

Iupilon™ MB4405U

Mitsubishi Engineering-Plastics Corp - Polycarbonate + Polyester

General Information			
Product Description			
PC/POLYESTER, Chemical Resistant, High Impact Strength			
General			
Features	• Chemical Resistant	• High Impact Resistance	
Uses	• General Purpose		
ASTM & ISO Properties ¹			
Physical	Nominal Value	Unit	Test Method
Density	1.20	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	18	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	17	cm ³ /10min	ISO 1133
Molding Shrinkage			Internal Method
Across Flow	0.60 to 0.80	%	
Flow	0.60 to 0.80	%	
Water Absorption (24 hr, 23°C)	0.30	%	Internal Method
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2000	MPa	ISO 527-1/1
Tensile Stress (Yield)	49.0	MPa	ISO 527-2/50
Tensile Strain			ISO 527-2/50
Yield	4.6	%	
Break	150	%	
Flexural Modulus ²	1900	MPa	ISO 178
Flexural Stress ²	72.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	61	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength (23°C)	No Break		ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed	95.0	°C	ISO 75-2/B
1.8 MPa, Unannealed	80.0	°C	ISO 75-2/A
CLTE			ISO 11359-2
Flow	7.5E-5	cm/cm/°C	
Transverse	8.0E-5	cm/cm/°C	
Processing Information			
Injection	Nominal Value	Unit	
Drying Temperature - Hot Air Dryer	110	°C	
Drying Time - Hot Air Dryer	4.0 to 8.0	hr	
Rear Temperature	270 to 290	°C	



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Injection	Nominal Value	Unit
Middle Temperature	270 to 290	°C
Front Temperature	270 to 290	°C
Nozzle Temperature	270 to 290	°C
Mold Temperature	60 to 90	°C

