

**Iupital FW-21**

POM

Mitsubishi Engineering-Plastics Corporation

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	8.2	cm <sup>3</sup> /10min	ISO 1133
Temperature	190	°C	-
Load	2.16	kg	-
Melt flow index, MFI	9.5	g/10min	ISO 1133
Temperature	190	°C	-
Load	2.16	kg	-
Molding shrinkage, parallel	2.0	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	2800	MPa	ISO 527
Yield stress	56	MPa	ISO 527
Yield strain	10	%	ISO 527
Strain at break	30	%	ISO 527
Flexural modulus, 23°C	2500	MPa	ISO 178
Flexural strength	81	MPa	ISO 178
Charpy impact strength, +23°C	100	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	6.5	kJ/m <sup>2</sup>	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Melting temperature, 10°C/min	166	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	104	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	154	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	110	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	110	E-6/K	ISO 11359-1/-2
Burning behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	0.8	mm	-
Yellow Card available	yes	-	-

Other properties	Value	Unit	Test Standard
Humidity absorption	0.22	%	Sim. to ISO 62
Density	1410	kg/m <sup>3</sup>	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	3 - 4	h	-
Mold temperature	60 - 80	°C	-
Zone 1	170	°C	-
Zone 2	180	°C	-
Zone 3	190	°C	-
Nozzle temperature	180 - 210	°C	-
Screw speed	80 - 120	rpm	-
Injection pressure	50 - 100	MPa	-

**Characteristics****Processing**

Injection Molding

**Delivery form**

Natural Color

**Additives**

Lubricants

**Features**

Copolymer

**Applications**

Automotive, Electrical and Electronical, General Purpose

**Regional Availability**

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