Technical Data Sheet

Polyflam RPP 4220 CS1

Polypropylene Homopolymer
LyondellBasell Industries
Engineering Plastics

Product Description
20% glass fibre reinforced flame retardant polypropylene homopolymer compound free of halogens

General			
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight		
Features	• Flame Retardant	• Halogen Free	• Homopolymer
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PP GF20 FR(51)		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.21 g/cm³	1.21 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (230°c/2.16 Kg)	9.0 cm³/10min	9.0 cm³/10min	ISO 1133
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus	812000 psi	5600 MPa	ISO 527-1/1A/1
Tensile Stress (Break)	8700 psi	60.0 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	3.3 %	3.3 %	ISO 527-2/1A/5
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°f (-30°c)	1.7 ft·lb/in²	3.5 kJ/m²	
73°f (23°c)	2.4 ft·lb/in²	5.0 kJ/m²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°f (-30°c)	8.3 ft·lb/in²	18 kJ/m²	
73°f (23°c)	11 ft·lb/in²	24 kJ/m²	
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
Electric Strength [1]			IEC 60243-1
73°f (23°c), 0.0394 In (1.00 Mm), In Oil	1000 V/mil	40 kV/mm	
Flammability	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Flammability Classification			IEC 60695-11-10, -20
0.06 In (1.6 Mm)	V-0	V-0	
0.13 In (3.2 Mm)	V-0	V-0	
Glow Wire Flammability Index			IEC 60695-2-12
0.06 In (1.5 Mm)	1760 °F	960 °C	
0.12 In (3.0 Mm)	1760 °F	960 °C	

Notes

[1] 2000 V/sec

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