

Iupilon™ ECF2010R

Mitsubishi Engineering-Plastics Corp - Polycarbonate

General Information

Product Description

Carbon Fiber Reinforced (10%), Flame Retardant, Non Br & Non P

General

Filler / Reinforcement	• Carbon Fiber, 10% Filler by Weight		
Additive	• Flame Retardant		
Features	• Bromine Free • Flame Retardant	• High Rigidity • High Stiffness	• Low (to None) Phosphorus Content
Uses	• General Purpose		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.24	g/cm ³	ISO 1183
Molding Shrinkage			Internal Method
Across Flow	0.25 to 0.45	%	
Flow	0.050 to 0.25	%	
Water Absorption (Saturation, 23°C)	0.11	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	8000	MPa	ISO 527-1/1
Tensile Stress (Break)	113	MPa	ISO 527-2/5
Tensile Strain (Break)	4.0	%	ISO 527-2/5
Flexural Modulus ²	7200	MPa	ISO 178
Flexural Stress ²	160	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	8.0	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength (23°C)	45	kJ/m ²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed	150	°C	ISO 75-2/B
1.8 MPa, Unannealed	146	°C	ISO 75-2/A
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.8 mm	V-2		
1.5 mm	V-0		

Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Hot Air Dryer	120	°C
Drying Time - Hot Air Dryer	4.0 to 8.0	hr
Rear Temperature	280 to 300	°C



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Injection	Nominal Value	Unit
Middle Temperature	280 to 300	°C
Front Temperature	280 to 300	°C
Nozzle Temperature	280 to 300	°C
Mold Temperature	80 to 120	°C

