

TDS Polyflam[™] RPP 374 ND CS1 Polypropylene Homopolymer

General			
Material Status	Commercial: Active		
Availability	Africa & Middle East Latin America	Asia Pacific North America	Europe
Filler / Reinforcement	Talc, 20% Filler by Weight		
Features	Copper Contact Stabilized	Flame Retardant	Homopolymer
UL File Number	E86615		
Processing Method	Injection Molding		
Resin ID (ISO 1043)	PP TD20 FR(17)		

Physical	Nominal Value (English) No	minal Value (SI)	Test Method
Density	1.35 g/cm ³	1.35 g/cm ³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (230°C/2.16 kg)	1.16 in ³ /10min	19.0 cm³/10min	ISO 1133
Water Absorption (73°F (23°C), 24 hr)	0.16%	0.16%	ISO 62

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	435000 psi	3000 MPa	ISO 527-2/1A/1
Tensile Stress (Yield)	3050 psi	21.0 MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	3.0 %	3.0 %	ISO 527-2/1A/50

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	1.1 ft·lb/in ²	2.3 kJ/m ²	
73°F (23°C)	1.2 ft·lb/in ²	2.5 kJ/m ²	

Page: 1 of 4

Copyright ©, 2017 A. Schulman

```
www.aschulman.com
Publish Date: 2017-06-15
```

The information and recommendations contained in this document are based upon data collected by A. Schulman and are believed to be reliable; however, because A. Schulman cannot anticipate or control the many different conditions under which this information and/or product may be used, no representation is made and no warranty is given of any kind, express or implied, for completeness, accuracy, availability, suitability, usefulness, commercial value, or non-violation of intellectual property rights of information, recommendations, and products and services directly or indirectly provided. A. Schulman assumes no responsibility for the results of the use of products and processes described herein and expressly disclaims the implied warranties of merchantability and fitness for a particular use.



TDS Polyflam[™] RPP 374 ND CS1 Polypropylene Homopolymer

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	4.0 ft·lb/in ²	8.5 kJ/m²	
73°F (23°C)	4.8 ft·lb/in ²	10 kJ/m ²	
			T
Inermal	Nominal Value (English)	Nominal Value (SI)	lest Method
Heat Deflection Temperature			
66 psi (0.45 MPa), Unannealed	244°F	118°C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	183°F	84.0°C	ISO 75-2/Af
Vicat Softening Temperature			
	293°F	145°C	ISO 306/A50
	180°F	82.0°C	ISO 306/B50
Ball Pressure Test (257°F (125°C))	Pass	Pass	IEC 60695-10-2
RTI Elec			UL 746
0.06 in (1.5 mm)	221°F	105°C	
0.12 in (3.0 mm)	221°F	105°C	
RTI Imp			UL 746
0.06 in (1.5 mm)	221°F	105°C	
0.12 in (3.0 mm)	221°F	105°C	
RTI Str			UL 746
0.06 in (1.5 mm)	221°F	105°C	
0.12 in (3.0 mm)	221°F	105°C	

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·cm	> 1.0E+13 ohms·ci	mIEC 60093
Comparative Tracking Index	600 V	600 V	IEC 60112

Page: 2 of 4

Copyright ©, 2017 A. Schulman

```
www.aschulman.com
Publish Date: 2017-06-15
```

The information and recommendations contained in this document are based upon data collected by A. Schulman and are believed to be reliable; however, because A. Schulman cannot anticipate or control the many different conditions under which this information and/or product may be used, no representation is made and no warranty is given of any kind, express or implied, for completeness, accuracy, availability, suitability, usefulness, commercial value, or non-violation of intellectual property rights of information, recommendations, and products and services directly or indirectly provided. A. Schulman assumes no responsibility for the results of the use of products and processes described herein and expressly disclaims the implied warranties of merchantability and fitness for a particular use.



TDS Polyflam[™] RPP 374 ND CS1 Polypropylene Homopolymer

Elemmobility	Nominal Value (English)	Nominal Value (SI)	Test Mathad
Burning Rate			ISO 3795
0.0591 in (1.50 mm), Self-Extinguishing	0.0 in/min	0.0 mm/min	
0.118 in (3.00 mm), Self-Extinguishing	0.0 in/min	0.0 mm/min	
Flame Rating			UL 94 IEC 60695-11-10, -20
0.06 in (1.5 mm)	V-0	V-0	
0.12 in (3.0 mm)	V-0	V-0	
Glow Wire Flammability Index			IEC 60695-2-12
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
0.06 in (1.5 mm)	1290°F	700°C	
0.12 in (3.0 mm)	1290°F	700°C	
Oxygen Index	26%	26%	ISO 4589-2



Injection	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

Page: 3 of 4

Copyright ©, 2017 A. Schulman

www.aschulman.com Publish Date: 2017-06-15

The information and recommendations contained in this document are based upon data collected by A. Schulman and are believed to be reliable; however, because A. Schulman cannot anticipate or control the many different conditions under which this information and/or product may be used, no representation is made and no warranty is given of any kind, express or implied, for completeness, accuracy, availability, suitability, usefulness, commercial value, or non-violation of intellectual property rights of information, recommendations, and products and services directly or indirectly provided. A. Schulman assumes no responsibility for the results of the use of products and processes described herein and expressly disclaims the implied warranties of merchantability and fitness for a particular use.



TDS Polyflam[™] 374 ND CS1 Polypropylene Copolymer

Injection	Nominal Value (English)	Nominal Value (SI)
Rear Temperature	356°F	180°C
Middle Temperature	392°F	200°C
Front Temperature	410°F	210°C
Nozzle Temperature	428°F	220°C
Processing (Melt) Temp	356 to 428°F	180 to 220°C
Mold Temperature	104 to 176°F	40 to 80°C
Injection Pressure	11600 to 17400 psi	80.0 to 120 MPa
Injection Rate	Slow-Moderate	Slow-Moderate
Holding Pressure	5800 to 13100 psi	40.0 to 90.0 MPa
Back Pressure	725 to 1450 psi	5.00 to 10.0 MPa
Cushion	< 0.197 in	< 5.00 mm
Screw Speed	< 709 in/min	< 18 m/mi

Page: 4 of 4 Copyright ©, 2017 A. Schulman

www.aschulman.com Publish Date: 2017-06-15

The information and recommendations contained in this document are based upon data collected by A. Schulman and are believed to be reliable; however, because A. Schulman cannot anticipate or control the many different conditions under which this information and/or product may be used, no representation is made and no warranty is given of any kind, express or implied, for completeness, accuracy, availability, usefulness, commercial value, or non-violation of intellectual property rights of information, recommendations, and products and services directly or indirectly provided. A. Schulman assumes no responsibility for the results of the use of products and processes described herein and expressly disclaims the implied warranties of merchantability and fitness for a particular use.