

## Technical Data Sheet

### Polyflam RPP 4220 MD 16V0 ORE16835



Polypropylene, Homopolymer

#### Product Description

20% glass fibre reinforced flame retardant polypropylene homopolymer compound free of halogens

<b>Processing Method</b>	Injection Molding
<b>Attribute</b>	Halogen Free; Homopolymer
<b>Additive</b>	Flame Retardant
<b>Filler/Reinforcement</b>	Glass Fiber, 20%
<b>Resin ID</b>	PP GF20 FR(51)

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Melt Volume Flow Rate, (230 °C/2.16 kg)	5.0	cm <sup>3</sup> /10 min	ISO 1133
Density, (Method A)	1.21	g/cm <sup>3</sup>	ISO 1183
<b>Mechanical</b>			
Tensile Strain at Break, (Type 1A, 5 mm/min)	3.0	%	ISO 527-2
Tensile Stress at Break, (Type 1A, 5 mm/min)	72.0	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	6400	MPa	ISO 527-1
<b>Impact</b>			
Charpy Impact Strength - Notched, (23 °C, Type 1, Edgewise, Notch A)	7.0	kJ/m <sup>2</sup>	ISO 179
Charpy Impact Strength - Unnotched, (23 °C, Type 1, Edgewise)	35	kJ/m <sup>2</sup>	ISO 179
<b>Thermal</b>			
Vicat Softening Temperature, (A (10N))	165	°C	ISO 306
Deflection Temperature Under Load			
(0.45 MPa, Unannealed)	158	°C	ISO 75-2/B
(1.80 MPa, Unannealed)	138	°C	ISO 75A-1, -2
<b>Electrical</b>			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI)	600	V	UL 746A
Surface Resistivity	>1.0E+15	ohm	IEC 60093
<b>Flammable</b>			
Glow Wire Flammability Index			
(1.5 mm) - Conditioned	960	°C	IEC 60695-2-12
(3.0 mm) - Conditioned	960	°C	IEC 60695-2-12

Glow Wire Ignition Temperature			
(1.5 mm, Passes)	800	°C	IEC 60695-2-13
(3.0 mm, Passes)	800	°C	IEC 60695-2-13
UL Information			
Flammability Classification			
(1.6 mm)	V-0		IEC 60695-11-10, -20
(3.2 mm)	V-0		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
Processing (Melt) Temp	200 to 230	°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