+135-3858-6433 (GuangDong)
+188-1699-6168 (ShangHai)
+852-6957-5415 (HongKong)

Hylex® P1010L

Polycarbonate

Ravago Manufacturing Americas, LLC

Technical Data

General			
Material Status	• Commercial: Active		
Literature [1]	• Processing - Hylex PC (English) • Technical Datasheet		
Search for UL Yellow Card	• Ravago Manufacturing Americas, LLC • Hylex®		
Availability	• North America		
Features	• General Purpose	• Good Flow	• Good Mold Release
Uses	• General Purpose		
Agency Ratings	• FDA 21 CFR 177.1580		
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.20	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	10	g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.50 to 0.70	%	ASTM D955
Water Absorption (24 hr)	0.15	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (23°C)	69.6	MPa	ASTM D638
Tensile Elongation (Break, 23°C)	120	%	ASTM D638
Flexural Modulus (23°C)	2340	MPa	ASTM D790
Flexural Strength (23°C)	93.1	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (23°C, 3.18 mm)	800	J/m	ASTM D256
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (M-Scale)	80		ASTM D785
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed	141	°C	
1.8 MPa, Unannealed	132	°C	
Vicat Softening Temperature	154	°C	ASTM D1525
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	4.0E+16	ohm·cm	ASTM D257
Dielectric Strength (3.18 mm, in Air)	16	kV/mm	ASTM D149
Arc Resistance	120	sec	ASTM D495
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.508 mm)	V-2		UL 94
Optical	**Nominal Value**	**Unit**	**Test Method**
Refractive Index	1.585		ASTM D542
Transmittance (3180 µm)	89.0 to 91.0	%	ASTM D1003
Haze (3180 µm)	0.50 to 0.80	%	ASTM D1003

Injection	Nominal Value	Unit
Drying Temperature	121	°C
Drying Time	3.0 to 4.0	hr
Drying Time, Maximum	12	hr
Dew Point	< -28.9	°C
Suggested Max Moisture	0.020	%

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Injection	Nominal Value	Unit
Suggested Shot Size	40 to 60	%
Rear Temperature	271 to 282	°C
Middle Temperature	277 to 288	°C
Front Temperature	282 to 299	°C
Nozzle Temperature	277 to 299	°C
Processing (Melt) Temp	288 to 316	°C
Mold Temperature	76.7 to 93.3	°C
Injection Pressure	6.89 to 12.4	MPa
Holding Pressure	4.83 to 8.27	MPa
Back Pressure	0.483 to 1.03	MPa
Screw Speed	40 to 70	rpm

Injection Notes

Pressures given are in the hydraulic circuit.

Drying time should not exceed 12 hours to avoid excessive heat history.
Drying time is 5 to 6 hours with regrind.
Air throughout minimum of 1 CFM/lb resin/hr.

Notes

[1] These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

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