Mitsubishi Engineering-Plastics Corp.

Iupilon™ KH3520UR

Mitsubishi Engineering-Plastics Corp - Polycarbonate

General Information

Product Description	
High Surface hardness (Clear), Pencil Hardness 3H	
General	
Features	• High Hardness
Uses	• General Purpose

ASTM & ISO Properties [1]

Physical	**Nominal Value**	**Unit**	**Test Method**
Density	1.17	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	35	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	33	cm³/10min	ISO 1133
Molding Shrinkage			Internal Method
Across Flow	0.50 to 0.70	%	
Flow	0.50 to 0.70	%	
Water Absorption (24 hr, 23°C)	0.19	%	Internal Method
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	2900	MPa	ISO 527-1/1
Tensile Stress (Yield)	82.0	MPa	ISO 527-2/50
Tensile Strain			ISO 527-2/50
Yield	6.0	%	
Break	33	%	
Flexural Modulus [2]	2900	MPa	ISO 178
Flexural Stress [2]	113	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (23°C)	2.0	kJ/m²	ISO 179
Charpy Unnotched Impact Strength (23°C)	37	kJ/m²	ISO 179
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			
0.45 MPa, Unannealed	103	°C	ISO 75-2/B
1.8 MPa, Unannealed	92.0	°C	ISO 75-2/A
CLTE			ISO 11359-2
Flow	6.5E-5	cm/cm/°C	
Transverse	6.7E-5	cm/cm/°C	

Processing Information

Injection	**Nominal Value**	**Unit**
Drying Temperature - Hot Air Dryer	80	°C
Drying Time - Hot Air Dryer	5.0 to 8.0	hr
Rear Temperature	240 to 280	°C

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Injection	Nominal Value	Unit
Middle Temperature	240 to 280	°C
Front Temperature	240 to 280	°C
Nozzle Temperature	240 to 280	°C
Mold Temperature	60 to 80	°C