

DATA SHEET 45421.180.xxxxx

## GO-HC NQ

Clear polyester film with scratch resistant coating on the front side suitable for structured printing with UV lacquers. High UV-stability. The reverse side has an ink receptive coating.

Material is available with a thickness of 0.13 mm and 0.18 mm.

GO-HC NQ will replace the product GO-HC.

Available in sheets and rolls. Sheets available in standard packing unit or on demand. All sheets and rolls are equipped with blue self-adhesive protective film on the reverse side as standard. If the second side is covered as well with protection film this film will be transparent.

### Formats

| Art.Number      | Nominal thickness (mm) | Packing quantity |
|-----------------|------------------------|------------------|
| 45421.130.xxxxx | 0.13                   | 100              |
| 45421.180.xxxxx | 0.18                   | 100              |

### Rolls

| Art.Number      | Length (m) | Nominal thickness (mm) |
|-----------------|------------|------------------------|
| 45421.130.xxxxx | 100        | 0.13                   |
| 45421.180.xxxxx | 100        | 0.18                   |

### Technical data

#### Characteristic



- Ink receptive coating
- Suitable for textured laquers
- Suitable for selected UV-coatings
- With UV protection

Excellent chemical resistance to common industrial solvents and household chemicals - please refer to Folex "Chemical Resistance Datasheet".

Folex products can be printed digital and screen in many cases with excellent results. We offer improved versions dedicated for digital printing.

### Specifications

|                         |           |
|-------------------------|-----------|
| Length (m)              | 100       |
| Nominal thickness (mil) | 7.2       |
| Nominal thickness (mm)  | 0.18      |
| Base Material           | Polyester |

### Product Applications

- Suitable for Membrane Switches, sign production as well as for production of labels

### Storage

- Once packaging is opened, store at a room temperature of 15 - 25°C and at a humidity of 30 - 60 %
- Shelf life 1 year after delivery (under above storage conditions)

### Properties

| Property                               | Test Method                         | Value  |
|--|-------------------------------------|--|
| Thickness                              | Folex method                        | 0.13 - 0.14 mm (0,13 mm), 0.18 - 0.19 mm (0,18 mm) |
| Optical                                |                                     |  |
| Haze                                   | ASTM D1003-77                       | 0,3 - 1,5%   |
| Gloss level (20°)                      | ASTM D2457-70, ASTM D523            | 165 - 175 GU                                       |
| Total luminous transmission            | ASTM D1003-77                       | 89 - 93%   |
| Yellowness Index                       | DIN 6167                            | 1.02 (0,13 mm), 1.08 (0,18 mm)                     |
| Mechanical                             |                                     |  |
| Embossing                              | Folex method                        | possible   |
| Tensile strength at break <sup>1</sup> | ASTM D 882                          | 170 N/mm <sup>2</sup>                              |
| Switch life                            | Folex method according to DIN 42115 | > 5 Mio. flexes                                    |
| Abrasion test                          | Folex method                        | Delta Haze: 0.6 - 9.0                              |
| adhesion of coating                    | Folex method                        | passed   |
| Chemical                               |                                     |  |
| Chemical stability                     | Folex method                        | good   |
| Electrical                             |                                     |  |
| Dielectric strength <sup>1</sup>       | ASTM D149                           | 16,5 kV (0,13mm)/ 19,0 kV (0,18mm)                 |

|                                  |                            |   |
|----------------------------------|----------------------------|---|
| Dielectric constant <sup>1</sup> | ASTM D150-98 (2004), 1 kHz | 2,27 (0,13mm)/ 2,42 (0,18mm)                                |
| Thermal                          |                            |   |
| Shrinkage TD                     | 130°C 30 min Folex method  | < 0,5%  |
| Shrinkage MD                     | 130°C 30 min Folex method  | < 1%  |
| Maximum processing temperature   |                            | 120°C   |
| Max. use temp                    |                            | 45°C/ 80°C (with embossing/ without embossing) <sup>2</sup> |
| Min. use temp                    |                            | 0°C/ -20°C (with embossing/ without embossing) <sup>2</sup> |
| Melting temperature <sup>1</sup> | ASTM E794-85               | 255°C   |
| Surface                          |                            |   |
| Roughness Ra                     | EN ISO 4287, ASME B46.1    | 0.04 - 0.25 µm  |
| Pencil hardness                  | Folex method               | 3 H   |
| Scratch resistance               | Folex method               | very good   |
| Surface tension front side       | DIN 53364, ASTM D2578      | 35 - 38 mN/m  |
| Surface tension reverse side     | DIN 53364, ASTM D2578      | 44 - 48 mN/m  |

<sup>1</sup> Data derived from base film Polyester manufacturers literature for base film

<sup>2</sup>at 50°C without condensation, based on the recommendation of the "Fachgemeinschaft Eingabesysteme", they recommend max. 70°C

#### 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. It is the users responsibility to determine the suitability for his/her own use and application and test through the complete production process to ensure the product is fully suitable for the intended use, since conditions of use are beyond our control. The sale of our products shall be subject to our current General Terms and Conditions. We reserve the right to make changes that serve to improve the product.