

Technical Data Sheet

Polyflam RIPP 374 NDCS1K GRY64540

Polypropylene Copolymer

Product Description

20% talc filled flame-retardant PP-Copolymer; without PBDE

Processing Method	Injection Molding
Attribute	Copolymer; Copper Contact Stabilized
Additive	Flame Retardant
Filler/Reinforcement	Talc, 20%
Resin ID	PP TD20 FR(17)

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (230 °C/2.16 kg)	9.0	cm ³ /10 min	ISO 1133
Density, (Method A)	1.37	g/cm ³	ISO 1183
Mechanical			
Tensile Stress at Yield, (Type 1A, 50 mm/min)	17.0	MPa	ISO 527-2
Tensile Strain at Yield, (Type 1A, 50 mm/min)	1.7	%	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	2300	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	6.0	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	2.4	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	60	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise)	19	kJ/m ²	ISO 179
Hardness			
Ball Pressure Test, (100 °C)	Pass		IEC 60695-10-2
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	57.0	°C	ISO 306
(A (10N), 50 °C/h)	133	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	101	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	63.0	°C	ISO 75-2/A
RTI Elec			
(1.5 mm)	65.0	°C	UL 746B
(3.0 mm)	65.0	°C	UL 746B

RTI Imp			
(1.5 mm)	65.0	°C	UL 746B
(3.0 mm)	65.0	°C	UL 746B
RTI Str			
(1.5 mm)	65.0	°C	UL 746B
(3.0 mm)	65.0	°C	UL 746B
Electrical			
Volume Resistivity	1000000000 0000	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	ISO 3795
(2.00 mm, Self-Extinguishing)	0.0	mm/min	FMVSS 302
Glow Wire Flammability Index			
(1.5 mm)	960	°C	IEC 60695-2-12
(3.0 mm)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			
(1.5 mm)	750	°C	IEC 60695-2-13
(3.0 mm)	750	°C	IEC 60695-2-13
Oxygen Index	27	%	ISO 4589-2
UL Information			
Flame Rating			
(1.5 mm)	V-0		UL 94
(3.0 mm)	V-0		UL 94
(0.8 mm)	V-0		UL 94
Flammability Classification			
(0.8 mm)	V-0		IEC 60695-11-10, -20
(1.5 mm)	V-0		IEC 60695-11-10, -20
(3.0 mm)	V-0		IEC 60695-11-10, -20
UL File Number	E86615		

Injection Parameters		Nominal Value	Units
Drying Time		2.0 to 4.0	hr
Drying Temperature		70 to 80	°C
Nozzle Temperature		220	°C
Screw Speed		<300	mm/sec
Processing (Melt) Temp		180 to 210	°C
Front Temperature		210	°C
Holding Pressure		40.0 to 90.0	MPa
Middle Temperature		200	°C
Rear Temperature		180	°C
Injection Rate		Slow-Moderate	
Back Pressure		5.00 to 10.0	MPa
Mold Temperature		40 to 80	°C
Injection Pressure		80.0 to 120	MPa
Cushion		<5.00	mm