

# Iupilon™ S-3001R

Mitsubishi Engineering-Plastics Corp - Polycarbonate

## General Information

### Product Description

High Flow, FDA compliant, Mold release improved

### General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Drinking Water Contact Acceptable • Good Mold Release	• High Flow • Low Viscosity	
Uses	• General Purpose		
Agency Ratings	• FDA		

## Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density	1.20	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	15	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	14	cm <sup>3</sup> /10min	ISO 1133
Molding Shrinkage			Internal Method
Across Flow	0.50 to 0.70	%	
Flow	0.50 to 0.70	%	
Water Absorption (24 hr, 73°F)	0.24	%	Internal Method
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	348000	psi	ISO 527-1/1
Tensile Stress (Yield)	8990	psi	ISO 527-2/50
Tensile Strain (Yield)	6.7	%	ISO 527-2/50
Tensile Strain (Break)	120	%	ISO 527-2/50
Flexural Modulus <sup>2</sup>	334000	psi	ISO 178
Flexural Stress <sup>2</sup>	13500	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	32	ft·lb/in <sup>2</sup>	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)	282	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	255	°F	ISO 75-2/A
CLTE - Flow	3.6E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	3.7E-5	in/in/°F	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	6.0E+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	460	V/mil	
Dielectric Constant			IEC 60250
1 MHz	3.10		
100 MHz	3.10		
Dissipation Factor			IEC 60250
1 MHz	9.0E-3		
100 MHz	6.0E-4		
Comparative Tracking Index (CTI)	PLC 2		UL 746A

## Processing Information



<b>Injection</b>	<b>Nominal Value</b>	<b>Unit</b>
Drying Temperature - Hot Air Dryer	248	°F
Drying Time - Hot Air Dryer	4.0 to 8.0	hr
Rear Temperature	518 to 572	°F
Middle Temperature	518 to 572	°F
Front Temperature	518 to 572	°F
Nozzle Temperature	518 to 572	°F
Mold Temperature	158 to 212	°F

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 0.079 in/min

