

Technical Data Sheet

Polyflam RPP 2000 E K2043 NAT



Polypropylene, Homopolymer

Product Description

Flame-retardant PP-Compound; halogenfree according to DIN VDE 0472 part 815; for extrusion, CU-stabilized

Processing Method	Extrusion
Attribute	Halogen Free; High Viscosity; Homopolymer
Additive	Flame Retardant
Resin ID	PP FR(53)

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (230 °C/2.16 kg)	3.0	cm ³ /10 min	ISO 1133
Density, (Method A)	0.910	g/cm ³	ISO 1183
Mechanical			
Tensile Stress at Yield, (Type 1A, 50 mm/min)	35.0	MPa	ISO 527-2
Flexural Modulus, (2.0 mm/min)	1500	MPa	ISO 178
Tensile Strain at Yield, (Type 1A, 50 mm/min)	10	%	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	1500	MPa	ISO 527-1
Flexural Stress			
(2.0 mm/min, 3.5%)	33.0	MPa	ISO 178
(2.0 mm/min, 7.0%)	40.0	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	13	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	3.0	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	No Break		ISO 179
(-30 °C, Type 1, Edgewise)	30	kJ/m ²	ISO 179
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	87.0	°C	ISO 306
(A (10N), 50 °C/h)	152	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	91.0	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	61.0	°C	ISO 75-2/A
Electrical			
Comparative Tracking Index (CTI)	600	V	IEC 60112

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

UL Information

Flame Rating			
(1.6 mm)	V-2		UL 94
(3.2 mm)	V-2		UL 94
(0.8 mm)	V-2		UL 94
Flammability Classification			
(0.8 mm)	V-2		IEC 60695-11-10, -20
(1.6 mm)	V-2		IEC 60695-11-10, -20
(3.2 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