

Iupilon FPR4500

PC

Mitsubishi Engineering-Plastics Corporation

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	26	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
Melt flow index, MFI	27	g/10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
Molding shrinkage, parallel	0.4	%	ISO 294-4, 2577
Molding shrinkage, normal	0.4	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2600	MPa	ISO 527
Yield stress	63	MPa	ISO 527
Yield strain	4.2	%	ISO 527
Strain at break	72	%	ISO 527
Flexural modulus, 23°C	2700	MPa	ISO 178
Flexural strength	97	MPa	ISO 178
Charpy impact strength, +23°C	N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	40	kJ/m ²	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	94	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	105	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	66	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	67	E-6/K	ISO 11359-1/-2
Burning behav. at thickness h	V-2	class	IEC 60695-11-10
Thickness tested	0.4	mm	-
Yellow Card available	yes	-	-

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	3.1	-	IEC 62631-2-1
Dissipation factor, 1MHz	71	E-4	IEC 62631-2-1
Volume resistivity	2E14	Ohm*m	IEC 62631-3-1
Surface resistivity	4E15	Ohm	IEC 62631-3-2
Electric strength	31	kV/mm	IEC 60243-1

Other properties	Value	Unit	Test Standard
Water absorption	0.24	%	Sim. to ISO 62
Density	1190	kg/m ³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80 - 90	°C	-
Pre-drying - Time	4 - 8	h	-

Characteristics**Processing**

Injection Molding

Special Characteristics

Flame retardant, Opaque

Applications

Electrical and Electronical, General Purpose

Regional Availability

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