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

## TYPICAL PROPERTIES CONTINUED

| 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]<br>130 µm<br>180 µm<br>250 µm | <br>17-18 kV<br>19-20 kV<br>22 kV | ASTM D149 |
| 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 | |

[1]For details of test method, please contact MacDermid Autotype
[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
[5]Thick PET, including 250µm films typically melts at high applied voltages

## CONTACT INFORMATION

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

macdermid.com/autotype


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