

Technical Data Sheet

Polyflam RIPP 2000 NAT

Polypropylene Copolymer

Product Description

Unfilled flame retardant PP-Copolymer grade, halogen free acc. DIN VDE 0472 part 815, fulfills french norm NF P 92 - 501/505 class M2

Processing Method	Injection Molding
Attribute	Good Colorability; Halogen Free
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)	13	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)	24.0	MPa	ISO 527-2
Tensile Strain at Yield, (Type 1A, 50 mm/min)	10	%	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	1100	MPa	ISO 527-1
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)	2.5	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	No Break		ISO 179
(-30 °C, Type 1, Edgewise)	46	kJ/m ²	ISO 179
Hardness			
Ball Pressure Test, (120 °C)	Pass		IEC 60695-10-2
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	64.0	°C	ISO 306
(A (10N), 50 °C/h)	141	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	78.0	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	53.0	°C	ISO 75-2/A
RTI Elec			
(1.5 mm)	65.0	°C	UL 746B
(3.0 mm)	65.0	°C	UL 746B

RTI Imp			
(1.5 mm)	65.0	°C	UL 746B
(3.0 mm)	65.0	°C	UL 746B
RTI Str			
(1.5 mm)	65.0	°C	UL 746B
(3.0 mm)	65.0	°C	UL 746B
Electrical			
Comparative Tracking Index (CTI)	600	V	IEC 60112
Flammable			
Burning Rate			
(1.50 mm, Self-Extinguishing)	0.0	mm/min	ISO 3795
(3.00 mm, Self-Extinguishing)	0.0	mm/min	ISO 3795
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)	700	°C	IEC 60695-2-13
(1.5 mm)	850	°C	IEC 60695-2-13
(3.0 mm)	800	°C	IEC 60695-2-13
Oxygen Index	26	%	ISO 4589-2
UL Information			
Flame Rating			
(1.5 mm)	V-2		UL 94
(3.0 mm)	V-2		UL 94
Flammability Classification			
(0.75 mm)	V-2		IEC 60695-11-10, -20
(1.5 mm)	V-2		IEC 60695-11-10, -20
(3.0 mm)	V-2		IEC 60695-11-10, -20
UL File Number	E86615		

Injection Parameters		Nominal Value	Units
Drying Time		2.0 to 4.0	hr
Drying Temperature		70 to 80	°C
Screw Speed		<300	mm/sec
Processing (Melt) Temp		180 to 220	°C
Back Pressure		5.00 to 10.0	MPa
Mold Temperature		40 to 80	°C