

Technical Data Sheet
**POLYFLAM® RIPP 5000
CC**

Polypropylene Copolymer
Engineering Plastics



Product Description

Unfilled flame-retardant PP-Copolymer for extrusion and cable coating with continuous 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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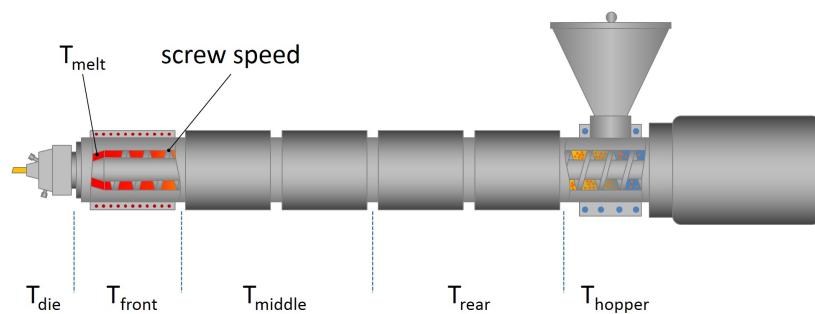


Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flammability Classification			IEC 60695-11-10, -20
0.03 in (0.8 mm)	V-2	V-2	
0.06 in (1.6 mm)	V-2	V-2	
0.13 in (3.2 mm)	V-2	V-2	
Glow Wire Flammability Index			IEC 60695-2-12
0.030 in (0.75 mm)	1760 °F	960 °C	
0.06 in (1.5 mm)	1760 °F	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