

AUTOTEX

Textured Hardcoated Polyester Film

PRODUCT DESCRIPTION

Autotex is a high quality textured polyester* film, developed for applications requiring a combination of flexibility with high abrasion and solvent resistance such as embossed membrane switches.

Autotex is available in sheets and rolls.



* The term polyester is the generic term for several different polymers, of which polyethylene terephthalate (PET) is the most common. PET is used in polyester film products.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

PRODUCT RANGE

Product	Base	Gauge		
		150 µm	200 µm	280 µm
Autotex with 0-series ink primer for solvent based screen printing inks	Touch	T150	T200	T280
	Fine	F150	F200	F280
	Velvet	V150	V200	V280
Autotex with 3-series ink primer for UV cured inkjet, UV cured screen printing, and solvent based screen printing inks	Touch	T153	T203	T283
	Fine	F153	F203	F283
	Velvet	V153	V203	V283

TYPICAL PROPERTIES

Property	Typical Value	Test Method
Haze ¹		
Touch	61% ± 4%	ASTM D1003
Fine	58% ± 5%	
Velvet	71% ± 5%	
Total luminous transmission ¹	92% ± 2%	ASTM D1003
Gloss level (60°) ¹		
Touch	6 ± 1 GU	ASTM D2457 (Modified to test method 022)
Fine	7 ± 1.5 GU	
Velvet	4.5 ± 1 GU	
Yellowness index ³	< 3	ASTM E313
Switch life ¹	> 5 million actuations	Test method 003
Tensile strength at break ²	172 to 190 N / mm ²	ASTM D882
Breakdown voltage ^{2,4}		
150 µm	16 to 18 kV	ASTM D149
200 µm	18 to 20 kV	
280 µm	22 kV	
Dimensional stability ³	Maximum shrinkage @120 °C 0.08% TD, 0.2% MD	Test method 094
Thickness all grades ¹	Nominal ± 10%	Test method 096
Maximum processing temp.	120 °C	-
Maximum use temperature ¹	Low humidity (< 10% RH) 85 °C High humidity (10-95% RH) < 60 °C	Test method 012
Minimum use temperature ¹	-40 °C (-40 °F)	ASTM D1003
Chemical Resistance	Excellent resistance to many common industrial solvents and household chemicals - please see Autotex Solvent Resistance Data Sheet	

Note: All evaluation results are obtained from lab produced samples at MacDermid Alpha Electronics Solutions. They are for general guidance only and do not represent the final product's properties.

- ¹ For details of test method, please contact MacDermid Alpha Electronics Solutions
- ² Data derived from base film manufacturer's literature
- ³ Specification value
- ⁴ Thick PET, including 250 µm films, typically melts at high applied voltages

PRIMER

Autotex has an ink adhesion primer on the second surface:

The standard 0-series ink-receptive coating is suitable for solvent based screen printing inks.

The 3-series primer has a more universal application and is suitable for a wide range of UV curable digital and screen inks as well as solvent based screen printing inks.

Please contact MacDermid Alpha Electronics Solutions for more information and request the 3-Series primer technical data sheet.

WINDOWS

Autotex can be screen printed with Windotex windowing lacquers to obtain a clear window. Printing guidelines are available in the Windotex Processing and Safety Recommendations. Due to its lighter texture, **Autotex Fine** will produce clearer windows than **Autotex Velvet**.

SHELF LIFE & STORAGE CONDITIONS

The recommended shelf life is 36 months from the date of manufacture. MacDermid Alpha Electronic Solutions guarantees 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 $\leq 250 \mu\text{m}$ 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

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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, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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