Technical Data Sheet

Polyflam RPP 4115 MD BLK

Polypropylene, Homopolymer

Product Description

***Polyflam* RPP 4115 MD BLK** is a 15 % talcum filled, non-halogenated flame-retardant PP-Homopolymer. This grade is in a developmental status and therefore changes in the given properties might occur until the commercialization.

Regulatory Status

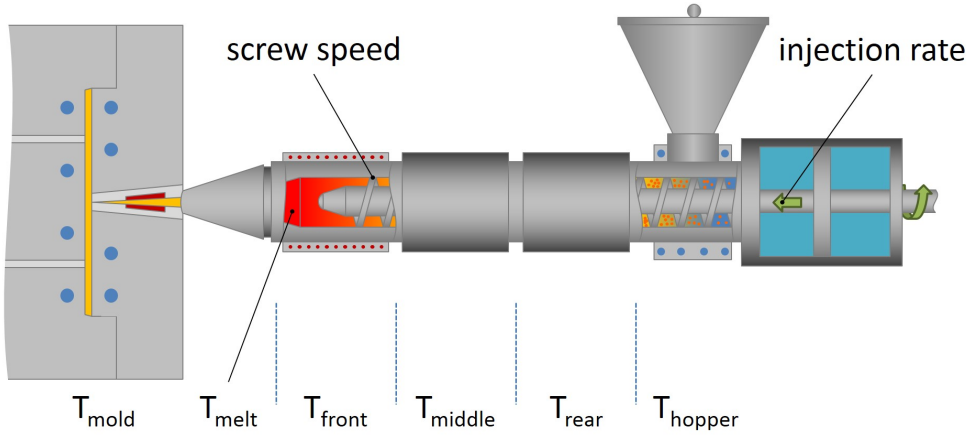
For regulatory compliance information, see *Polyflam* RPP 4115 MD BLK Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status	Commercial: Active
Availability	Europe
Processing Method	Injection Molding
Attribute	Good Processability; Halogen Free; Homopolymer
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)	5.2	cm³/10 min	ISO 1133
Density, (Method A)	1.18	g/cm³	ISO 1183
Mechanical			
Tensile Modulus, (1 mm/min, Type 1A)	2550	MPa	ISO 527-1
Nominal Tensile Strain at Break, (50 mm/min, Type 1A)	8	%	ISO 527-2
Tensile Stress at Break, (Type 1A, 50 mm/min)	20	MPa	ISO 527-2
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	1.6	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	1.6	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	18	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	8.0	kJ/m²	ISO 179
Thermal			
Vicat Softening Temperature			
(A (10N), 50 °C/h)	150	°C	ISO 306
(B (50N), 50 °C/h)	84	°C	ISO 306
Deflection Temperature Under Load			
(0.45 MPa, Unannealed)	114	°C	ISO 75-2/B
(1.80 MPa, Unannealed)	73	°C	ISO 75-2/A
Electrical			
Comparative Tracking Index (CTI)	600	V	IEC 60112
Flammable			

Manufacturer website: https://www.lyondellbasell.com/en/

Glow Wire Flammability Index, (3.0 mm)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			
(1.5 mm)	850	°C	IEC 60695-2-13
(3.0 mm)	875	°C	IEC 60695-2-13
UL Information			
Flammability Classification			
(1.5 mm)	V-0		IEC 60695-11-10, -20
(3.0 mm)	V-0		IEC 60695-11-10, -20
(3.2 mm)	V-0		IEC 60695-11-10, -20



Injection Parameters	Nominal Value	Units
Drying Temperature	70 to 80	°C
Drying Time	2.0 to 4.0	hr
Processing (Melt) Temp	180 to 220	°C
Mold Temperature	40 to 80	°C
Screw Speed	<300	mm/sec
Holding Pressure	40.0 to 90.0	MPa
Back Pressure	5.00 to 10.0	MPa
Injection Pressure	80.0 to 120	MPa
Injection Rate	Slow-Moderate	

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Notes

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

Processing notes

Melt contacting surfaces should be made of a high quality, corrosive resistant steel. Positive experiences have been made with steel qualities containing > 12% chromium.

Avoid processing at very barrel high temperatures or above the recommended melt temperature range as this can increase risk of deposit onto the tool surfaces. Avoid long residence times. At start and end of production, it is recommended to purge clean with non-flame retardant polymer or a polyolefin.

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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