

Iupital™ A25-03

Mitsubishi Engineering-Plastics Corp - Acetal (POM) Copolymer

General Information

Product Description

Viscosity, Medium; Rigidity, High

General

Features	- General Purpose - High Rigidity - Medium Viscosity
Uses	- Automotive Applications - Automotive Electronics - Electrical/Electronic Applications - General Purpose
Automotive Specifications	GM GMW22P-POM-C3

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.41	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	14	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	12	cm ³ /10min	ISO 1133
Molding Shrinkage - Flow (3.00 mm)	2.1	%	Internal Method
Water Absorption - 60% RH (23°C)	0.22	%	Internal Method
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	3050	MPa	ISO 527-1/1
Tensile Stress (Yield)	69.0	MPa	ISO 527-2/50
Tensile Strain			ISO 527-2/50
Yield	11	%	
Break	35	%	
Flexural Modulus ²	2950	MPa	ISO 178
Flexural Stress ²	98.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	8.0	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength (23°C)	250	kJ/m ²	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	105	°C	ISO 75-2/A
Melting Temperature	170	°C	ISO 11357-3
CLTE			ISO 11359-2
Flow	1.1E-4	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
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.8 mm)	HB		UL 94



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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	175	°C
Middle Temperature	185	°C
Front Temperature	195	°C
Nozzle Temperature	180 to 210	°C
Mold Temperature	60 to 80	°C
Injection Pressure	50.0 to 100	MPa
Injection Rate	Moderate	
Screw Speed	80 to 120	rpm

