

HyTek®

Madico's "Hydrophobic Teknology" for applications that require water repellency

Madico's HyTek material is designed for numerous applications (short term or consumable products) that require water repellency and self-cleaning properties. The materials used in the construction are environmentally friendly and compliant to EU RoHS and REACH regulations.

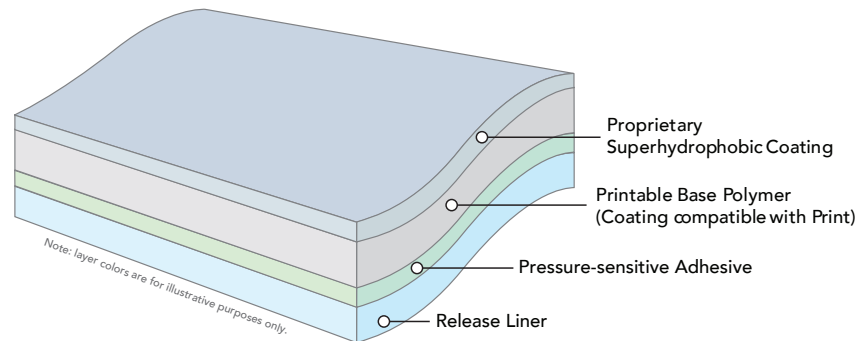
Material Construction:

- Coating: 0.25 mil
- Printable polymeric substrate: 2 – 12 mil
- Adhesive layer: Customer specified
- Release liner: Customer specified

All thicknesses are based on nominal data.

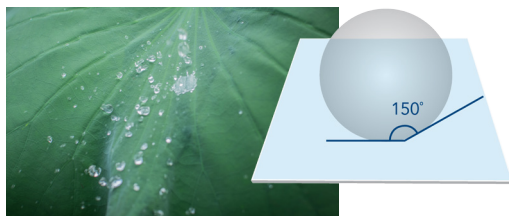
Printable polymeric substrate:

- PS (Polystyrene), HIPS (High Impact Polystyrene), PVC (Polyvinyl Chloride) or customer specified



Applications:

- Medical applications
- Industrial applications
- Sporting goods



Benefits:

- Superhydrophobicity (contact angle > 150°) and self-cleaning properties
- Retains Superhydrophobic properties/ability to repel water, exhibits Lotus effect – Initial & after aging.
- Low water mobility angle to prevent Rose Petal effect
- Print-compatible base material and coating
- All components of construction are EU Directive RoHS compliant
- For diagnostic test strips:
 - No false results or mis-read strips
 - Prevents cross-contamination with reagents
 - Ensures good adhesion to reagent strips

Technical Performance

Test	Specifications	Results			
			Water Mobility Angle (°)	Contact Angle (°)	Adhesion-Reagent to Substrate (lbs/in)
Thermal Aging	60°C for 2 weeks	Initial	9 ± 2	151 ± 1	No change
		After Aging	3 ± 1	152 ± 2	No change
Heat-Freeze-Humidity	UL 1703, > 10 cycles	Initial	9 ± 2	151 ± 1	N.A.
		After Aging	7 ± 2	152 ± 2	N.A.
Damp Heat	40°C; 80% RH for 14 weeks	Initial	No change	N.A.	No change
		After Aging	No change	N.A.	No change