

Iupital™ FG2025MZ

Mitsubishi Engineering-Plastics Corp - Acetal (POM) Copolymer

Friday, February 10, 2023

General Information

Product Description

GF reinforced; Drinking water standard acquired

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Regarding available country, please inquire via our website.			
Filler / Reinforcement	• Glass Fiber, 25% Filler by Weight		
Features	• Drinking Water Contact Acceptable	• High Rigidity	
Uses	• Automotive Applications • Automotive Electronics	• Electrical/Electronic Applications • General Purpose	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.59	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	6.3	cm ³ /10min	ISO 1133
Water Absorption - 60% RH (23°C)	0.20	%	Internal Method
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	9800	MPa	ISO 527-1/1
Tensile Stress (Break)	135	MPa	ISO 527-2/5
Tensile Strain (Break)	3.0	%	ISO 527-2/5
Flexural Modulus ²	8800	MPa	ISO 178
Flexural Stress ²	200	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	9.0	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength (23°C)	60	kJ/m ²	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

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

¹ The values described are typical values only.

² The usage examples indicated here do not guarantee results applicable to relevant uses of the products.

³ It is the users' responsibility to investigate industrial property rights and the terms of use related to the uses and applications indicated here.

⁴ For the handling (transport, storage, forming, disposal, etc.) of the products, it is advisable to refer to technical documents and the Safety Data Sheet (SDS) of the proper materials and grades. Please contact us for consultations when the products are used for the purpose of food containers and packaging, medical parts, safety equipment, and toys for children.

⁵ In Japan, the colored products of each grade may contain chemicals subject to reporting requirements under the applicable law provided in Appendix 9 of Article 18-2 of the Enforcement Order, under Article 57-2 of the Industrial Safety and Health Act. For details, please contact us.

⁶ For the export of our products and products incorporated with our products, please comply with the relevant laws and regulations, such as the Foreign Exchange and Foreign Trade Law.

⁷ Please note that because of the chemical substance management systems in each country, the chemicals used in our products are subject to control, and separate applications might be required or are banned from imports and exports. It is advisable to inquire about the status of regulations in the relevant countries if you are exporting or importing our products.

Iupital™ FG2025MZ

Mitsubishi Engineering-Plastics Corp - Acetal (POM) Copolymer

Injection	Nominal Value	Unit
Injection Rate	Moderate	
Screw Speed	80 to 120	rpm

Notes

¹ Typical properties: these are not to be construed as specifications.

² 2.0 mm/min