Iupilon™ ML-350 R591A

Mitsubishi Engineering-Plastics Corp - *Polycarbonate*

General Information

General			
Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Forms	• Pellets		

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)	19	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	18	cm³/10min	ISO 1133
Molding Shrinkage			
Across Flow : 0.126 in	0.50 to 0.70	%	
Flow : 0.126 in	0.50 to 0.70	%	
Water Absorption (Saturation, 73°F)	0.24	%	
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	363000	psi	ISO 527-1
Tensile Stress (Yield)	8850	psi	ISO 527-2
Tensile Strain (Yield)	6.0	%	ISO 527-2
Nominal Tensile Strain at Break	130	%	ISO 527-2
Flexural Modulus	348000	psi	ISO 178
Flexural Stress	14100	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (73°F)	23	ft·lb/in²	ISO 179
Charpy Unnotched Impact Strength (73°F)	No Break		ISO 179
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	279	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	255	°F	ISO 75-2/A
CLTE - Flow	3.5E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	4.1E-5	in/in/°F	ISO 11359-2
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	4.0E+15	ohms	IEC 60093
Volume Resistivity	3.0E+16	ohms·cm	IEC 60093
Electric Strength			IEC 60243-1
0.0394 in	790	V/mil	
0.118 in	430	V/mil	
Relative Permittivity			IEC 60250
100 Hz	3.10		
1 MHz	3.10		
Dissipation Factor			IEC 60250
100 Hz	7.0E-4		
1 MHz	9.0E-3		
Comparative Tracking Index (CTI)	250	V	UL 746A

Notes

[1] Typical properties: these are not to be construed as specifications.