

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
Autoflex EB with 0-series ink primer for solvent based screen printing inks	Gloss	EBG130	EBG180	EBG250
	Antiglare	EBA130	EBA180	EBA250
Autoflex EB with 7-series ink primer for UV screen and solvent screen printing inks	Gloss	EBG137	EBG187	
	Antiglare	EBA130	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

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 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 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

TYPICAL PROPERTIES CONTINUED

Property	Autoflex EB	Test Method
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	

¹For details of test method, please contact MacDermid Enthone Industrial Solutions

²Data derived from base film manufacturer's literature.

³Specification value

⁴For more information, please refer to MacDermid Enthone Industrial Solutions statement on pencil hardness testing

⁵Thick 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 Enthone Industrial Solutions polyester film products.

Note – Performance characteristics may be subject to change

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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