



TDS Polyflam™ RPP 490 CS1 K2054

Polypropylene Homopolymer

Product

Flame-retardant PP-homopolymer; halogen free

General

Material Status	Commercial: Active			
Availability	Africa & Middle East	Asia Pacific	Europe	
	Latin America	North America		
Features	Copper Contact Stabilized	Halogen Free		
	Flame Retardant	Homopolymer		
Processing Method	Injection Molding			
Resin ID (ISO 1043)	PP FR(51)			

Physical	Nominal Value (SI)	Test Method
Density	1.06 g/cm ³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (230°C/2.16 kg)	23.0 cm ³ /10min	ISO 1133

Mechanical	Nominal Value (SI)	Test Method
Tensile Modulus	2400 MPa	ISO 527-2/1A/1
Tensile Stress (Yield)	26.0 MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	3.0 %	ISO 527-2/1A/50

Impact	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength		ISO 179/1eA
-30°C	1.5 kJ/m ²	
23°C	2.0 kJ/m ²	
Charpy Unnotched Impact Strength		ISO 179/1eU
-30°C	10 kJ/m ²	
23°C	20 kJ/m ²	



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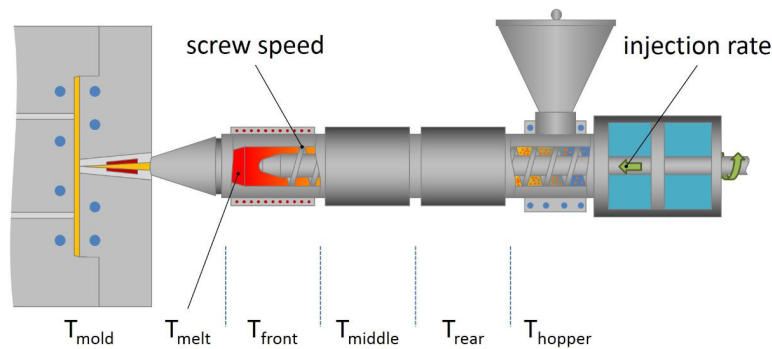
Thermal	Nominal Value (SI)	Test Method
Heat Deflection Temperature		
0.45 MPa, Unannealed	105°C	ISO 75-2/Bf
1.8 MPa, Unannealed	60.0°C	ISO 75-2/Af
Vicat Softening Temperature		
--	151°C	ISO 306/A120
--	98.0°C	ISO 306/B50
Ball Pressure Test (140°C)	Pass	IEC 60695-10-2
RTI Elec		UL 746
1.5 mm	65°C	
3.0 mm	65°C	
RTI Imp		UL 746
1.5 mm	65°C	
3.0 mm	65°C	
RTI Str		UL 746
1.5 mm	65°C	
3.0 mm	65°C	

Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Comparative Tracking Index	600 V	600 V	IEC 60112

Flammability	Nominal Value (SI)	Test Method
Burning Rate		ISO 3795
1.50 mm, Self-Extinguishing	0.0 mm/min	
3.00 mm, Self-Extinguishing	0.0 mm/min	
Flame Rating		UL 94
0.8 mm	V-2	
1.5 mm	V-0	
3.0 mm	V-0	

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Flammability	Nominal Value (SI)	Test Method
Flammability Classification		IEC 60695-11-10, -20
1.5 mm	V-0	
3.0 mm	V-0	
0.8 mm	V-2	
Glow Wire Flammability Index		IEC 60695-2-12
1.5 mm	960°C	
3.0 mm	960°C	
Glow Wire Ignition Temperature		IEC 60695-2-13
1.5 mm	825°C	
3.0 mm	825°C	
Oxygen Index	39%	ISO 4589-2



Additional Information

- 1) Not for use in food contact applications
- 2) Not for use in medical or pharmaceutical applications



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Injection	Nominal Value (SI)
Drying Temperature	70 to 80°C
Drying Time	2.0 to 4.0 hr
Rear Temperature	180°C
Middle Temperature	200°C
Front Temperature	210°C
Nozzle Temperature	220°C
Processing (Melt) Temp	180 to 220°C
Mold Temperature	40 to 80°C
Injection Pressure	80.0 to 120 MPa
Injection Rate	Slow-Moderate
Holding Pressure	40.0 to 90.0 MPa
Back Pressure	5.00 to 10.0 MPa
Cushion	< 5.00 mm
Screw Speed	< 18 m/mi