Mitsubishi Engineering-Plastics Corp.

Iupiace™ GV10

Mitsubishi Engineering-Plastics Corp - Polyphenylene Ether + PS

General Information		
Product Description		
GF-reinforced / V-1; GF 10%		
General		
Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight	
Features	• Flame Retardant	
Uses	• Automotive Applications • Automotive Electronics	• Electrical/Electronic Applications • General Purpose

ASTM & ISO Properties [1]			
Physical	**Nominal Value**	**Unit**	**Test Method**
Density	1.15	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (300°C/2.16 kg)	5.5	cm³/10min	ISO 1133
Molding Shrinkage			Internal Method
Across Flow : 3.20 mm	0.30 to 0.50	%	
Flow : 3.20 mm	0.20 to 0.40	%	
Water Absorption (Saturation, 23°C)	0.060	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	4200	MPa	ISO 527-1/1
Tensile Stress (Break)	83.0	MPa	ISO 527-2/5
Tensile Strain (Break)	2.5	%	ISO 527-2/5
Flexural Modulus [2]	4100	MPa	ISO 178
Flexural Stress [2]	135	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (23°C)	8.0	kJ/m²	ISO 179
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			
0.45 MPa, Unannealed	135	°C	ISO 75-2/B
1.8 MPa, Unannealed	130	°C	ISO 75-2/A
CLTE			ISO 11359-2
Flow	4.5E-5	cm/cm/°C	
Transverse	7.5E-5	cm/cm/°C	
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	2.0E+15	ohms	IEC 60093
Volume Resistivity	3.0E+16	ohms·cm	IEC 60093
Comparative Tracking Index	200	V	IEC 60112
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.75 mm)	V-1		UL 94

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Processing Information		
Injection	**Nominal Value**	**Unit**
Drying Temperature - Hot Air Dryer	100 to 120	°C
Drying Time - Hot Air Dryer	2.0 to 4.0	hr
Rear Temperature	260 to 290	°C
Middle Temperature	280 to 310	°C
Front Temperature	280 to 310	°C
Nozzle Temperature	270 to 310	°C
Mold Temperature	90 to 125	°C
Injection Pressure	20.0 to 150	MPa
Injection Rate	Moderate	
Screw Speed	60 to 150	rpm