f (-30°c)	4.8 ft·lb/in²	10 kJ/m²	
73°f (23°c)	14 ft·lb/in²	30 kJ/m²	
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	214 °F	101 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	136 °F	58.0 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	185 °F	85.0 °C	ISO 306/B50
--	302 °F	150 °C	ISO 306/A50
Ball Pressure Test (266°f (130°c))	Pass	Pass	IEC 60695-10-2
RTI Elec			UL 746B
0.030 In (0.75 Mm)	149 °F	65.0 °C	
0.06 In (1.5 Mm)	149 °F	65.0 °C	
0.08 In (2.0 Mm)	149 °F	65.0 °C	
0.12 In (3.0 Mm)	149 °F	65.0 °C	
RTI Imp			UL 746B
0.030 In (0.75 Mm)	149 °F	65.0 °C	
0.06 In (1.5 Mm)	149 °F	65.0 °C	
0.08 In (2.0 Mm)	149 °F	65.0 °C	
0.12 In (3.0 Mm)	149 °F	65.0 °C	
RTI Str			UL 746B
0.030 In (0.75 Mm)	149 °F	65.0 °C	
0.06 In (1.5 Mm)	149 °F	65.0 °C	
0.08 In (2.0 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**
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

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Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Comparative Tracking Index	600 V	600 V	IEC 60112
High Amp Arc Ignition (HAI)			UL 746A
0.030 In (0.75 Mm)	PLC 0	PLC 0	
0.06 In (1.5 Mm)	PLC 0	PLC 0	
0.08 In (2.0 Mm)	PLC 0	PLC 0	
0.12 In (3.0 Mm)	PLC 1	PLC 1	
Hot-wire Ignition (HWI)			UL 746A
0.030 In (0.75 Mm)	PLC 4	PLC 4	
0.06 In (1.5 Mm)	PLC 2	PLC 2	
0.08 In (2.0 Mm)	PLC 2	PLC 2	
0.12 In (3.0 Mm)	PLC 1	PLC 1	
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-0	V-0	
0.06 In (1.5 Mm)	V-0	V-0	
0.12 In (3.0 Mm)	• V-0 • 5VB	• V-0 • 5VB	
0.08 In (2.0 Mm)	5VB	5VB	
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)	1470 °F	800 °C	
0.06 In (1.5 Mm)	1470 °F	800 °C	
0.12 In (3.0 Mm)	1470 °F	800 °C	
Oxygen Index	35 %	35 %	ISO 4589-2

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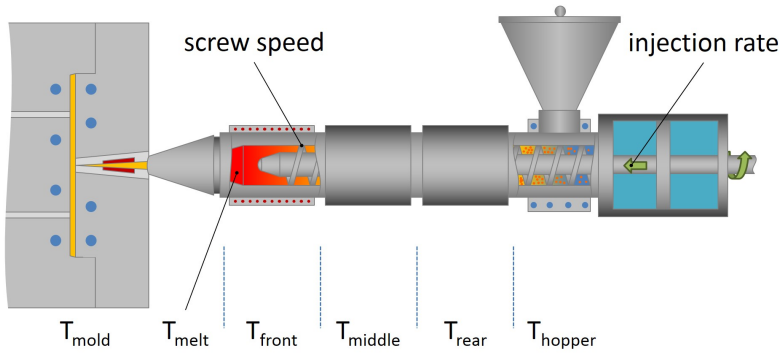

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	158 to 176 °F	70 to 80 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Rear Temperature	356 °F	180 °C
Middle Temperature	392 °F	200 °C
Front Temperature	410 °F	210 °C
Nozzle Temperature	428 °F	220 °C
Processing (Melt) Temp	356 to 410 °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

Injection Notes

Mould surface contacting melt should
be of non-corrosive steel (content of chrome > 12%)

Notes

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