Technical Data Sheet

Polyflam RIPP 5000 CC NAT

Polypropylene Copolymer

Product Description

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

Processing Method	Extrusion Coating
Attribute	Copolymer
Additive	Flame Retardant

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (230 °C/2.16 kg)	3.5	cm³/10 min	ISO 1133
Density, (Method A)	1.15	g/cm³	ISO 1183
Mechanical			
Tensile Stress at Yield, (Type 1A, 50 mm/min)	11.0	MPa	ISO 527-2
Nominal Tensile Strain at Break, (50 mm/min, Type 1A)	400	%	ISO 527-2
Flexural Modulus, (2.0 mm/min)	650	MPa	ISO 178
Tensile Strain at Yield, (Type 1A, 50 mm/min)	27	%	ISO 527-2
Tensile Stress at Break, (Type 1A, 50 mm/min)	15.0	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	500	MPa	ISO 527-1
Flexural Stress			
(2.0 mm/min, 3.5%)	12.0	MPa	ISO 178
(2.0 mm/min, 6.6%)	13.0	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	55	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	4.0	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	No Break		ISO 179
(-30 °C, Type 1, Edgewise)	No Break		ISO 179
Hardness			
Shore Hardness, (Shore D, DIN 53505)	49		ISO 868
Thermal			
Vicat Softening Temperature, (A (10N), 50 °C/h)	83.0	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa)	55	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	45.0	°C	ISO 75-2/A
Electrical			

Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI)	600	V	IEC 60112
Surface Resistivity	>1.0E+15	ohm	IEC 60093
Flammable			
Burning Rate			
(2.00 mm, Self-Extinguishing)	0.0	mm/min	FMVSS 302
(2.00 mm, Self-Extinguishing)	0.0	mm/min	ISO 3795
Glow Wire Flammability Index			
(0.75 mm)	960	°C	IEC 60695-2-12
(1.5 mm)	960	°C	IEC 60695-2-12
(3.0 mm)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			
(0.75 mm)	675	°C	IEC 60695-2-13
(1.5 mm)	675	°C	IEC 60695-2-13
(3.0 mm)	675	°C	IEC 60695-2-13
Oxygen Index	27	%	ISO 4589-2
UL Information			
Flammability Classification			
(0.8 mm)	V-2		IEC 60695-11-10, -20
(1.6 mm)	V-2		IEC 60695-11-10, -20
(3.2 mm)	V-2		IEC 60695-11-10, -20

Extrusion Parameters	Nominal Value	Units
Drying Time	2.0 to 4.0	hr
Melt Temperature	180 to 210	°C
Drying Temperature	70 to 80	°C