

| 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).

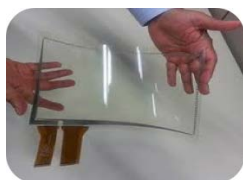
Pylux-H is 100% UV curable, solvent-free, with exceptionally smooth surface after curing (Ra<0.5nm). Moreover, we have demonstrated a curing speed of >20m/min for R2R manufacturing.

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

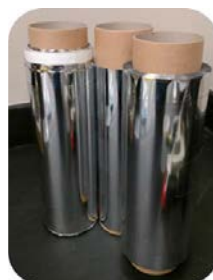
Application Examples



Mobile Phone Cover Lens



Flexible Touch Panel



Pylux™ R2R Production

To request samples, or for further information please contact:

info@aresmaterials.com
Ares Materials, Inc.
17217 Waterview Pkwy.
Dallas, TX 75272
USA