

Specifications/Properties				
Property	Measurement Range	Value	Units	Method
Physical				
Ultimate Tensile Strength	25 °C	65	MPa	ASTM D1708
Ultimate Elongation	25 °C	5	%	ASTM D1708
Young's Modulus	25 °C	3	GPa	ASTM D1708
Pencil Hardness	25 °C	>1	H	ASTM D3363
Thermal				
Coefficient of Thermal Expansion (in-plane;linear)	0 - 100 °C	50	ppm/°C	ASTM E831
Glass Transition (T _g)	0 - 200 °C	135	°C	ASTM E1356
Thermal Degradation - 1% (T _{1%})	25 - 700 °C	200	°C	ASTM E2550
Thermal Degradation - 5% (T _{5%})	25 - 700 °C	290	°C	ASTM E2550
Thermal Degradation - Onset (T _d)	25 - 700 °C	295	°C	ASTM E2550
Optical				
Optical Transmission	>450 nm >550 nm	>85 >90	%	ASTM D1003
Haze	-	<1	%	ASTM D1003
b*	-	<1	-	ASTM E317
Refractive Index (n _D)	25 °C	1.548	-	ASTM D542
Chemical Compatibility ^a				
Polar Protic Solvent (e.g. water)	23 °C	EXCELLENT	-	Ares Method
Polar Aprotic Solvent (e.g. acetone)	23 °C	EXCELLENT	-	Ares Method
Nonpolar Solvent (e.g. chloroform)	23 °C	EXCELLENT	-	Ares Method
Strong Base (e.g. 1.0M KOH)	23 °C	EXCELLENT	-	Ares Method

^a no observable change in material properties and dimension for:
EXCELLENT - >30min / GOOD - 10-30min / FAIR - 5-10 min / POOR - <5min

Pylux-H has been specifically formulated for high surface hardness and increased glass transition temperature. These properties make it an ideal polymer for flexible cover lens and flexible touch panel substrate applications.

Pylux-H can be processed at up to 200°C featuring all of the exceptional optical performance characteristics of the Pylux™ polymer family: >90% visible spectrum transmittance vs. air, <0.5% haze, low b* (yellow index), and superb optical retardation (as good as glass).

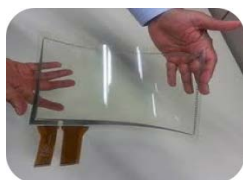
Pylux-H is 100% UV curable, solvent-free, with exceptionally smooth surface after curing (Ra<0.5nm). Moreover, we have demonstrated a curing speed of >20m/min for R2R manufacturing.

Pylux-H offers a great combination of **mechanical and thermal properties** in addition to compatibility with **R2R processing**.

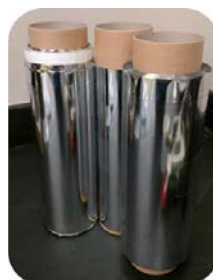
Application Examples



Mobile Phone Cover Lens



Flexible Touch Panel



Pylux™ R2R Production

To request samples, or for further information please contact:

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