

**Iupilon MB5002R**

(PC+Polyester)

Mitsubishi Engineering-Plastics Corporation

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	9	cm <sup>3</sup> /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
Melt flow index, MFI	10	g/10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
Molding shrinkage, parallel	0.7	%	ISO 294-4, 2577
Molding shrinkage, normal	0.7	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	2100	MPa	ISO 527
Yield stress	50	MPa	ISO 527
Yield strain	5.9	%	ISO 527
Strain at break	140	%	ISO 527
Flexural modulus, 23°C	2000	MPa	ISO 178
Flexural strength	78	MPa	ISO 178
Charpy impact strength, +23°C	N	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	80	kJ/m <sup>2</sup>	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Temp. of deflection under load, 1.80 MPa	112	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	132	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	80	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	96	E-6/K	ISO 11359-1/-2

Electrical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Relative permittivity, 1MHz	3.5	-	IEC 62631-2-1
Dissipation factor, 1MHz	230	E-4	IEC 62631-2-1
Volume resistivity	3E11	Ohm*m	IEC 62631-3-1
Surface resistivity	7E11	Ohm	IEC 62631-3-2
Electric strength	24	kV/mm	IEC 60243-1

Other properties	Value	Unit	Test Standard
Water absorption	0.2	%	Sim. to ISO 62
Density	1200	kg/m <sup>3</sup>	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	4 - 8	h	-
Mold temperature	60 - 90	°C	-
Zone 1	270 - 290	°C	-
Zone 2	270 - 290	°C	-
Zone 3	270 - 290	°C	-
Nozzle temperature	270 - 290	°C	-

**Characteristics****Processing**

Injection Molding

**Applications**

General Purpose

**Special Characteristics**

Anti-static

**Regional Availability**

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