

Technical Data Sheet



Polyflam RPP 1221

Polypropylene Copolymer
LyondellBasell Industries
Engineering Plastics

Product Description

Polyflam® RPP 1221 is a Low-Blooming General Purpose Copolymer Polypropylene Flame-Retardant material with a UL V-2 flammability rating and 115° C temperature index @ 0.030 in.

General

Material Status	• Commercial: Active
Availability	• North America
Features	• Flame Retardant
UL File NumberUSA	• E51193
Processing Method	• Injection Molding

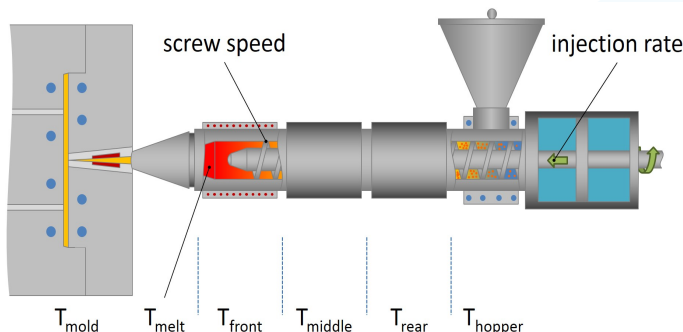
Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	0.952	0.950 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR)	20 g/10 min	20 g/10 min	ASTM D1238
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Yield)	3190 psi	22.0 MPa	ASTM D638
Tensile Elongation (Break)	100 %	100 %	ASTM D638
Flexural Modulus	144000 psi	990 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact	3.4 ft-lb/in	180 J/m	ASTM D256
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	176 °F	80.0 °C	
264 psi (1.8 MPa), Unannealed	122 °F	50.0 °C	
RTI Elec (0.030 in (0.76 mm))	239 °F	115 °C	UL 746B
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating			UL 94
0.06 in (1.5 mm)	V-2	V-2	
0.12 in (3.0 mm)	V-2	V-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
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 11600 psi	40.0 to 80.0 MPa
Back Pressure	725 to 1450 psi	5.00 to 10.0 MPa

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.

Product Storage and Handling

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light
- Improper storage may bring damage to the packaging and can negatively affects on the quality of this product
- Keep material completely dry for good processing

Company Information

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

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