

PRODUCT GROUP 300

Series 347 easySWITCH Special Inks for Membrane switches



Especially for the high requirements in the field of front displays/panels and membrane switches, Printcolor has exclusively designed a permanently elastic and highly resistant ink system.

The choice of raw materials and the individual formulas of Series 347 easySWITCH offer following features:

- Flexibility of all color shades and long-lasting mechanical resistance of the front displays (according to DIN 41115) as well as for further processing, i.e. punching, cutting, cold- or warm forming, a. s. o.
- Adhesion on all PET- and PC-foils (suitable for front displays) by Autotyp, Technoplast/Folex, Rexam, Bayer, GE and others; adhesion test according to DIN EN ISO 2409.
- High peel strength and adhesion values with tapes by Lohmann, 3M, a. s. o. and with suitable and printable adhesive systems, proofed according to DIN EN 1939.

The back-printing inks, Series 347-00/D-MT, Series 347-9100/D-MT and Series 347-RAL7035/D-MT are of a mat setting and offer – thanks to their controlled surface energy (>35mN/m), dynamic peel strength values of more than 14 N/25mm. On the other hand, the range of back-printing inks is complemented by the glossy special setting D (Series 347-00/D, Series 347-9100/D and Series 347-RAL7035/D). Due to the low surface energy the resulting dynamic peel strength values of these inks are a little lower; this however allows re-positioning of the laminated foils for further processing.

General characteristics of these settings are:

- chemical resistance against adhesive- and plasticizer influences to guarantee a durable bonding between foil, ink and adhesive
- wetting of the ink surface within the interlayer adhesion to reach optimal bonding with multicolor ink layers
- unsurpassed opacity of the MS-basic colors of Series 388-MS/HP (High Pigmented) and of the back-printing inks
- Maximum transparency and brilliance of the MS-basic colors of Series 388/HL (High Transparent)
- Split-resistant metallic colors
- Cyclohexanone-free formulation of Series 347 easySWITCH
- UV-curing or 2-component structure- and window varnishes
- Temporary printable protection layers by means of Print-and-Peel systems
- Screen-printable adhesives based on UV technology or solvent based

All MS-colors of Series 388 must be blended with a minimum of 20% special binder Series 347-07, varnish Series 347-1782/05 or retarder paste Series 347-06/Lang. To reach the desired properties, the following parameters have to be considered:

Series 347-07, ST-Binder

When designing special color shades based on the MS-colors of Series 388-MS, this blending agent is being used with a minimum mixing ratio of 20% by weight to ensure the desired product properties. The maximum mixing ratio (in % by weight) is unlimited.

Series 347-1782/05, ST-varnish, highly transparent

This product has solitary been developed for blending of highly transparent inks (like they are being used in the field of backlit digital windows. This varnish is characterized by highest transparency.

Series 347-06/Lang, ST-retarder paste

This blending paste has been developed to guarantee printing of finest details and is not useful for area printing. The addition ratio is limited to 20% by weight and it can be used instead of the binder Series 347-07 or as addition to inks that are already mixed with binder.



SUBSTRATES

PVC	PMMA (pre-tests)	PC	PET (coated)
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USE

Application	Membrane switches, front panels
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PROPERTIES, PROCESSING, DRYING AND MESH

Mesh	77-55 Y PW PET 1000 up to 150-31 Y PW PET 1000
Drying / Curing	Air / jet
Further Processing	Punching, forming, embossing, bonding/laminating

ADDITIVES

Thinner	Series 300-017	Addition Ratio	10-30 % by weight
Retarder	Series 300-018/ISO	Addition Ratio	up to 10 % by weight

VARIOUS

Delivery Conditions	1 kg / 5 kg / 25 kg
Other	-

Disclaimer

Please thoroughly read the Material Safety Data Sheet (MSDS) prior to processing. The Material safety Data Sheets according to 91/155/EWG form, contain indications of hazardous ingredients. Exposure levels and instructions for precautions when processing, handling and storing as well as first aid. The information given in the MSDS refers to the processing as described within this technical leaflet. Above data are based on laboratory tests and field experience. All therein contained statements are to the best of our knowledge without any obligation from our side and do not discharge from testing the product by yourself. In doubtful cases, you are kindly requested to either perform your own tests or refer to our technical staff. Application, use and processing of the delivered products are beyond our control and are therefore at your own risk and responsibility. Printcolor is thus free from any guarantees or liabilities. In cases of justified complaints, Printcolor can only be made liable for the counterpart of the utilized ink system. Adding not stated products or foreign / competitors products, is solely at your own risk and liberates Printcolor of any later calls; especially in cases when damages occurred and which have been caused through use of products of foreign type. This leaflet replaces all former issues. (02/2011)