AUTOFLEX EB

Product Data Sheet

Hardcoated Polyester Film

PRODUCT 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.

***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 Enthone Industrial Solutions polyester film products.

PRODUCT RANGE

Product	Base	Gauge		
		130 µm	180 µm	250 µm
Autoflex EB with 0-series ink primer for solvent based screen printing inks	Gloss	EBG130	EBG180	EBG250
	Antiglare	EBA130	EBA180	EBA250
Autoflex EB with 3-series ink primer for UV cured inkjet, UV cured screen printing and solvent based screen printing inks	Gloss	EBG133	EBG183	EBG253
	Antiglare	EBA133	EBA183	EBA253
Autoflex EB with 7-series ink primer for UV screen and solvent screen printing inks	Gloss	EBG137	EBG187	-
	Antiglare	EBA137	EBA187	-
Autotex EB non-primed for ITO sputtering**	Gloss	EBG130 NP	EBG180 NP	-
	Antiglare	EBA130 NP	EBA180 NP	-

**NP grades are not standard. Please contact MacDermid Enthone Industrial Solutions to check availability

TYPICAL PROPERTIES

Property	Typical Value	Test Method
Haze[1] Gloss Antiglare	< 2% 9.8% ± 3% for 130 and 180 µm 10.8% ± 3% for 250 µm	ASTM D1003
Total luminous transmission[1]	91% ± 2%	ASTM D1003
Gloss level (60°)[1] Gloss Antiglare	 96 ± 2 GU 50 ± 5 GU	ASTM D2457 (modified to test method 022)
Yellowness index[3]	< 3.5	ASTM E313
Taber abrasion[1] Gloss Antiglare	 < 5% N/A	Test method 103
Hardcoat Adhesion[3]	Pass	Test method 080
Switch life[1]	> 5 million actuations	Test method 003
Pencil hardness[4]	2 - 3H	Test method 058
Tensile strength at break[2]	172 N / mm^2	ASTM D882
Breakdown voltage[2, 5] 130 µm 180 µm 250 µm	 17-18 kV 19-20 kV 22 kV	ASTM D149
Dimensional stability[3]	0.2% @ 120 °C MD maximum shrinkage	Test method 094
Thicknesses all grades[1]	Nominal ± 10%	Test method 096
Maximum processing temp	120 °C	-
Maximum use temp[1]	Low humidity (<10%RH) 85 °C	Test method 012
	High humidity (10-95%RH) 60 °C	
Minimum use temp[1]	-40 °C (-40 °F)	Test method 012
Chemical resistance	Excellent resistance to many common industrial solvents and household chemicals - please refer to **Autoflex EB** Solvent Resistance Data Sheet	

Note: All evaluation results are obtained from lab produced samples at MacDermid Enthone Industrial 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 Enthone Industrial Solutions
[2]Data derived from base film manufacturer's literature
[3]Specification value
[4]For more information, please refer to MacDermid Enthone Industrial Solutions statement on pencil hardness testing
[5]Thick PET, including 250µm films typically melts at high applied voltages

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 Enthone Industrial Solutions for more information.

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

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

TEXTURES

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

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 Enthone Industrial Solutions 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.

SHELF LIFE & STORAGE CONDITIONS

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

The recommeded shelf life represents the maximum processing life time 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 °C 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

MacDermid Enthone Industrial Solutions recommends 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 from MacDermid Enthone Industrial Solutions.

WASTE TREATMENT

Prior to using any recommendations or suggestions by MacDermid Enthone Industrial Solutions 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 is the most recent issue, please contact us:
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