

Product Data Sheet

Screen Printing Ink

SunChemical[®]
Coates Screen Inks

FX 2 SPECIAL WHITE

Solvent Based Screen Ink, 1-Component

APPLICATION

Special white FX 2 is used for printing on dyed substrates to avoid risk of bleeding of that dye (e.g. gold varnishes) if printed with a conventional solvent based screen ink.

PROPERTIES

- Special white FX 2 is a solvent based 1-component screen printing ink. FX 2 dries by evaporation of solvents.
- Special white FX 2 results in a satin-gloss to glossy finish.
- FX 2 has been formulated for indoor use.
- Note: Pre-tests to determine suitability of FX 2 are essential, as generally printers will not know which solvents dissolve the dye in the substrate. Also, adhesion tests are required on various substrates.

COLOUR SHADES - OVERVIEW

- White: FX 2 White with medium to good opacity
- Clear varnish: FX 2/70 Upon request.

CHOICE OF PIGMENTS AND LIGHT FASTNESS

Special white FX 2 contains pigments with a high light fastness. However, FX 2 is only suitable for indoor applications.

ADJUSTMENT FOR SCREEN PRINTING

- FX 2 is not supplied in a ready-to-print adjustment.
- Depending on local conditions the ink is adjusted for printing by addition of 10 to 15 % by weight thinner or retarder (stir with mixer, agitator).
- Prior to printing, the ink should be stirred well to obtain a homogeneous dispersion of all ingredients.

THINNERS / RETARDERS

For adjustment of FX 2, the following products are available:

Thinner:	■ ZE 1723	Standard thinner
Retarder:	○ ZE 1699	Retarder
	■= Preferred	○= Suitable

Depending on printing conditions, the products listed above can be mixed into the ink individually or as mixtures. Please note that depending on evaporation rate of the thinner/retarder used drying times may be longer.

Thinner/retarder should be mixed into the ink thoroughly using a mixer or agitator. In addition, ink should be stirred well prior to each processing to obtain a homogeneous dispersion of all ingredients.

ADDITIONAL AUXILIARY AGENTS

Not available.

OVERPRINTING

Generally, it is not necessary to overprint special white FX 2 with varnish. Basically, overprinting is possible with varnish FX 2/70.-

DRYING

FX 2 special white dries physically, i.e. by evaporation of solvents.

Drying times below are only approximate as drying properties depend on various factors:

- Type and amount of thinners/retarders used.
- Thickness of printed ink layer; number of overprinted ink layers.
- Rack drying or tunnel dryer.
- Temperature, air supply, speed of air stream.
- Type of substrate/material printed.

Depending on local conditions, drying time in a drying frame (rack) is approx. 8-10 minutes at room temperature (20°C). Drying time using an efficient tunnel dryer (e.g. 2 hot air and 1 cold air section) is about 60-120 seconds at a temperature of 50°C.

Note: Addition of retarders may result in much longer drying times!

SCREEN FABRIC / STENCILS

FX 2 has been formulated for printing with fabrics ranging from 77 to 140 threads/cm. Suitability for printing with coarser or finer fabrics should be determined by corresponding pre-trials.

All copy emulsions and capillary films suitable for solvent based screen inks can be used, such as our program of SunCoat or Murakami products.

CLEANING

Stencils and tools can be cleaned with our universal cleaning agents URS or URS 3.

PACK SIZE

FX 2 is delivered in 1 litre containers. Other pack sizes are available upon request.

SHELF LIFE

In closed original containers, special white FX 2 generally has a shelf life of 5 years from date of production.

For exact date of expiry, please refer to the label.

SAFETY DATA SHEETS

Read safety data sheet prior to processing

Safety data sheets comply with Regulation (EC) No. 1907/2006 (REACH), Appendix II.

CLASSIFICATION AND LABELLING

Hazard classification and labelling comply with Regulation (EC) No. 1272/2008 (CLP/GHS).

CONFORMITY

Coates Screen Inks GmbH does not use any of the substances or mixtures for the production of printing inks, which are banned according to the EUPIA (European Association of the Printing Inks Industry) exclusion policy.

Further compliance confirmations are available upon request.

ADDITIONAL INFORMATION ABOUT OUR PRODUCTS

Internet: Various technical articles are available for download on www.coates.de, section "SN-Online"

The statements in our product and safety data sheets are based on our present experiences, however they are no assurance of product properties and do not justify a contractual legal relationship. We provide these details to inform customers about our products and their possible applications. However, on account of various factors influencing processing of our products it is absolutely essential to carry out printing trials under local production conditions. Choice of individual ink types and their suitability for the intended application is the sole and entire responsibility of the user. We do not assume any liability for any problems of technical or process-related nature. Any liability shall be limited to the value of the goods delivered by us and processed by the user.

All former product data sheets are no longer valid.

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