

## easySWITCH Series 347 Screen printing ink for Membrane Switch

Specifically developed for the requirements within the range of membrane switches and transparency in keyboards. A permanent elastic, highly resistant colour system was compiled. The selection of the raw materials was met in such a way that apart from a high mechanical stability also a "cold" subsequent treatment, for example stamping machines, is ensured coining/shaping and deforming. The chemical resistance of the back printing inks guarantees highest stability in relation to plasticizers and adhesive influences.

The back printing inks contain 6 different ink systems in "opaque-mat (D-MT)" and "opaque-glossy (D)". The difference of these 6 back printing inks is the Surface Energy and the Dynamic peel strength (with double sided tape from Lohmann "Duplobond 362.2 plus).

		Surface Energy	Dynamic peel strength
-	Back printing inks D-MT	35 mN/m	> 14 N/25 mm
-	Back printing inks D	28-35 mN/m	> 6 N/25 mm

The easySWITCH colour mixing system covers 15 base colours similar to the high-pigmented MS-colour system. The offer spectrum is supplemented by the adhesive resistant back printing inks and high transparent colours.

## **MS-Base inks**

Series 347-1000 Series 347-1100 Series 347-1200 Series 347-2000 Series 347-3000 Series 347-3100 Series 347-3200 Series 347-3300	MS-Light yellow, easySWITCH MS-Medium yellow, easySWITCH MS-Dark yellow, easySWITCH MS-Orange, easySWITCH MS-Red, easySWITCH MS-Magenta red, easySWITCH MS-Dark red, easySWITCH MS-Magenta, easySWITCH	Series 347-4000 Series 347-5000 Series 347-6000 Series 347-7000 Series 347-8000 Series 347-9000 Series 347-0900	MS-Violet, easySWITCH MS-Blue, easySWITCH MS-Green, easySWITCH MS-Brown, easySWITCH MS-Black, easySWITCH MS-White, easySWITCH MS-Ultramarin, easySWITCH
MS-Base inks	transparent colors		
Series 347-1010	MS-Yellow, easySWITCH	Series 347-2100	MS-Pure orange, easySWITCH
Series 347-1020	MS-Real Yellow, easySWITCH	Series 347-3050	MS-Light red, easySWITCH
Series 347-1300	MS-Yellow orange, easySWITCH	Series 347-3150 Series 347-1782/05	MS-MS-Medium red, easySWITCH MS-Varnish, transparent, easySWITCH
Back printing ink			
Series 347-00/D-MT	ST-White, mat, easySWITCH	Series 347-RAL7035/D-M	
Series 347-00/D	ST-White, gloss, easySWITCH	Series 347-RAL7035/D Series 347-9100/D-MT	Opaque Gray, gloss, easySWITCH Barring Gray, mat, easySWITCH
Series 347-33	ST-Black, easySWITCH	Series 347-9100/D	Barring Gray, gloss, easySWITCH
Series 347-100	ST-Silver, easySWITCH		
Series 347-02299	ST-Coarse silver, easySWITCH		
Auxiliary agents			
Series 347-07	MS-Binder, easySWITCH		
Series 347-06/Lang	MS-Retarder paste, easySWITCH		
Process inks			
Series 347-0950/ISO	ISO-Process cyan, easySWITCH	Series 347-0970/ISO	ISO-Process magenta, easySWITCH
Series 347-0960/ISO	ISO-Process Yellow, easySWITCH	Series 347-0980/ISO	ISO-Process black, easySWITCH
		Series 347-04/ISO	ISO-Transparent paste, easySWITCH
Print-and-Peel	thickness of the lovers flowible	tonoile atronath chie	
Series 447-05	thickness of the layers, flexible, Print-and-Peel, transparent	easySWITCH	
Series 447-18	Print-and-Peel, red	easySWITCH	
	Thin of the layers, hard, tensile	strength able	
Series 447-27	Print-and-Peel, blue	easySWITCH	

UV-Systems Series 547-05/F Series 547-05/V	UV-Texture Lacquer, Fine UV-Texture Lacquer Velvet	easySWITCH easySWITCH
Series 547-05/C Series 547-05/AC	UV-Window varnish, high transparent UV-Anti clear varnish,	easySWITCH easySWITCH
Series 547-15019	UV-cureable glue,	easySWITCH
<b>2C-Window varnish</b> Series 647-05/C	2C- Window varnish, high transparent	easySWITCH

All MS-colors must be used with minimum 20 % binder series 347-07, highly transparent colors can be made off with series 347-1782/05 or the retarder paste series 347-06/Lang. To ensure the desired characteristics following steps has to be considered

- Series 347-07, MS-Binder. For the formulation of special color shades with the MS-Colors must contain minimum 20 % in the color mixture.
- Series 347-1782/05, MS-Varnish, high transparent. This varnish is used for the formulation of highly transparent colors as in the area membrane switch windows.
- Series 347-06/Lang, MS-Retarder paste. This retarder paste was developed to print of fine details in the print motives and is not suggested for the use of full area print. The addition is limited up to 20 % and can be used as an alternative additive to MS-Binder series 347-07 or as an additional additive for the final mixture.

## **Technical Data**

Thinner	: Series 300-017, to add 10-30 %
Retarder	: Series 300-018/ISO, to add until 10 %
Cleaner	: Series 300-URS, Series 10-055, Series 10-063
others	: Hardener series 600-HDA for 2K-Window varnish series 647-05/C (4:1)
Mesh	: 90-48 PET 1000, generally 77-55 PET 1000 up to 120-34 PET 1000
Coating	: With all general photo polymer emulsions and capillary films
Squeegee	: RKS, 70 Shore or PUR, 75 Shore
Drying/Curing	: Air / Jet
Substrate I	: Coated PET-Foils
Substrate II	: Polycarbonate, PET-G and PET-A, hard-PVC, PVC- self adhesive foils
In- / Outdoor	<ul> <li>Indoor use; medium-term for outdoor applications (2-3 years, depending upon conditions)</li> </ul>
Subsequent treatment	: Usual subsequent treatment (punching machines, deforming, coining/shaping, lamination)
Overprintability	: Within the Series of 347, also Series of 386, Series of 388 and Series of 655
Available in	: Series 347
Availiable Colors	: MS-Base inks, back printing inks, high transparent colours Series 347-1782/xx
Stock availability	: Ex Stock
Unit	: 1kg / 5kg
Price level	· **
Characteristics	: Compatible with a large selection of functional UV systems

## Precautionary measures

Read material safety data sheet prior to processing.

Addition of not mentioned products or competitors products are on your own risk and releases Printcolor Screen Ltd. of any later demands, especially in cases of damage and loss caused by alien products.

All former leaflets are no longer valid. Stand: 11-2006/SG

The material safety data sheets according to OSHA form contain indication of hazardous ingredients, TLV-level and instructions for precautions when processing, handling and storing as well as first aid. The information given in the MSDS refers to processing as described in this technical leaflet. The statements in our leaflets have been made to the best of our knowledge and are given without any obligation. They serve to advise our business associates, **but it is absolutely necessary** to make your own printing tests under local conditions, with regard to the intended purpose prior to starting the printing job. In case of any doubts please contact our technical advisors. The application, use and processing of the products delivered by us are beyond our control. This is subject to your responsibility and there is no liability or guarantee on our part.

In case of justified complaints the manufacturer can only be made liable for the countervalue of the used ink system.