

Iupiace™ AP4GM6

Mitsubishi Engineering-Plastics Corp - Polyphenylene Ether + PS

General Information			
Product Description			
Flow, good; Reinforced (30%); Flame Retardant, V-1			
General			
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Features	• Flame Retardant	• Good Flow	
Uses	• Automotive Applications • Automotive Electronics	• Electrical/Electronic Applications • General Purpose	
ASTM & ISO Properties ¹			
Physical	Nominal Value	Unit	Test Method
Density	1.32	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (280°C/5.0 kg)	25	cm³/10min	ISO 1133
Molding Shrinkage			Internal Method
Across Flow : 3.20 mm	0.20 to 0.40	%	
Flow : 3.20 mm	0.10 to 0.30	%	
Water Absorption (Saturation, 23°C)	0.060	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	7800	MPa	ISO 527-1/1
Tensile Stress (Break)	91.0	MPa	ISO 527-2/5
Tensile Strain (Break)	3.1	%	ISO 527-2/5
Flexural Modulus ²	7300	MPa	ISO 178
Flexural Stress ²	145	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	6.0	kJ/m²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2/A
1.8 MPa, Unannealed	115	°C	
CLTE			ISO 11359-2
Flow	2.6E-5	cm/cm/°C	
Transverse	6.1E-5	cm/cm/°C	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	3.0E+15	ohms	IEC 60093
Volume Resistivity	2.0E+15	ohms·cm	IEC 60093
Electric Strength			IEC 60243-1
1.00 mm	34	kV/mm	
3.00 mm	17	kV/mm	
Dielectric Constant			IEC 60250
100 Hz	3.50		
1 MHz	3.30		



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Electrical	Nominal Value	Unit	Test Method
Dissipation Factor			IEC 60250
100 Hz	9.2E-3		
1 MHz	7.7E-3		
Comparative Tracking Index	150	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating (1.5 mm)	V-1		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Hot Air Dryer	60 to 100	°C
Drying Time - Hot Air Dryer	2.0 to 4.0	hr
Rear Temperature	240 to 270	°C
Middle Temperature	250 to 290	°C
Front Temperature	250 to 290	°C
Nozzle Temperature	250 to 280	°C
Mold Temperature	80 to 100	°C
Injection Pressure	20.0 to 150	MPa
Injection Rate	Moderate	
Screw Speed	60 to 150	rpm

