

# SolarFlex® Tube

Part of the SOLARIS® System

## 1. Description

**SolarFlex® Tube** is a range of UV flexo inks intended for Arpeco presses and a variety of narrow web applications.

## 2. Product Features\*

- Viscosity adapted for Arpeco presses.
- Very high colour intensity and excellent printability giving low dot gain and high print fidelity.
- Adhesion to a range of plastic substrates typically used for squeezable tubes.
- Low cured print odour.
- Silicone-free formulation for easier lamination and post-print finishing.
- Formulated without VOC, Benzophenone and 4-Methyl Benzophenone.

## 3. Product Suitability\*

### 3.1 Applications

**SolarFlex® Tube** inks are intended for use in the following areas:

- Printing on an Arpeco press for many applications.
- Laminated and plastic tubes found in the oral care and cosmetic markets.
- Carton board printing.
- Other paper or board applications such as tags and tickets.

**SolarFlex® Tube** inks are **not** suitable for use in the following areas:

- Uncoated Thermal papers.
- Primary food packaging or secondary food packaging unless there is an effective functional barrier.
  - Plastic packaging and bottles will not usually provide an effective barrier to migration.
  - Printers should assure themselves that use of these products on food packaging has been fully assessed for risk and the finished printed product meets all relevant regulatory requirements.
  - Typically, the use of specifically formulated Low Migration (LM) products will be required.

**SolarFlex® Tube** inks should not be used for other end uses without prior discussion with your local Sun Chemical representative.

\*Please refer to your local Sun Chemical representative for specific details.

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### 3.2 Substrates

**SolarFlex® Tube** inks are suitable for most grades of label stocks commonly used in the Narrow Web industry. Corona treatment is recommended for non-top-coated plastic substrates to ensure an optimum treatment level of 38-44 Dynes/cm but preliminary tests should always be conducted prior to producing commercial print. With significant variation between different grades of substrates, the printer should take any specific advice from the substrate manufacturer and make any necessary tests under realistic conditions before commercial printing.

### 3.3 Print Finishing

**SolarFlex® Tube** inks can be over-varnished to improve gloss, physical and chemical resistance properties and are suitable for hot foil stamping or cold-foil blocking when used in conjunction with the appropriate blockable overprint varnish or adhesive such as SLD008.

**SolarFlex® Tube** inks will accept most types of VIP (Variable Information Printing) but great care should be taken when producing print for subsequent VIP due to the wide variety of processes and materials available. Best results can often be obtained using an appropriate overprint varnish\*.

\* Please refer to your local SunChemical representative for specific details.

## 4. Safety, Health and Environment

**SolarFlex® Tube** inks should be used in accordance with normal standards of industrial hygiene. Please refer to the information provided on product labels and relevant Safety Data Sheets. For more details on handling of UV materials please refer to EuPIA's latest document – 'Guidelines for Printers on the Safe Use of Energy Curing Printing Inks and Related Products'.

### 4.1 Storage

**SolarFlex® Tube** inks are supplied in 5 Kg tamper-evident black plastic buckets with spouts. Shelf life is at least 12 months from date of manufacture in their original containers when stored between 5° and 25°C and protected from direct sunlight but may remain useable for longer periods.

### 4.2 Waste Disposal

Care should be exercised in the disposal of printing ink waste. This should be carried out in accordance with good industrial practice, observing all the appropriate local regulations and guidelines. For more specific handling advice refer to the Safety Data Sheet (SDS).

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## 5. Printing Conditions

### 5.1 Printing Viscosities

**SolarFlex® Tube** inks are supplied press-ready and should not need adjusting under normal conditions when using Arpeco presses.

### 5.2 Additives

A range of press-side additives is available for non-standard conditions or applications.

### 5.3 Wash Up

A variety of proprietary wash-up solutions are available which are suitable for use with UV inks and press components such as flexo plates and pipes. Please contact Sun Chemical technical services or your Sun Chemical representative for recommendations and advice.

### 5.4 Plates and Rollers

**SolarFlex® Tube** inks are suitable for use with UV compatible photopolymer plates commonly used in the industry. All rollers, tubes, sealants etc. must also be resistant to UV materials.

## 6. End-Use Safety / Assumptions

Acceptable technical performance of **SolarFlex® Tube** inks is dependent on:

- Control of anilox / film weight.
- Adequate curing on press to ensure that the print is dry before conversion.
- Full checks having been made to ensure the printed material meets customer specifications.

**SolarFlex® Tube** is not intended to be used in applications where low migration is an end-use requirement. There are materials within the ink formulation which have the potential to migrate under certain conditions. If a label, sleeve or tag etc. forms part of a food package, it is the responsibility of the converter and food packer to ensure that migration does not exceed any permitted regulatory limitations.

Please see [www.sunchemical.com](http://www.sunchemical.com) for further information on Sun Chemical products and services and contact your local Sun Chemical representative for specific product advice.

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	Code	Description	Lightfastness	Alkali	Alcohol
4-colour process	STB26	PROCESS YELLOW	5	+	+
	STB36	PROCESS MAGENTA	5 <sup>1</sup>	-	+
	STB25	PROCESS CYAN	7	+	+
	STB46	PROCESS BLACK	7	+	+
Standard Blend Colours	STB05	OPAQUE ORANGE	4	+	+
	STB33	RESISTANT RED	6	+	+
	STB42	RUBINE RED	5 <sup>1</sup>	-	+
	STB56	RESISTANT RHODAMINE <sup>2</sup>	7	+	+
	STB64	RESISTANT VIOLET <sup>2</sup>	6-7	+	+
	STB73	RESISTANT ROYAL BLUE	6-7	+	+
	STB65	REFLEX BLUE <sup>3</sup>	3 <sup>1</sup>	-	-
Additional Colours <sup>2</sup>	STB71	GREEN	7	+	+
	STB45	FIRST-DOWN WHITE	7	+	+
	STB48	TRANSPARENT WHITE	N/A	N/A	N/A

<sup>1</sup> Lightfastness under wet conditions, such as during external exposure is significantly worse for certain colours. Please consult our technical services for recommendation of alternative shades.

<sup>2</sup> Resistant colours are may differ slightly in shade from the equivalent non resistant colour.

<sup>3</sup> Contains dye complex (Fanal) pigment which can bleed/migrate.

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