

Technical Data Sheet

Polyflam RPP 2000 E S CS1 GRY64540

Polypropylene, Homopolymer

Product Description

Flame retardant polypropylene homopolymer compound, UV stabilized for outdoor applications, free of halogens

Processing Method	Extrusion
Attribute	Halogen Free; Homopolymer
Additive	Flame Retardant; UV Stabilizer
Application	Outdoor Applications; Seats
Resin ID	PP FR(53)

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (190 °C/10.0 kg)	10	cm ³ /10 min	ISO 1133
Density, (Method A)	0.940	g/cm ³	ISO 1183
Mechanical			
Tensile Stress at Yield, (Type 1A, 50 mm/min)	32.0	MPa	ISO 527-2
Tensile Strain at Yield, (Type 1A, 50 mm/min)	9.0	%	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	1500	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched, (23 °C, Type 1, Edgewise, Notch A)	8.0	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched, (23 °C, Type 1, Edgewise)	No Break		ISO 179
Hardness			
Ball Pressure Test, (140 °C)	Pass		IEC 60695-10-2
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	82.0	°C	ISO 306
(A (10N), 120 °C/h)	149	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	87.0	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	44.0	°C	ISO 75-2/A
Electrical			
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
Flammable			

Glow Wire Flammability Index		
(0.75 mm)	960 °C	IEC 60695-2-12
(1.5 mm)	960 °C	IEC 60695-2-12
(3.0 mm)	960 °C	IEC 60695-2-12
Glow Wire Ignition Temperature		
(0.75 mm)	750 °C	IEC 60695-2-13
(1.5 mm)	750 °C	IEC 60695-2-13
(3.0 mm)	750 °C	IEC 60695-2-13
Oxygen Index	29 %	ISO 4589-2
Additional Information		
Water Absorption 23C/50RH	0.16 %	ISO 62
UL Information		
Flammability Classification		
(0.8 mm)	V-2	IEC 60695-11-10, -20
(1.6 mm)	V-2	IEC 60695-11-10, -20

Extrusion Parameters	Nominal Value	Units
Drying Time	2.0 to 4.0	hr
Melt Temperature	170 to 210	°C
Suggested Max Moisture	<0.10	%
Drying Temperature	70 to 80	°C