

AUTOTEX AM

Hardcoat Polyester Film with Microban[®] Antimicrobial Product Protection Americas Only

PRODUCT DESCRIPTION

Autotex AM is MacDermid Enthone hardcoated polyester film with Microban[®] ZPTech[®] technology embedded into the hardcoat during manufacture.

Autotex AM combines unique UV cured hardcoat technology for durability and chemical resistance with antimicrobial technology which is active 24/7 to inhibit the growth of stain and odor causing bacteria on the surface. The result is a surface that is robust for cleaning and stays hygienically cleaner and fresher between routine cleans.

Autotex AM has an ink primer on the second surface for protected graphics.

Autotex AM is available in Fine and Touch textures. Fine is the texture typically used for membrane touch switch and equipment overlay applications. Touch is a finer feel texture originally designed for computer touchpads. They are both now available with AM additive for wide-ranging high touch and communal touch surfaces to help improve surface cleanliness. There are additional AM products in development; please contact your Account Manager for details and availability.

Autotex AM







Durable Cleanable Antimicrobial

AUTOTEX AM PRODUCT RANGE

Dvaduat	Finish	Gauge	
Product		150 µm	200 μm
Autotex AM with 3-series ink primer	Touch	AM T153L	AM T203L
	Fine*	AM F153L	AM F203L

^{*} Contact us for availability



PRIMER

Autotex AM has an ink adhesion primer on the second surface.

The 3-series primer offers excellent adhesion to a wide range of UV inkjet, solvent based screen printing inks and UV curable screen printing inks.

LAMINATE

MacDermid Alpha Electronics Solutions supply the **Autotex AM** film range with a protective laminate on the ink primer surface and recommend that the laminate remains in place until the first ink print pass.

DURABILITY

Property	Typical Value	Test Method
RCA Wear	Hardcoat not worn through at 200 cycles	ASTM F2357-10
IPA/Water 85%/15% abrasion test	No visual change to appearance. No traces of abrasion at 200 cycles	BS-EN-ISO 105-X12:2016.
15% Sodium Hypochlorite (Bleach) abrasion test	No visual change to appearance. No traces of abrasion at 200 cycles	BS-EN-ISO 105-X12:2016.

SURFACE CLEANING

Please note that the use of **Autotex AM** does not substitute for proper cleaning and disinfection of surfaces.

CLEANING CHEMICAL RESISTANCE

Autotex AM has been tested for resistance against the following cleaning and disinfecting chemicals. Film was soaked for 24 hours in the reagent prior to testing.

There was no visual change to the appearance of the film.

Antimicrobial efficacy was also confirmed after soaking.



Disinfectant Type	Brand
Soap and water	Fairy™ liquid
Hydrogen Peroxide	ETO™
Bleach - Sodium Hypochlorite	Domestos™ (50:50 blend in water)
Quaternary Ammonium - alkyl dimethyl benzyl ammonium chloride	Virex™ TB
Hydrogen Peroxide	25% solution in water
Peracetic acid	Perform™ PAA 0.07%
Ethanol	70% solution in water
IPA	70% solution in water
Chlorhexidine	Hibiscrub™
Ortho-phthaldehyde	Cidex™ OPA
Pentapotassium bis(peroxymonosulphate)	Descogen® Liquid r.f.u.
Phenolic	Wex-cide 128
Glucoprotamin	Incidin [®] Plus
Bleach - Sodium Hypochlorite	Fantastik All Purpose Cleaner
All Purpose Cleaner (Butyl Diglycol)	Mr Clean
Quaternary Ammonium	Formula 409
Quaternary ammonium; Ethanol (Ethyl alcohol)	Lysol® Disinfectant Spray
Lactic Acid	10% Lactic acid solution
Citric acid	10% Citric acid solution



TYPICAL PROPERTIES

Property	Typical Value	Test Method
Haze ¹	T texture 61% ± 4% F texture 58% ± 5%	ASTM D1003
Total luminous transmission ¹	92% ± 2.0%	ASTM D1003
Gloss level (60°) ¹	T 6 ± 1 GU F 7 ± 1.5 GU	ASTM D2457 (Modified to test method 022)
Yellowness index ³	< 3	ASTM E313
Switch life ¹	> 5 million actuations	Test method 003
Hardcoat adhesion ³	Pass	Test method 080
Tensile strength at break ²	172 - 190 N/ mm ²	ASTM D882
Breakdown voltage ² 150 µm 200 µm	16 - 18 kV 18 - 20 kV	ASTM D149
Dimensional stability ³	< 0.2% MD at 120°C maximum shrinkage	Test method 094
Thickness all grades ¹	Nominal ± 10%	Test method 096
Maximum processing temp	120 °C	-
Maximum use temperature ¹ Low humidity High humidity	(< 10% RH) 85 °C (85% RH) 60 °C	Test method 012
Minimum use temperature ¹	-40 °C (-40 °F)	Test method 012

¹ For details of test method, please contact MacDermid Alpha Electronics Solutions

Note – performance characteristics may be subject to change

WINDOW PRINTING

Autotex AM can be screen printed on the first surface with Windotex windowing lacquers to obtain a clear window. Printing guidelines are available in the Windotex Processing and Safety Recommendations. Note: Windotex does not offer any antimicrobial product protection.

 $^{^{2}}$ Data derived from base film manufacturer's literature. The coating slightly enhances most properties

³ Specification value



SHELF LIFE & STORAGE CONDITIONS

The recommended shelf life is 36 months from the date of manufacture. MacDermid Alpha Electronics Solutions guarantee a minimum remaining shelf life of 8 weeks at the time of despatch.

The recommended shelf life represents the maximum processing lifetime of the product from the date of manufacture when stored correctly and in unopened packaging.

The following storage conditions are recommended:

Storage Conditions		
Temperature	15 to 25 °C	
Relative Humidity	50 to 65%	
Packaging	Store in original protective packaging Once the packaging has been opened, the processing lifetime can be compromised due to air ingress, contamination, or UV light	
Moisture	Store away from water sources	
Chemicals	Keep away from aggressive solvents	
Stacking	For material ≤ 250 µm thick, 100 sheet packs should be stacked no more than 10 packs high	

IMDS ID-No

By arrangement with our regulatory affairs team.



SAFETY & WARNING

It is recommended that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use.

Safety Data Sheets are available.

WASTE TREATMENT

Prior to using any recommendations or suggestions for waste treatment, the user is required to know the appropriate local/state/federal regulations for on-site or off-site treatment which may require permits. If there is any conflict regarding our recommendations, local/state/federal regulations take precedent.

CONTACT INFORMATION

To confirm this document is the most recent version, please contact techinfo@MacDermidAlpha.com

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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. READ IT THOROUGHLY PRIOR TO PRODUCT USE. Emergency safety directory assistance: US +1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazii 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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