

# SunLit<sup>®</sup> Metallics

## 1. Description

SunLit Metallics are a range of innovative metallic sheetfed offset printing inks for paper and board. SunLit Metallics are applicable for publication, commercial, packaging and label printing on straight and perfecting presses.

## 2. Product features

SunLit Metallics inks:

- are one pack press ready inks
- are available in different shades as described below
- are vegetable based and free of mineral oils
- are based on metallic pigments
- dry by penetration and oxidation
- are free of cobalt based drying catalysts

## 3. Product Suitability

### 3.1 Applications

SunLit Metallics are intended for use in paper and board offset printing. The inks are suitable for all types and all sizes of sheetfed offset printing machines.

The inks are not suitable for the following applications:

- Non-absorbent substrates
- Poster printing
- Sensitive food packaging applications
- Waterless offset printing

### 3.2 Substrates

SunLit Metallics inks can be printed on the following substrates:

- matt/silk coated paper
- gloss coated paper
- coated cardboard

NB: The paper quality will influence the drying performance and the gloss/brilliance of the metallic print. In particular uncoated substrates are critical.



### 3.3 Rub resistance

Due to the nature of the brass/aluminium pigment SunLit Metallics inks offer a medium rub resistance. This can be improved with an oil based or waterbased coating. However this will have an influence on metallic gloss and brilliance.

### 3.4 Varnishability and lamination

Printed sheets with SunLit Metallics can be finished either with an oil based overprint varnish or a water based overprint varnish.

When applying inline or offline UV coatings a suitable water based primer is mandatory. When applying a UV coating a trial under industrial conditions should be carried out prior to the production run.

Lamination should be avoided.

## 4. Colour Range

SunLit Metallics inks are supplied as finished inks.

METALLIC SHADE	PRODUCT CODE
SUNLIT METALLICS Rich Gold	<b>MT851</b>
SUNLIT METALLICS Rich Pale Gold	<b>MT852</b>
SUNLIT METALLICS Pale Gold	<b>MT853</b>
SUNLIT METALLICS Gold Pantone® 871	<b>MT871</b>
SUNLIT METALLICS Gold Pantone® 872	<b>MT872</b>
SUNLIT METALLICS Gold Pantone® 873	<b>MT873</b>
SUNLIT METALLICS Gold Pantone® 874	<b>MT874</b>
SUNLIT METALLICS Gold Pantone® 875	<b>MT875</b>
SUNLIT METALLICS Gold Pantone® 876	<b>MT876</b>
SUNLIT METALLICS Silver Pantone® 877	<b>MT877</b>
SUNLIT METALLIC SILVER	<b>MT861</b>
SUNLIT METALLIC SILVER (DARK SHADE)	<b>MT862</b>



## 5. General Handling

### 5.1 Storage

SunLit Metallics should be stored at ambient temperature between 5°C and 25°C. Under these conditions SunLit Metallics inks have a shelf life of at least 12 months in an unopened vacuum-packed tin.

### 5.2 Press returns

Ink from the duct should not be reused as the emulsified fountain solution can deteriorate the stability of the ink.

### 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

SunLit Metallics is not required to run with a special fount solution. However Sun Chemical recommends the use of SunFount products to achieve optimal performance:

SunFount<sup>®</sup> 410; suitable for 5-7% IPA in normal water qualities

SunFount<sup>®</sup> 480; suitable for 3-6% IPA, to prevent roller glazing

SunFount<sup>®</sup> 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. For SunLit Metallics the optimum pH value is between pH 5 and pH5.5. Please consult our technical services for assistance.

### 6.2 Printing Plates

SunLit Metallics can be run with any type of aluminium based printing plates (CtP plates, conventional positive or negative plates). The abrasivity of the metallic pigment can lead to shorter plate life compared to coloured inks. Baking the plate can prolong the plate life.

### 6.3 Influence of IR drier

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



#### 6.4 Print density

Depending on the press conditions and substrates we recommend a wet colour density for gold of OD 1.4 to OD 1.6. The density should be measured with the Filter for Yellow and the polarisation filter. The wet density for silver should be in the range of OD 0.9 to OD 1.1 measure with the filter for cyan and the polarisation filter.

#### 6.4 Press cleaning

After having printed with SunLit Metallics ink the press can be easily cleaned using standard press washes.

### 7. End-use safety

SunLit Metallics are vegetable based inks intended for sheetfed offset printing.

All Sun Chemical products are formulated to the latest CEPE/EuPIA guidelines. This excludes the use of carcinogenic, mutagenic and toxic for reproduction (CMR 1 and 2) or labelled (T) according to the Dangerous Substances Directive 67/548/EEC substances. Substances classified as very toxic (T+) or toxic (T) and pigments based on compounds of Antimony, Arsenic, Cadmium, Chromium (VI), Lead, Mercury, Selenium. The use of certain dyes, solvents, plasticisers and miscellaneous materials are also excluded. A copy of the document is available on the EuPIA website:

<http://www.eupia.org>

### 8. Technical Assistance / Contacts

For further information, please contact your local Sun Chemical team or visit our website on [www.sunchemical.com](http://www.sunchemical.com)

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