Technical Data Sheet

Polyflam RPP 2000S K2043 GRY64540

Polypropylene, Homopolymer

Product Description

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

Processing Method	Injection Molding
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	cm³/10 min	ISO 1133
Density, (Method A)	0.940	g/cm³	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/m²	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