

Iupital™ MF3020

Mitsubishi Engineering-Plastics Corp - Acetal (POM) Copolymer

General Information			
Product Description			
Milled fiber reinforced			
General			
Filler / Reinforcement	• Milled Glass Fiber, 20% 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	1.55	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	20	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	15	cm³/10min	ISO 1133
Molding Shrinkage - Flow (3.00 mm)	1.7	%	Internal Method
Water Absorption - 60% RH (23°C)	0.20	%	Internal Method
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	4500	MPa	ISO 527-1/1
Tensile Stress (Break)	60.0	MPa	ISO 527-2/5
Tensile Strain (Break)	4.0	%	ISO 527-2/5
Flexural Modulus ²	3900	MPa	ISO 178
Flexural Stress ²	100	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	4.0	kJ/m²	ISO 179
Charpy Unnotched Impact Strength (23°C)	40	kJ/m²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed	160	°C	ISO 75-2/B
1.8 MPa, Unannealed	118	°C	ISO 75-2/A
Melting Temperature	166	°C	ISO 11357-3
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	



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Injection	Nominal Value	Unit
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

