







## **BRAND OVERVIEW**





Entec polymers offers a broad range of generic Polycarbonate products that includes unfilled grades for injection molding, blow molding and extrusion. HYLEX® HB products are available with clear or blue edge tints, UV stabilization and UL94 HB flame retardancy.

HYLEX® HB polycarbonate products are used in various markets such as automotive, construction, medical, lighting, sports and recreation, digital media and eyewear. Applications include lenses, cases, lighting, CD and DVD cases, medical device housings, electrical housings and large water cooler bottles.

Property	ASTM Method	P1003L2HB	P1303L*HB	P1007L*HB	P1307L*HB	P1010L*HB	P1312L*HB	P1017L*HB	P1317L*HB	P1025L*HB	P1325L*HB	P1340L1HB	P1055LHB
Melt Index, g/10 min. (300°C/1.2kg)	D1238	2.5	3	7	7	11	12	18	18	25	25	39	55
Density (g/cc)	D792	1.20	1.20	1.19	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.19
Notched Izod Impact (J/m)	D256	750	810	850	900	800	800	700	700	640	640	690	500
Tensile Strength at Yield (MPa)	D638	62	61	63	63	63	63	63	63	62	62	62	61
Tensile Strength at Break (MPa)	D638	65	58	68	65	68	65	68	65	65	65	58	50
Elongation at Yield (%)	D638	7	6	7	7	7	7	7	7	6		6	6
Elongation at Break (%)	D638	>70	96	135	110	130	110	125	110	120	110	110	75
Flexural Modulus (Mpa)	D790	2300	2330	2300	2300	2340	2300	2340	2300	2300	2300	2410	2300
Heat Deflection Temperature 1.8 MPa Unannealed (°C)	D648	130	131	132	124	132	127	125	132	126	126	124	125
FDA Approval	N/A	Yes	No	No	No								
UV Stabilized	N/A	No	Yes	Yes	No								

NOTE: \* indicates a 1,2 or 3 and references the edge tint color.



## HYLEX® HB BRAND OVERVIEW | PROCESSING CONDITIONS

		P1003L2HB	P1303L*HB	P1007L*HB	P1307L*HB	P1010L*HB	P1312L*HB	P1017L*HB	P1317L*HB	P1025L*HB	P1325L*HB	P1340L1HB	P1055LHB
Drying Temperature	°C	120	120	120	120	120	120	120	120	120	120	120	120
Drying Time	Hours	3 to 4	2 to 4	3 to 4	3 to 4	3 to 4	3 to 4	3 to 4	3 to 4	3 to 4	3 to 4	3 to 4	3 to 4
Rear Zone Temp	°C	300 to 320	260 to 300	290 to 310	290 to 310	270 to 295	270 to 295	260 to 280	260 to 280	250 to 270	250 to 270	250 to 270	260 to 280
Center Zone Temp	°C	310 to 330	260 to 290	300 to 320	300 to 320	280 to 305	280 to 305	270 to 295	270 to 295	260 to 280	260 to 280	260 to 280	270 to 290
Front Zone Temp	°C	320 to 345	260 to 290	310 to 330	310 to 330	295 to 315	295 to 315	280 to 305	280 to 305	270 to 295	270 to 295	270 to 295	280 to 300
Nozzle Temp	°C	315 to 340	240 to 280 (Adapter)	305 to 325	305 to 325	290 to 310	290 to 310	275 to 300	275 to 300	265 to 290	265 to 290	265 to 290	270 to 290
Melt Temperature	°C	320 to 345	260 to 300	310 to 330	310 to 330	295 to 315	295 to 315	280 to 305	280 to 305	270 to 295	270 to 295	270 to 295	280 to 300
Mold Temp	°C	80 to 115	240 to 300 (die)	80 to 115	80 to 115	70 to 95	70 to 95	70 to 95	70 to 95	70 to 90	70 to 90	70 to 90	70 to 95
Screw RPM	RPM	40 to 70		40 to 70	60 to 200								

## **KEY CHARACTERISTICS**



High Transparency



High Temperature Resistance



High Impact



High Stiffness



Dimensional Stability



Lightweight