

Topfinish

1. Description

Topfinish is an innovative range of oil based coatings for the application on straight ahead and perfecting sheetfed presses where water based coatings or UV varnishes are no option. Topfinish coatings are available with a gloss, silk, neutral and matt finish.

2. Product features

TopFinish oil-based overprint coatings:

- offer lowest level of yellowing
- are based on vegetable and mineral (non-aromatic) oils
- dry by oxidation and penetration
- can be printed with and without fountain solution
- do not require special resistant printing inks
- shall be applied via the inking unit
- are free of Bisphenol A and BPA derived resins
- are free of cobalt based drying catalysts

3. Product Suitability

3.1 Applications

TopFinish overprint coatings are intended for use on fibre based substrates. The coatings are suitable for all types and all sizes of straight ahead and perfecting sheetfed offset printing presses.

The coatings are not suitable for the following applications:

- Food packaging applications without functional barrier
- Printing on films and foils
- Waterless printing plates
- Sheetfed presses with an Anilox inking system (e.g. Heidelberg Anicolor®)

3.2 Substrates

TopFinish can be printed on the following substrates:

- Any kind of matt/silk coated paper
- Any kind of uncoated paper
- Any kind of gloss coated paper
- Any kind of coated cardboard

NB: The paper quality will influence the drying performance and the gloss of the print.



4. TopFinish Range

TopFinish Coatings are supplied as finished products.

The following table sums up the available range:

PRODUCT NAME	PRODUCT CODE	GLOSS	SILK	MATT	NEUTRAL
TOPFINISH GLOSS	TPF400	+			
TOPFINISH SILK	TPF220		+		
TOPFINISH MATT	TPF200			+	
TOPFINISH NEUTRAL *	TPF100				+
TOPFINISH NEUTRAL	TPF110				+

* mineral oil free

5. General Handling

5.1 Storage

TopFinish coatings should be stored at ambient temperature between 5°C and 35°C. Under these conditions, TopFinish coatings have a shelf life of at least 36 months in an unopened vacuum-packed tin.

Oil based coatings supplied in drums or pails should be used within 12 months after production. Drums and pails having exceeded 12 months may be fit for purpose but must be inspected before usage. Critical is the formation of skin where there is surface contact with air (oxygen). Minor appearance of skin shall be removed provided that the oil based coating underneath is skin-free. In either case, once the container is opened, the oil based coating should be worked off in a timely manner.

The polypropylene ink cartridge is not a barrier to air. Oxygen diffused in the printing ink may initiate premature drying, particularly at elevated temperatures and extended storage times. Previous experience has shown that the printing inks can be used for one year after manufacturing after being stored and transported at ambient temperature and humidity.

5.2 Waste disposal

Waste disposal should be carried out in accordance with good industrial practice, observing all the appropriate local, national and regional regulations and guidance.



6. Printing Conditions

6.1 Fount Solution

TopFinish oil-based overprint coatings are not required to run with a special fount solution. However for spot coatings Sun Chemical recommends the use of the following SunFount products to achieve optimal performance:

SunFount® 410; suitable for 5-7% IPA in normal water qualities
SunFount® 480; suitable for 3-6% IPA, to prevent roller glazing
SunFount® 455; suitable for 0-5% IPA, adapted for IPA free printing

The quality of the water and the overall printing conditions have a strong impact on the choice of fountain solution and the level of IPA required. Minimum fount settings support fast and thorough drying of the coating.

Please consult our technical services for assistance.

6.2 Printing Plates

TopFinish coatings can be run with any type of aluminium based printing plates (CtP plates, conventional positive or negative plates).

6.3 Influence of IR drier

The use of IR drier is not recommended as it will lead to increased set off in the delivery pile.

6.4 Press cleaning

After having printed with TopFinish coatings the press can be easily cleaned using standard press washes. Because of the high drying potential, TopFinish left-overs should be removed from the press as soon as printing is completed.

6.5 Coating film thickness

In order to avoid soiling of the TopFinish coatings it is recommended to apply a sufficient amount.

7. End-use safety

TopFinish coatings are intended for sheetfed offset printing.

All Sun Chemical Europe printing inks and related materials are formulated in accordance with the CEPE/EuPIA Exclusion Policy. This excludes from use all materials classified according to the CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures as carcinogenic, mutagenic or toxic for reproduction in categories 1A or 1B with hazard statements H340, H350 or H360, in addition to toxic or highly toxic materials with hazard statements H300, H301, H310, H311, H330, H331, H370 or H372. A copy of the document is available on the EuPIA website: <http://www.eupia.org>



TopFinish oil-based overprint coatings also comply with EN71/3 (suitability for toy packaging).

8. Technical Assistance / Contacts

For further information, please contact your local Sun Chemical team.

9. Disclaimer

Our Products are intended for sale to professional users. The information herein is general information designed to assist customers in determining the suitability of our products for their applications. All recommendations are made without guarantee, since the application and conditions of use are beyond our control. We recommend that customers satisfy themselves that each product meets their requirements in all respects before commencing a print run. There is no implied warranty of merchantability or fitness for purpose of the product or products described herein. In no event shall Sun Chemical be liable for damages of any nature arising out of the use or reliance upon this information. Modifications of the product for reasons of improvements might be made without further notice.