

Iupilon™ TMB1412

Mitsubishi Engineering-Plastics Corp - Polycarbonate + ABS

General Information			
Product Description			
PC/ABS, Flame Retardant (Phosphoric acid), High Modulus			
General			
Additive	• Flame Retardant		
Features	• Flame Retardant	• High Rigidity	• High Stiffness
Uses	• General Purpose		
ASTM & ISO Properties ¹			
Physical	Nominal Value	Unit	Test Method
Density	1.27	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (260°C/2.16 kg)	21	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (260°C/2.16 kg)	20	cm³/10min	ISO 1133
Molding Shrinkage			Internal Method
Across Flow	0.15 to 0.35	%	
Flow	0.15 to 0.35	%	
Water Absorption (Saturation, 23°C)	0.20	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	4700	MPa	ISO 527-1/1
Tensile Stress (Yield)	58.0	MPa	ISO 527-2/50
Tensile Strain			ISO 527-2/50
Yield	2.6	%	
Break	10	%	
Flexural Modulus ²	4200	MPa	ISO 178
Flexural Stress ²	100	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	4.0	kJ/m²	ISO 179
Charpy Unnotched Impact Strength (23°C)	85	kJ/m²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed	89.0	°C	ISO 75-2/B
1.8 MPa, Unannealed	79.0	°C	ISO 75-2/A
Flammability	Nominal Value	Unit	Test Method
Flame Rating (1.0 mm)	V-0		UL 94
Processing Information			
Injection	Nominal Value	Unit	
Drying Temperature - Hot Air Dryer	80	°C	
Drying Time - Hot Air Dryer	4.0 to 8.0	hr	
Rear Temperature	230 to 270	°C	



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Injection	Nominal Value	Unit
Middle Temperature	230 to 270	°C
Front Temperature	230 to 270	°C
Nozzle Temperature	230 to 270	°C
Mold Temperature	50 to 70	°C

