

Iupital™ FG2025

Mitsubishi Engineering-Plastics Corp - Acetal (POM) Copolymer

General Information			
Product Description			
GF reinforced			
General			
Filler / Reinforcement	• Glass Fiber, 25% Filler by Weight		
Features	• High Rigidity		
Uses	• Automotive Applications • Electrical/Electronic Applications • Automotive Electronics • General Purpose		
ASTM & ISO Properties ¹			
Physical	Nominal Value	Unit	Test Method
Density	1.59	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	9.0	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	6.3	cm³/10min	ISO 1133
Molding Shrinkage - Flow (3.00 mm)	0.60	%	Internal Method
Water Absorption - 60% RH (23°C)	0.20	%	Internal Method
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	10000	MPa	ISO 527-1/1
Tensile Stress (Break)	140	MPa	ISO 527-2/5
Tensile Strain (Break)	3.0	%	ISO 527-2/5
Flexural Modulus ²	9100	MPa	ISO 178
Flexural Stress ²	210	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	9.0	kJ/m²	ISO 179
Charpy Unnotched Impact Strength (23°C)	60	kJ/m²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed	164	°C	ISO 75-2/B
1.8 MPa, Unannealed	162	°C	ISO 75-2/A
Melting Temperature	166	°C	ISO 11357-3
CLTE			ISO 11359-2
Flow	3.0E-5	cm/cm/°C	
Transverse	1.1E-4	cm/cm/°C	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+16	ohms	IEC 60093
Volume Resistivity	1.0E+14	ohms·cm	IEC 60093
Electric Strength			IEC 60243-1
1.00 mm	25	kV/mm	
3.00 mm	16	kV/mm	



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Electrical	Nominal Value	Unit	Test Method
Dielectric Constant			IEC 60250
1 MHz	4.10		
100 MHz	4.10		
Dissipation Factor			IEC 60250
1 MHz	8.0E-3		
100 MHz	3.0E-3		
Comparative Tracking Index	600	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.8 mm)	HB		UL 94

Processing Information			
Injection	Nominal Value	Unit	
Drying Temperature - Hot Air Dryer	80	°C	
Drying Time - Hot Air Dryer	3.0 to 4.0	hr	
Rear Temperature	180	°C	
Middle Temperature	190	°C	
Front Temperature	200	°C	
Nozzle Temperature	180 to 210	°C	
Mold Temperature	60 to 100	°C	
Injection Pressure	50.0 to 100	MPa	
Injection Rate	Moderate		
Screw Speed	80 to 120	rpm	

