Technical Data Sheet

Polyflam RPP 2120 GRY60305

Polypropylene, Homopolymer

Product Description

20% mineral filled flame retardant PP-homopolymer, halogen free

Processing Method	Injection Molding
Attribute	Halogen Free; Homopolymer
Additive	Flame Retardant
Filler/Reinforcement	Mineral, 20%
Resin ID	PP MD20 FR(53)

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (230 °C/2.16 kg)	15	cm³/10 min	ISO 1133
Density, (Method A)	1.08	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)	4.9	%	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	2700	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched, (23 °C, Type 1, Edgewise, Notch A)	3.0	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched, (23 °C, Type 1, Edgewise)	30	kJ/m²	ISO 179
Thermal			
Vicat Softening Temperature, (A (10N), 50 °C/h)	154	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	114	°C	ISO 75-2/B
Electrical			
Comparative Tracking Index (CTI)	600	V	IEC 60112
Flammable			
Burning Rate	<100	mm/min	ISO 3795
Glow Wire Flammability Index			
(1.5 mm)	960	°C	IEC 60695-2-12
(2.0 mm)	850	°C	IEC 60695-2-12
(3.0 mm)	960	°C	IEC 60695-2-12
UL Information			

Flammability Classification		
(0.8 mm)	V-2	IEC 60695-11-10, -20
(1.6 mm)	V-2	IEC 60695-11-10, -20

Injection Parameters	Nominal Value	Units
Drying Time	2.0 to 4.0	hr
Drying Temperature	70 to 80	°C
Nozzle Temperature	220	°C
Screw Speed	<300	mm/sec
Processing (Melt) Temp	180 to 220	°C
Front Temperature	210	°C
Holding Pressure	40.0 to 90.0	MPa
Middle Temperature	200	°C
Rear Temperature	180	°C
Injection Rate	Slow-Moderate	
Back Pressure	5.00 to 10.0	MPa
Mold Temperature	40 to 80	°C
Injection Pressure	80.0 to 120	MPa
Cushion	<5.00	mm