Mitsubishi Engineering-Plastics Corp.

Iupilon™ EMT3150U

Mitsubishi Engineering-Plastics Corp - Polycarbonate

General Information			
Product Description			
Flame Retardant, Non Br & Non P, Clear, UV stabilized			
General			
Additive	• Flame Retardant	• UV Stabilizer	
Features	• Bromine Free • Flame Retardant • Good Weather Resistance	• High Clarity • Light Stabilized • Low (to None) Phosphorus Content	• UV Stabilized
Uses	• General Purpose		
Appearance	• Clear/Transparent		

ASTM & ISO Properties [1]			
Physical	**Nominal Value**	**Unit**	**Test Method**
Density	1.20	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	4.0	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	4.0	cm³/10min	ISO 1133
Molding Shrinkage			Internal Method
Across Flow	0.50 to 0.70	%	
Flow	0.50 to 0.70	%	
Water Absorption (Saturation, 23°C)	0.24	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	2300	MPa	ISO 527-1/1
Tensile Stress (Yield)	64.0	MPa	ISO 527-2/50
Tensile Strain			ISO 527-2/50
Yield	6.0	%	
Break	65	%	
Flexural Modulus [2]	2400	MPa	ISO 178
Flexural Stress [2]	99.0	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (23°C)	67	kJ/m²	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	135	°C	ISO 75-2/B
1.8 MPa, Unannealed	122	°C	ISO 75-2/A
CLTE			ISO 11359-2
Flow	6.5E-5	cm/cm/°C	
Transverse	6.6E-5	cm/cm/°C	

Iupilon™ EMT3150U

Mitsubishi Engineering-Plastics Corp - Polycarbonate

Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	6.0E+15	ohms	IEC 60093
Volume Resistivity	3.0E+16	ohms·cm	IEC 60093
Comparative Tracking Index (CTI)	PLC 3		UL 746A
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (1.5 mm)	V-0		UL 94

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 310	°C
Middle Temperature	280 to 310	°C
Front Temperature	280 to 310	°C
Nozzle Temperature	280 to 310	°C
Mold Temperature	70 to 100	°C