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.







^{*} The term polyester is the generic term for a number of different polymers, of which polyethylene terephthalate (PET) is the most common. PET is used in MacDermid Autotype High Performance Film Systems polyester film products.

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 Autotype 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 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 ¹		ASTM D1003
Gloss	< 2%	
Antiglare	9.5% ±3%	
Total luminous transmission ¹	91% ± 2%	ASTM D1003
Gloss level (60°) ¹		ASTM D2457
Gloss	96 ± 2	(modified to test
Antiglare	50 ± 5	method 022)
Yellowness index ³	< 3.5	ASTM E313
Taber abrasion ¹		Test method 103
Gloss	< 5%	
Antiglare	N/A	
Hardcoat Adhesion ³	Pass	Test method 080
Switch life ¹	>5 million actuations	Test method 003





Property	Autoflex EB	Test Method	
Pencil hardness ⁴	2 - 3H	Test method 058	
Tensile strength at break ²	172 N/mm ²	ASTM D882	
Breakdown voltage ^{2, 5}		ASTM D149	
130 µm	17-18 kV		
180 µm	19-20 kV		
250 µm	22 kV		
Dimensional stability ³	0.2% @ 120° 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	Please refer to Autoflex EB Solvent Resistance Data Sheet		

¹For details of test method, please contact MacDermid Autotype

CONTACT INFORMATION

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

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² Data derived from base film manufacturer's literature. The coating slightly enhances most properties

³ Specification value

⁴ For more information, please refer to MacDermid Autotype statement on pencil hardness testing

⁵Thick PET, including 250µm films typically melts at high applied voltages