

### **AUTOFLEX EB**

Polyester film is tougher and more durable than polycarbonate and PVC films. It offers enhanced chemical resistance and dramatically improved flex life. The Autoflex range of hard coated polyester films extends the functionality of polyester film into areas demanding high abrasion resistance together with excellent receptivity to graphic inks and selective textures. Autoflex EB has been developed for applications requiring a combination of high abrasion resistance and flexibility, such as embossed membrane switches and thermoformed CRT displays.

#### PRODUCT DESCRIPTION

Autoflex EB is a high quality, embossable, hard coated polyester film, consisting of a base polyester and an embossable, texturable, chemically bonded UV-cured hard surface coating. It is available in sheets and rolls, print receptive side cling film laminated as standard.

**Product range:** Autoflex EB Gloss G130, G180, G250

Gloss finish (93% gloss level) 130, 180 and 250 micron

Autoflex EB Antiglare A130, A180, A250

Antiglare finish (55% gloss level) 130, 180 and 250 micron

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

confers excellent adhesion to a wide range of solvent based graphic inks. The

primer is not recommended for use with UV cured graphics inks or a combination of solvent and UV graphic inks because the adhesion

performance will be inconsistent. A special primer is available for use with

UV inks upon request.

**Textures:** Autoflex EB can be screen printed with Fototex to obtain

selective textures (see Fototex Product Data Sheet).

#### PRODUCT APPLICATIONS

Autoflex EB is used as a substrate in the following markets:

AUTOFLEX EB



Markets	Major Benefits	
Membrane switch overlays		Excellent scratch resistance
Touch screens Facia panels	Ц	Chemical and household cleaner resistance even at the edges
Nameplates		Receptive to Fototex texturing varnishes
Labels/Product marking		Embossable
		Consistent gloss/antiglare surface
		Attractive appearance
		Superior flex life

#### PRODUCT PERFORMANCE

Property	Autoflex EB	Test Method
CHEMICAL	Resistant to:	DIN 42 115
☐ Chemical resistance	Alcohols	
	Dilute acids	
	Dilute alkalis	
	Esters	
	Hydrocarbons	
	Ketones	
	Household cleaning agents	
MECHANICAL		1
Switch life	>5 million flexes	Autotype Method
☐ MIT fold durability	>20,000 folds transverse direction	ASTM D2176
OPTICAL		2
☐ Gloss level	Gloss 93%	ASTM D2457-70 <sup>2</sup>
	Antiglare 55%	
DIIVOICAI		
PHYSICAL  Abrasion resistance	25% horse 100 aviales CS10E11	
Abrasion resistance	<5% haze - 100 cycles, CS10F wheel,	ASTM D1044-82 <sup>2</sup>
☐ Pencil hardness	500g (gloss finish only) 3H	Autotype Method
☐ Pencil hardness	эп —	+
THERMAL		
☐ Dimensional stability	0.3% maximum shrinkage at 120°C	A
Dimensional stability	0.570 maximum sininkage at 120 C	Autotype Method

Autoflex polyester films have limited long term resistance to UV light and therefore are not recommended for prolonged use outdoors (see Autotex UV).

AUTOFLEX EB

See Test Method Manual

<sup>&</sup>lt;sup>2</sup>Adapted to Autotype Method. See Test Method Manual (contained in the Technical Manual)



#### **WORKING INSTRUCTIONS**

See Technical Manual for comprehensive printing, cutting and embossing recommendations.

#### **HAZARDS**

None associated with this product.

#### **WARNINGS**

None associated with this product.

#### FIRE PRECAUTIONS

Polyester films will burn with difficulty. Extinguisher method recommended - foam or water.

#### **FIRST AID**

No chemical related injury is anticipated from the use of this product.

#### **ENVIRONMENTAL**

EC Regulation 594/91 classifies ozone depleting substances into a number of different groups, I-VI. Autotex does NOT contain any substance classified in groups I-VI nor have any of the substances been used by Autotype during manufacture.

For details of the content of each of the groups, please see separate Ozone Depleting Substances Document.

#### **DISPOSAL**

The range of products comprises films with a chemically treated surface which renders them difficult to recycle in normal PET recovery schemes. The product contains no substances listed on the EC Black or Grey lists and may be safely disposed of in a landfill or by authorised incineration.

AUTOFLEX EB



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