

TDS Polyflam™ RPP 2000 S

Polypropylene Homopolymer

Product

Flame retardant polypropylene homopolymer compound, UV stabilized for outdoor applications (i.e. stadium seats), free of halogens

General

Material Status	Commercial: Active		
Availability	Africa & Middle East Latin America	Asia Pacific North America	Europe
Additive	UV Stabilizer		
Features	Flame Retardant	Halogen Free	Homopolymer
Uses	Outdoor Applications	Seats	
Processing Method	Injection Molding		
Resin ID (ISO 1043)	PP FR(40)		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.910 g/cm ³	0.910 g/cm ³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (230°C/2.16 kg)	0.427 in ³ /10min	7.00 cm ³ /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	160000 psi	1100 MPa	ISO 527-2/1A/1
Tensile Stress (Yield)	4640 psi	32.0 MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	11 %	11 %	ISO 527-2/1A/50

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	2.4 ft·lb/in ²	5.0 kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength 73°F (23°C)	No Break	No Break	ISO 179/1eU

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Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature			
66 psi (0.45 MPa), Unannealed	201°F	94.0°C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	120°F	49.0°C	ISO 75-2/Af
Vicat Softening Temperature			
--	304°F	151°C	ISO 306/A120
--	194°F	90.0°C	ISO 306/B50
Ball Pressure Test (284°F (140°C))	Pass	Pass	IEC 60695-10-2

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+15 ohms.cm	IEC 60093
Comparative Tracking Index	600 V	600 V	IEC 60112

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flammability Classification			IEC 60695-11-10, -20
0.03 in (0.8 mm)	V-2	V-2	
0.06 in (1.6 mm)	V-2	V-2	
Glow Wire Flammability Index			IEC 60695-2-12
0.030 in (0.75 mm)	1760°F	960°C	
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
0.030 in (0.75 mm)	1430°F	775°C	
0.06 in (1.5 mm)	1430°F	775°C	
0.12 in (3 mm)	1430°F	775°C	
Oxygen Index	26 %	26 %	ISO 4589-2