



#### DATA SHEET 4591x.180.xxxxx

# PC-HC

Clear polycarbonate film with scratch resistant coating on the front side.

Material is available with a thickness of 0.18 mm, 0.25 mm and 0.38 mm.

Available in sheets and rolls. All sheets and rolls are equipped with clear self-adhesive protective film on the hard coat side and green self-adhesive protective film on the reverse side as standard.

Art.Number	Nominal thickness (mm)	Packing quantity
4591x.180.xxxxx	0.18	100
4591x.250.xxxxx	0,25	50
4591x.380.xxxxx	0.38	100

## Rolls

Art.Number	Length (m)	Nominal thickness (mm)
4591x.180.xxxxx	100	0.18
4591x.250.xxxxx	100	0.25
4591x.380.xxxxx	100	0.38

#### Technical data

#### Characteristic





- Ink receptive coating
- Suitable for textured laquers

Good chemical resistance. Please refer to Folex "Chemical Resistance Datasheet".

Folex products can be printed digital and screen in many cases with excellent results.



## **Specifications**

Nominal thickness (mil)	7.2
Nominal thickness (mm)	0.18
Base Material	Polycarbonat
Packing quantity	100

# **Product Applications**

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

## Storage

- $\bullet$  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	0.18 - 0.19 mm (0.18), 0.25 - 0.27 (0.25), 0.38 -
		0.40 (0.38)
Optical		
Haze	ASTM D1003-77	0.1 - 0.5%
Gloss level (60°)	ASTM D2457-70, ASTM D523	175 - 190 (20°) GU
Total luminous transmission	ASTM D1003-77	91 - 92.5%
Yellowness Index	DIN 6167	0.5 - 0.6
Mechanical		
Embossing	Folex method	possible
Tensile strength at break <sup>1</sup>	ASTM D 882	65 N/mm <sup>2</sup>
Switch life	Folex method according to DIN 42115	pending
Abrasion test	Folex method	Delta Haze: 0.5-5.5
Adhesion of coating	Folex method	passed
Electrical		
Dielectric strength <sup>1</sup>	IEC 243	5.25 kV
Chemical		
Chemical stability	Folex method	good
Thermal		
Shrinkage TD	130°C 30 min Folex method	< 0,35%
Shrinkage MD	130°C 30 min Folex method	< 0,35%
Maximum processing temperature		125°C
Max. use temp		not specified



Min. use temp		not specified
Surface		
Roughness Ra	EN ISO 4287, ASME B46.1	0.04 - 0.3 μm
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	35 ± 3 mN/m

<sup>&</sup>lt;sup>1</sup> Data derived from base film Polcarbonate manufacturers literature

#### Product liability clause

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