

Iupilon™ DSH3002R 7031A

Mitsubishi Engineering-Plastics Corp - Polycarbonate

General Information

Product Description

Light Diffusion, Medium class

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Features	• Low Light Diffusion		
Uses	• Displays	• Lighting Applications	
	• LEDs	• Lighting Diffusers	

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.20	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	14	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	14	cm ³ /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	363000	psi	ISO 527-1/1
Tensile Stress (Yield)	8560	psi	ISO 527-2/50
Tensile Strain (Yield)	6.5	%	ISO 527-2/50
Nominal Tensile Strain at Break	110	%	ISO 527-2/50
Flexural Modulus ²	334000	psi	ISO 178
Flexural Stress ²	12900	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	4.3	ft·lb/in ²	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)	277	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	253	°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
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.030 in)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
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

