

# AUTOTEX XE

# Hardcoated Polyester Film for Extreme Environments

## **PRODUCT DESCRIPTION**

**Autotex XE** has been developed for applications such as instrument, fascia and membrane switch panels and durable labels that are used where high or widely fluctuating temperatures, excessive humidity and strong levels of ultraviolet light are encountered.

Autotex XE is available in sheets and rolls.



## READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

## PRODUCT RANGE

Product	Finish	Gauge		
		150 µm	200 µm	280 µm
Autotex XE with 0-series ink primer for solvent based screen printing inks and UV cured digital	Fine	XE F150	XE F200	-
	Velvet	XE V150	XE V200	XE V280
Autotex XE with 3-series ink primer for UV cured inkjet, UV cured screen printing and solvent based screen printing inks	Fine	XE F153	XE F203	-
	Velvet	XE V153	XE V203	-



# **TYPICAL PROPERTIES**

Property	Typical Value	Test Method	
Haze <sup>1</sup>			
Fine	58% ± 5%	ASTM D1003	
Velvet	71% ± 5%		
Total luminous transmission <sup>1</sup>	92% ± 2%	ASTM D1003	
Gloss level (60°) <sup>1</sup>		ASTM D2457	
Fine	7 ± 1.5 GU	(modified to test	
Velvet	4.5 ± 1 GU	method 022)	
Yellowness index <sup>3</sup>	< 5	ASTM E313	
Hardcoat adhesion <sup>3</sup>	Pass	Test method 080	
Switch life <sup>1</sup>	> 5 million actuations	Test method 003	
Tensile strength at break <sup>2</sup>	172 to 190 N / mm <sup>2</sup>	ASTM D882	
Breakdown voltage <sup>2</sup>			
150 µm	16 to 18 kV	ASTM D149	
200 µm	18 to 20 kV		
Dimensional stability <sup>3</sup>	0.2% max shrinkage MD at 120 °C	Test method 094	
Thickness all grades <sup>1</sup>	Nominal ± 10%	Test method 096	
Maximum processing temperature	120 °C	-	
Maximum use temperature <sup>1</sup>	Low humidity (< 10% RH) 85 °C	Test method 012	
Maximum use temperature <sup>1</sup>	High humidity (85% RH) 85 °C	Test method 012	
Minimum use temperature <sup>1</sup>	-40 °C (-40 °F)	Test method 012	
Chemical resistance	Excellent resistance to many common industrial solvents and household chemicals - please see <b>Autotex XE</b> Solvent Resistance Data Sheet		
Outdoor resistance	Please see Autotex XE Environmental Data Sheets		

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.

<sup>1</sup> For details of test method, please contact MacDermid Alpha Electronics Solutions

<sup>2</sup> Data derived from base film manufacturer's literature

<sup>3</sup> Specification value



### PRIMER

Autotex XE has an ink adhesion primer on the second surface. Two versions are available:

The standard or 0-series primer is for use with solvent based screen printing inks and has been used successfully with some digital UV curable inkjet inks.

The 3-series primer is for use with UV curable inkjet inks, solvent based screen printing inks and UV screen printing inks.

#### WINDOWS

Windotex is not a UV resistant product and is therefore not recommended for prolonged use outdoors. Due to the stabilising chemistry used in **Autotex XE**, the adhesion of Windotex to the surface may be impaired. Contact MacDermid Enthone Industrial Solutions for further information.

### SHELF LIFE & STORAGE CONDITIONS

Shelf life of **Autotex XE** is 36 months from date of manufacture when stored in cool, dry conditions in the original packaging. Once processed this shelf life does not apply. Finished parts can last many years.

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			
Chemicals	Keep away from aggressive solvents			

The following storage conditions are recommended:



#### **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

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

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