Technical Data Sheet

POLYFLAM® RIPP 5000 CC

Polypropylene Copolymer
Engineering Plastics

Product Description
Unfilled flame-retardant PP-Copolymer for extrusion and cable coating with continius use temperature -40°C to 125°C

General		
Features	• Copolymer	• Flame Retardant
Processing Method	• Extrusion Coating	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.15 g/cm³	1.15 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (230°C/2.16 kg)	3.50 cm³/10min	3.50 cm³/10min	ISO 1133
Molding Shrinkage	0.90 to 1.6 %	0.90 to 1.6 %	ISO 294-4
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus	72500 psi	500 MPa	ISO 527-2/1A/1
Tensile Stress			ISO 527-2/1A/50
Yield	1600 psi	11.0 MPa	
Break	2180 psi	15.0 MPa	
Tensile Strain (Yield)	27 %	27 %	ISO 527-2/1A/50
Nominal Tensile Strain at Break	400 %	400 %	ISO 527-2/1A/50
Flexural Modulus [1]	94300 psi	650 MPa	ISO 178
Flexural Stress [1]			ISO 178
6.6% Strain	1890 psi	13.0 MPa	
3.5% Strain	1740 psi	12.0 MPa	
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	1.9 ft·lb/in²	4.0 kJ/m²	
73°F (23°C)	26 ft·lb/in²	55 kJ/m²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	No Break	No Break	
73°F (23°C)	No Break	No Break	
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Shore Hardness (Shore D)	49	49	DIN 53505
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Heat Deflection Temperature			
66 psi (0.45 MPa), Unannealed	131 °F	55.0 °C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	113 °F	45.0 °C	ISO 75-2/Af
Vicat Softening Temperature	181 °F	83.0 °C	ISO 306/A50
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
Comparative Tracking Index	600 V	600 V	IEC 60112
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	ISO 3795
0.0787 in (2.00 mm), Self-Extinguishing	0.0 in/min	0.0 mm/min	FMVSS 302

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Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flammability Classification			IEC 60695-11-10, -20
0.03 in (0.8 mm)	V-2	V-2	
0.06 in (1.6 mm)	V-2	V-2	
0.13 in (3.2 mm)	V-2	V-2	
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)	1250 °F	675 °C	
0.06 in (1.5 mm)	1250 °F	675 °C	
0.12 in (3.0 mm)	1250 °F	675 °C	
Oxygen Index	27 %	27 %	ISO 4589-2

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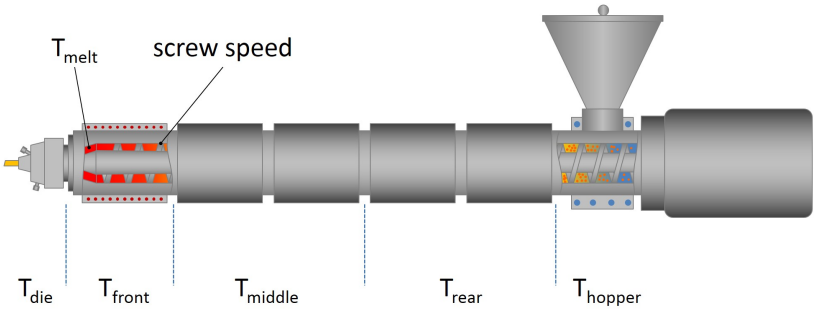

Extrusion	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	158 to 176 °F	70 to 80 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Melt Temperature	356 to 410 °F	180 to 210 °C