AUTOTEX STEEL

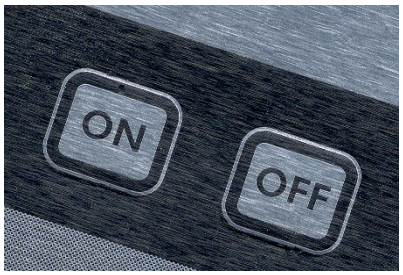
Product Data Sheet

Textured Hardcoat Polyester Film

DESCRIPTION

Autotex Steel is a high quality textured hardcoat polyester* film, for applications requiring a combination of high abrasion resistance and flexibility such as embossed membrane switches. **Autotex Steel** gives a stainless-steel look when printed with metallic ink and can also give an effective woodgrain appearance.

Autotex Steel is available in sheets and rolls.



PRODUCT RANGE

Products	Finish	Gauge	
		150µm	200µm
Autotex with 0-series ink primer for solvent based screen printing inks	Steel	S150	S200
Autotex with 7-series ink primer for UV screen printing inks and solvent based screen printing inks	Steel	S157	S207

PRIMER

Autotex Steel has an ink adhesion primer on the second surface. Two versions are available:

The standard 0-series ink-receptive coating for solvent based screen printing inks. This 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.

MIRROR INKS

We have found that some mirror screen printing inks can be more brittle than graphic inks and, for this reason, we recommend that customers perform their own printing trials and in house evaluations. 0-series ink primer is particularly good for creating blemish free prints with mirror inks.

WINDOWS

Autotex Steel can be screen printed with Windotex windowing lacquers to obtain a clear window. The cosmetic quality of the printed window can be affected by the steel finish, i.e. where there are deep lines in the texture these may be seen in a printed window. Special printing guidelines are available in the Windotex Processing and Safety Recommendations.

TYPICAL PROPERTIES

Property	Typical Value	Test Method
Haze[1]	50% ±5%	ASTM D1003
Total luminous transmission[1]	92% ± 2%	ASTM D1003
Gloss level (60°)[1] with the grain (MD) against the grain (TD)	 25-30 Gloss Units 8-10 Gloss Units	ASTM D2457 (Modified to test method 022)
Yellowness index[3]	<3	ASTM E313
Hardcoat adhesion[3]	Pass	Test method 080
Switch life[1]	>5 million actuations	Test method 003
Tensile strength at break[2]	172 N/mm^2	ASTM D882
Breakdown voltage[2] 150 µ 200 µ	 16 - 18 kV 18 – 20 kV	ASTM D149
Dimensional stability[3]	0.2% max. shrinkage MD at 120°C	Test method 094
Thickness all grades[1]	Nominal ± 10%	Test method 096
Maximum processing temperature	120°C	-
Maximum use temperature[1]	Low humidity (<10%RH) 85°C High humidity (10-95%RH) ≤60°C	Test method 012
Minimum use temperature[1]	-40°C (-40°F)	Test method 012
Chemical resistance	Excellent resistance to many common industrial solvents and household chemicals - please see **Autotex** 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
***** 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

Note – Performance characteristics may be subject to change

CONTACT INFORMATION

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

www.macdermid.com/autotype

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