

Technical Data Sheet

**Polyflam RPP 374 ND CS1 GRY64540**



Polypropylene, Homopolymer

**Product Description**

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

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

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Melt Volume Flow Rate, (230 °C/2.16 kg)	19	cm <sup>3</sup> /10 min	ISO 1133
Density, (Method A)	1.35	g/cm <sup>3</sup>	ISO 1183
<b>Mechanical</b>			
Tensile Stress at Yield, (Type 1A, 50 mm/min)	21.0	MPa	ISO 527-2
Tensile Strain at Yield, (Type 1A, 50 mm/min)	2.5	%	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	3000	MPa	ISO 527-1
<b>Impact</b>			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	2.5	kJ/m <sup>2</sup>	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	2.3	kJ/m <sup>2</sup>	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	20	kJ/m <sup>2</sup>	ISO 179
(-30 °C, Type 1, Edgewise)	8.5	kJ/m <sup>2</sup>	ISO 179
<b>Hardness</b>			
Ball Pressure Test, (125 °C)	Pass		IEC 60695-10-2
<b>Thermal</b>			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	82.0	°C	ISO 306
(A (10N), 50 °C/h)	145	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	118	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	60.0	°C	ISO 75-2/A
RTI Elec			
(1.5 mm)	105	°C	UL 746B
(3.0 mm)	105	°C	UL 746B

<b>RTI Imp</b>			
(1.5 mm)	105	°C	UL 746B
(3.0 mm)	105	°C	UL 746B
<b>RTI Str</b>			
(1.5 mm)	105	°C	UL 746B
(3.0 mm)	105	°C	UL 746B
<b>Electrical</b>			
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
<b>Flammable</b>			
<b>Burning Rate</b>			
(2.00 mm, Self-Extinguishing)	0.0	mm/min	FMVSS 302
(2.00 mm, Self-Extinguishing)	0.0	mm/min	ISO 3795
<b>Glow Wire Flammability Index</b>			
(1.5 mm)	960	°C	IEC 60695-2-12
(3.0 mm)	960	°C	IEC 60695-2-12
<b>Glow Wire Ignition Temperature</b>			
(1.5 mm)	700	°C	IEC 60695-2-13
(3.0 mm)	700	°C	IEC 60695-2-13
Oxygen Index	26	%	ISO 4589-2
<b>Additional Information</b>			
Water Absorption 23C/50RH	0.16	%	ISO 62
<b>UL Information</b>			
<b>Flame Rating</b>			
(1.5 mm)	V-0		UL 94
(3.0 mm)	V-0		UL 94
<b>Flammability Classification</b>			
(1.5 mm)	V-0		IEC 60695-11-10, -20
(3.0 mm)	V-0		IEC 60695-11-10, -20
UL File Number	E86615		

<b>Injection Parameters</b>	<b>Nominal Value</b>	<b>Units</b>
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 220	°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