

Iupilon GPN2050DF

PC-GF50

Mitsubishi Engineering-Plastics Corporation

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	2.9	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
Melt flow index, MFI	4.3	g/10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
Molding shrinkage, parallel	0.1	%	ISO 294-4, 2577
Molding shrinkage, normal	0.1	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	13500	MPa	ISO 527
Stress at break	91	MPa	ISO 527
Strain at break	1.1	%	ISO 527
Flexural modulus, 23°C	12800	MPa	ISO 178
Flexural strength	165	MPa	ISO 178
Charpy impact strength, +23°C	29	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	5	kJ/m ²	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	115	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	120	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	19	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	26	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Yellow Card available	yes	-	-

Other properties	Value	Unit	Test Standard
Water absorption	0.07	%	Sim. to ISO 62
Density	1630	kg/m ³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	4 - 8	h	-
Mold temperature	60 - 100	°C	-
Zone 1	280 - 300	°C	-
Zone 2	280 - 300	°C	-
Zone 3	280 - 300	°C	-
Nozzle temperature	280 - 300	°C	-

Characteristics**Processing**

Injection Molding

Features

Low Warpage

Additives

Flame retarding agent

Applications

General Purpose

Special Characteristics

Flame retardant

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa