Technical Data Sheet

Polyflam RPP 4000 E NAT

Polypropylene, Homopolymer

Product Description

Unfilled flame-retardant PP-Homopolymer, Extrusion grade, halogenfree

Regulatory Status

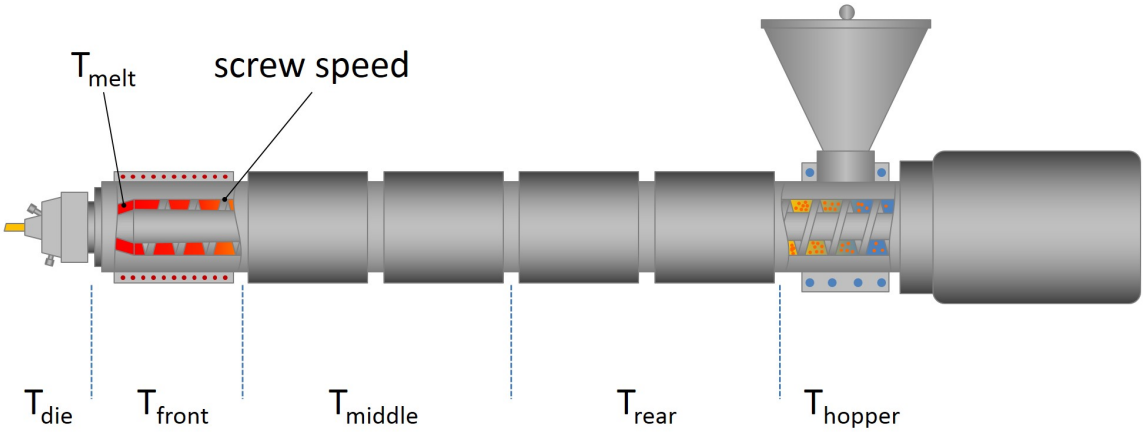
For regulatory compliance information, see *Polyflam* RPP 4000 E NAT Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status	Discontinued
Availability	Africa-Middle East; Asia-Pacific; Europe; Latin America; North America
Processing Method	Extrusion; Injection Molding
Attribute	Good Processability; Halogen Free; Homopolymer; UL Listed under File Numbers E86615 / E132739 / E31765
Additive	Flame Retardant
Resin ID	PP FR(40)

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (230 °C/2.16 kg)	2.0	cm³/10 min	ISO 1133
Density, (Method A)	1.06	g/cm³	ISO 1183
Mechanical			
Tensile Modulus, (1 mm/min, Type 1A)	2600	MPa	ISO 527-1
Tensile Strain at Yield, (Type 1A, 50 mm/min)	4.1	%	ISO 527-2
Nominal Tensile Strain at Break, (50 mm/min, Type 1A)	26	%	ISO 527-2
Flexural Modulus, (2.0 mm/min)	2300	MPa	ISO 178
Flexural Stress			
(2.0 mm/min, 3.5%)	37.1	MPa	ISO 178
(2.0 mm/min, 5.1%)	39.0	MPa	ISO 178
Tensile Stress at Yield, (Type 1A, 50 mm/min)	26.8	MPa	ISO 527-2
Tensile Stress at Break, (Type 1A, 50 mm/min)	16.6	MPa	ISO 527-2
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	2.5	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	1.5	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	40	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	15	kJ/m²	ISO 179
Thermal			
Vicat Softening Temperature			
(A (10N), 50 °C/h)	154	°C	ISO 306
(B (50N), 50 °C/h)	97.0	°C	ISO 306

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Deflection Temperature Under Load Unannealed (0.45 MPa)	108	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	58.0	°C	ISO 75-2/A
Electrical			
Comparative Tracking Index (CTI)	600	V	IEC 60112
Flammable			
Glow Wire Flammability Index			
(0.75 mm)	960	°C	IEC 60695-2-12
(1.5 mm)	960	°C	IEC 60695-2-12
(3.0 mm)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			
(0.75 mm)	775	°C	IEC 60695-2-13
(1.5 mm)	775	°C	IEC 60695-2-13
(3.0 mm)	775	°C	IEC 60695-2-13
UL Information			
Flammability Classification			
(0.8 mm)	V-0		IEC 60695-11-10, -20
(1.6 mm)	V-0		IEC 60695-11-10, -20
(3.0 mm)	5VA		IEC 60695-11-10, -20
(3.0 mm)	5V		IEC 60695-11-10, -20
(3.2 mm)	V-0		IEC 60695-11-10, -20



Extrusion Parameters	Nominal Value	Units
Drying Temperature	70 to 80	°C
Drying Time	2.0 to 4.0	hr
Melt Temperature	170 to 210	°C
Suggested Max Moisture	<0.10	%

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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.

Company Information

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

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