

## SUNTEC® FOILS

SunTec Foils is a high quality oxidative drying sheetfed offset ink series for 4c process printing on films, foils and other impervious materials. SunTec Foils inks are not supposed to penetrate in the substrate and are designed to dry very fast. Often, a covering White is printed prior to the colours. SunTec Foils inks are not fresh.

Printing on films and foils is a complex industrial process requiring special attention and care. The way how the sheets are printed and processed define the quality of the prints. Critical quality factors are ink adhesion, ink drying and final mechanical resistance. A test run under practical conditions is strongly advised.

Sun Chemical does not recommend the use of IR dryers when printing SunTec Foils.

The optimum application range of SunTec Foils is to achieve optimum mechanical resistance on metallic foils, plastic films and other impervious substrates. Target areas are small and medium size print jobs which use the aforesaid materials. Preferred press configurations are straight 4+ colour presses of all makes and sizes. A coating unit is not required.

PROCESS COLOURS	PRODUCT CODE	LIGHT FASTNESS ISO 12040	ALCOHOL ISO 2836	SOLVENT MIXTURE ISO 2836	ALKALI ISO 2836
SUNTEC FOILS Process Black	<b>FOP46</b>	8	+	+	+
SUNTEC FOILS Process Cyan	<b>FOP25</b>	8	+	+	+
SUNTEC FOILS Process Magenta	<b>FOP27</b>	5	+	+	-
SUNTEC FOILS Process Yellow	<b>FOP26</b>	5	+	+	+
SUNTEC FOILS Intense Magenta	<b>FOP39</b>	5	+	+	-
SUNTEC FOILS Covering White	<b>FOP45</b>				

**SunTec Foils makes offset printing of impervious substrates feasible and attractive**

**working for you.**



## SUNTEC® FOILS

### CHARACTERISTICS

Very fast conversion\* and work & turn\*  
Excellent mechanical resistance\*

Excellent lithographic stability at all press speeds  
Good gloss\*

\*Dependent on substrate

### ENVIRONMENTAL

It is Sun Chemical's policy to reduce progressively ecological impacts and resource intensity throughout the life-cycle of their products. When selecting raw materials we follow strictly the EuPIA Raw Material Exclusion List ([www.eupia.com](http://www.eupia.com)) and respect the CONEG regulation on toxic heavy metals. SunTec Foils complies with EN 71/3 (suitability for toy packaging).

### PRINT STANDARDISATION (ISO 12647:2, PSO)

Some offset printers commenced to realise print standardisation according to ISO 12647:2 in their press-rooms. The entire offset workflow is regulated comprising the incoming picture data, the dot size and shape on the printing plate and the reproduction of the picture on the print. Finally, the colour of the full-tone and the dot gain of the 4 colours are specified. By their choice of pigments and by their precise dot reproduction, SunTec Foils supports the realisation of ISO 12647:2 in an offset pressroom. SunTec Foils complies with industrial standards as ISO 2846:1 (Colour).

Sun Chemical has gained a lot of expertise in print standardisation and is an official partner of FOGRA, which is one of the certifying institutes. Please consult Sun Chemical if support in this matter is needed.

### FOUNTAIN SOLUTIONS

SunTec Foils process inks are compatible with a wide range of fountain solutions. Isopropanol (IPA) reduction or elimination is supported. Sun Chemical recommends the following ideally adapted products:

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. Please consult our technical services for assistance.

### APPLICATION INFORMATION

SunTec Foils process inks dry by oxidation. They are supplied ready for use. The use of additives is not required.

SunTec Foils is suitable for all types of offset printing plates.

SunTec Foils is not recommended for sensitive food packaging and outdoor posters.

SunTec Foils inks are optimised for printing on impervious substrates, e.g.:

Plastic films (PE, PP, PE-coated cardboard, polyester, hard PVC etc). Plastic films containing plasticisers are not suitable !

Metallic foils (laminated and varnished metallic foil, aluminium vapour coated papers, metallised papers)

Other materials (cast coated papers and cardboards, e. g. metallised Chromocartons)

### PROPERTIES

SunTec Foils inks are very rapidly drying inks. For this reason, during extended machine down times, drying of the ink on the printing plate and blanket, on the rollers and in the ink duct is to be expected. The risk of skin formation in the ink duct during longer print runs must also be considered.

Running the press at minimum dampening settings is a pre-requisite for proper functioning. Addition of approx. 15 % Isopropanol (IPA) to the fountain solution improves ink drying. Aeration promotes drying as well. Thus, the printed films/foils should not be stacked too high and should be aired as soon as possible.

Spray powder is almost always indispensable. It is extremely important to ensure that the spraying equipment gives even powder distribution. The use of a fine powder grade is recommended.

The smooth surface of films and foils and their lack of absorbency does not support the adhesion of ink compared to fibre-based substrates as paper or cardboard. For this reason, the drying, adhesion and scratch resistance of the print should be tested in a proof run before starting the proper print job.

For further detailed application advice please contact our technical services. A Material Safety Data Sheet is available on request.

**SunChemical®**  
a member of the DIC group 

Our Products are intended for sale to professional users. The information herein is general information designed to assist customers whether our products are suitable 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.