

FOLEX GO-HC GRAPHIC OVERLAY FILM

Scratch-resistant, highly-transparent films for current and future trends

As a result of the constantly growing market presence of input systems equipped with touch screens, there is also increasing demand for new materials for these changing products. Industrial graphics and membrane switch layouts are being adapted accordingly, and there is a clear trend towards larger windows that also need to be mechanically more stable because of their operation by touch. GO-HC is the response from Folex to this trend. The product's very good scratch resistance is achieved by a specially developed hard coat surface applied to the front side. The film is characterised by excellent optical quality and mechanical resistance. Similarly, the product's high transparency enhances the brilliant appearance of screen printing inks. Due to its great chemical resistance, the scratch-resistant polyester film offers an outstanding alternative to window printing. In addition, the product is easy to clean. GO-HC can be used for diverse types of input systems, e.g. a combination of keyboard and touch screen or touch displays. Needless to say, there are also other possible applications, such as in sign-making, for front panels or plates, or generally for demanding applications requiring scratch resistance. With GO-HC, Folex has extended its portfolio to include another new, highly versatile product.



Figure: Printed GO-HC

WHAT DOES GO-HC OFFER?

- Scratch resistance and mechanical stability
- Transparency and optical quality
- Processing tolerance – good die-cutting, embossing and lasering properties

- Chemical and mechanical protection, robustness towards mechanical stress
- Cleanliness – can easily be cleaned thanks to its homogeneous, closed surface, making it ideal for applications in the medical sector.
- Rear side can be printed with conventional and UV screen printing inks
- Selective surface UV lacquers such as texture, semi gloss and matt can be applied to the top surface.
- No further curing of the scratch-resistant side needed
- Attractive appearance
- Transparent gluing possible
- Very good price/performance ratio

ADVANTAGES OF FOLEX GO-HC GRAPHIC OVERLAY FILM AT A GLANCE

- High transparency
- Scratch resistance
- High chemical and mechanical resistance
- Good mechanical processing properties (embossing, die-cutting, laser cutting)
- Good printability with UV lacquers and screen printing inks
- Easy to clean

PRODUCT APPLICATIONS

- Graphic overlay film for membrane switches
- Touch screens
- Signs and other graphic displays
- Panels, labels, name badges
- Protective film

SUPPLY

- Available in sheets and on rolls
- Film thicknesses of 0.13 mm and 0.18 mm
- Supplied with self-adhesive protective film
- Maximum roll width: 1220 mm

THE ADVANTAGES OF FOLEX GO-HC IN DETAIL

1. SCRATCH RESISTANCE

One essential characteristic of GO-HC is its scratch resistance. The tests we performed when developing this product revealed a very low loss of gloss and a very low increase in haze.

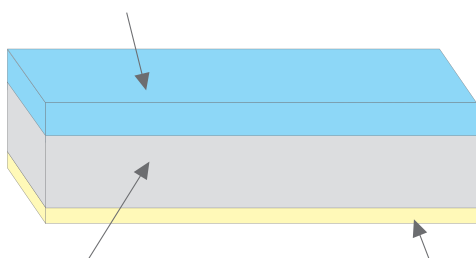
2. PRINTABILITY

The rear side of the film has a clear coating for ink adhesion to ensure permanent printing with solvent-based and UV curing screen printing inks.

3. SUITABILITY FOR TEXTURED PRINTING

The scratch-resistant side of the film can be textured, excellent for enhancing the aesthetic appearance of your product design. This can be done by applying various structure lacquers by screen printing. The lacquers are cured with UV radiation. We have already obtained very good results in tests of various lacquers (see separate "List of Recommended Lacquers").

Scratch-resistant coating



Highly transparent PET film Pretreatment for screen printing

Figure: Structure of Folex GO-HC

4. CHEMICAL RESISTANCE

We obtained outstanding results in tests exposing GO-HC to chemicals and foods. Tested under conditions, reference DIN 42115 revealed no noticeable changes to the surface, i.e. no haze, layer separation or similar.

The substances tested successfully included the following:

- Cosmetics (sun cream, lipstick, nail varnish remover)
- Drinks (cola, tea, coffee)
- Foods (e.g. mustard, beetroot, garlic)
- Hydrocarbons
- Alcohols, ketones, aldehydes, esters, ethers
- Ammonia and alkylamines
- Organic acids, mineral acids, bases
- Oxidising agents (hydrogen peroxide, sodium hypochlorite, iodine)

5. PROCESSING TOLERANCE

- Die-cutting, embossing, lasering, gluing
- Suitable for indoor use

Interested? If required we will be pleased to send you also material samples. Please do not hesitate to contact us, as we will be happy to assist you. See contact details below:

Product liability clause

The foregoing information and any consulting provided by us in terms of application engineering shall be given to our best knowledge, but shall not be considered binding information neither with regard to any third party industrial property rights. Any such consulting shall not relieve you from your own review of our current consulting information as to their suitability for the intended procedures and applications. These shall be beyond our control, and be subject to your exclusive responsibility. The sale of our products shall be subject to our current "General Terms and Conditions".

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