

# AUTOFLEX EB

## Product Data Sheet

Hardcoated Polyester Film



### DESCRIPTION

**Autoflex EB** is a high quality hardcoated polyester\*\* film, consisting of a base polyester and an embossable, texturable, chemically bonded UV-cured hard surface coating in gloss or antiglare finish.

**Autoflex EB** is available in sheets and rolls.



### PRODUCT RANGE

Autoflex EB Version	Finish	Gauge		
		130µm	180µm	250µm
<b>Autoflex EB</b> with 0-series ink primer for solvent based screen printing inks	Gloss	EBG130	EBG180	EBG250
	Antiglare	EBA130	EBA180	EBA250
<b>Autoflex EB</b> with 7-series ink primer for UV screen and solvent screen printing inks	Gloss	EBG137	EBG187	
	Antiglare	EBA130	EBA187	
<b>Autotex EB</b> non-primed for ITO sputtering*	Gloss	EBG130 NP	EBG180 NP	
	Antiglare	EBA130 NP	EBA180 NP	

\*NP grades are not standard. Please contact MacDermid Autotype to check availability

#### AUTOFLEX EB

Product Data Sheet

Issue: 25 August 2017

Doc Control Reference: 140320160305HB ver.11



## PRIMER

**Autoflex EB** has an ink adhesion primer on the second surface:

The standard 0-series ink-receptive coating for solvent based screen printing inks. The primer has also been used successfully with some digital UV inkjet printers. Please contact MacDermid Autotype for more information.

The 7-series primer offers excellent adhesion to a wide range of solvent based screen printing inks and UV screen printing inks.

## LAMINATE

Polyester films with high gloss surfaces are prone to blocking when stored with the film surfaces touching each other. Blocking is the term given when two surfaces adhere or merge into each other and when separated leave permanent marks on the film. MacDermid Autotype supply the **Autoflex EB** 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. 2L and hardcoat laminate versions may be available upon request.

## TEXTURES

**Autoflex EB** can be screen printed on the hardcoat surface with Fototex to obtain selective textures (see Fototex Product Data Sheet).

## TYPICAL PROPERTIES

Property	Autoflex EB	Test Method
Haze <sup>1</sup> Gloss Antiglare	< 2% 9.8% ±3% for 130 and 180µm 10.8% ±3% for 250µm	ASTM D1003
Total luminous transmission <sup>1</sup>	91% ± 2%	ASTM D1003
Gloss level (60°) <sup>1</sup> Gloss Antiglare	96 ± 2 GU 50 ± 5 GU	ASTM D2457 (modified to test method 022)
Yellowness index <sup>3</sup>	< 3.5	ASTM E313
Taber abrasion <sup>1</sup> Gloss Antiglare	< 5% N/A	Test method 103
Hardcoat Adhesion <sup>3</sup>	Pass	Test method 080
Switch life <sup>1</sup>	>5 million actuations	Test method 003
Pencil hardness <sup>4</sup>	2 - 3H	Test method 058

### AUTOFLEX EB

Product Data Sheet

Issue: 25 August 2017

Doc Control Reference: 140320160305HB ver.11



## TYPICAL PROPERTIES CONTINUED

Property	Autoflex EB	Test Method
Tensile strength at break <sup>2</sup>	172 N/mm <sup>2</sup>	ASTM D882
Breakdown voltage <sup>2, 5</sup> 130 µm 180 µm 250 µm	17-18 kV 19-20 kV 22 kV	ASTM D149
Dimensional stability <sup>3</sup>	0.2% @ 120°C MD maximum shrinkage	Test method 094
Thicknesses all grades <sup>1</sup>	Nominal ± 10%	Test method 096
Maximum processing temp	120°C	-
Maximum use temp <sup>1</sup>	Low humidity (<10%RH) 85°C High humidity (10-95%RH) 60°C	Test method 012
Minimum use temp <sup>1</sup>	-40°C (-40°F)	Test method 012
Chemical resistance	Excellent resistance to many common industrial solvents and household chemicals - please refer to <b>Autoflex EB Solvent Resistance Data Sheet</b>	

<sup>1</sup>For details of test method, please contact MacDermid Autotype

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

<sup>3</sup>Specification value

<sup>4</sup>For more information, please refer to MacDermid Autotype statement on pencil hardness testing

<sup>5</sup>Thick PET, including 250µm films typically melts at high applied voltages

\* \*The term polyester is the generic term for several different polymers, of which polyethylene terephthalate (PET) is the most common. PET is used in MacDermid Autotype High Performance Film Systems polyester film products. Note – Performance characteristics may be subject to change

## CONTACT INFORMATION

To confirm this is the most recent issue, please contact MacDermid Autotype

[macdermid.com/autotype](http://macdermid.com/autotype)

<b>North America</b> MacDermid Autotype Inc. 245 Freight Street Waterbury, CT 06702, USA (800) 323 0632 autotypeusinfo@macdermid.com	<b>Europe</b> MacDermid Autotype Ltd. Grove Road, Wantage, Oxon OX12 7BZ, UK +44 (0) 1235 771111 salessupport@macdermidautotype.com	<b>Asia</b> MacDermid Autotype Pte Ltd. 14 Joo Koon Crescent, Singapore, 629014 +65 643 00701 autotype-asia@macdermid.com
---	--	--

The information and recommendations in this publication are believed to be accurate and are offered in good faith but do not constitute specifications. Suggestions concerning uses and applications are only the opinion of MacDermid Autotype Limited and users should carry out their own testing procedures to confirm suitability for their purposes. Except in the case of death or personal injury caused by the materials, MacDermid Autotype Limited MAKES NO WARRANTY OF ANY KIND AND EXCLUDES ANY STATUTORY WARRANTY EXPRESS OR IMPLIED other than that materials conform to their current applicable standard specification. Statements herein therefore should not be construed as guarantees of satisfactory quality or fitness for purpose. The responsibility of MacDermid Autotype Limited for claims arising out of breach of guarantee, negligence, strict liability or otherwise is limited to the purchase price of the material. Suggestions concerning working practices and procedures are based on the practices adopted by existing users of the products and are made in good faith. IT IS THE RESPONSIBILITY OF THE USER TO ENSURE THAT ALL RELEVANT HEALTH AND SAFETY LAWS AND REGULATIONS ARE COMPLIED WITH. MacDermid Autotype Limited does not provide any advice on such laws and regulations and accepts no responsibility, express or implied, for breach of such regulations. Statements concerning the use of products described herein should not be construed as recommending the infringement of any patent and no liability for infringement arising out of such use is assumed.