# **Technical Information**

# SUNLITTM DIAMOND

SunLit Diamond is based on an innovative resin/oil combination providing robust lithographic stability and optimum press performance. SunLit Diamond is fast in colour and shows very low misting on modern high speed presses. On most substrates, fast setting and rapid drying allow quick work and turn or further processing of the print work (folding, cutting, stitching etc).

SunLit Diamond is a top quality sheetfed offset ink series for 4-colour process printing. It allows printing on the widest range of paper and board with all types of sheetfed presses including 8, 10 and 12 multicolour perfecting presses. SunLit Diamond is suitable for publication and commercial printing, packaging and wet glue labels.

SunLit Diamond can be printed in-line with water-based coatings or in-line/off-line with oil-based sealers to accelerate the print shop workflow. The application of UV coatings (in-line or off-line) might require the use of a primer. When printing without in-line coating, Sun Chemical does not recommend the use of IR dryers.

Sun Chemical® is committed to the environment. An independent scientific investigation confirmed that SunLit Diamond contain 78 - 82% of renewable materials determined by the so-called C<sup>14</sup> method which is used in modern archaeology. This is a significant contribution to industrial sustainability.

PROCESS COLOURS	PRODUCT CODE	LIGHT FASTNESS ISO 12040	ALCOHOL ISO 2836	SOLVENT MIXTURE ISO 2836	ALKALI ISO 2836
SunLit Diamond Process Black	DIA46	8	-	-	+
SunLit Diamond Process Cyan	DIA25	8	+	+	+
SUNLIT DIAMOND Process Magenta	DIA27	5	+	+	-
SunLit Diamond Process Yellow	DIA26	5	+	+	+

SunLit Diamond is the optimum choice when excellent lithography and fast job workflow are in demand to enable optimum pressroom efficiency.

working for you.





# SUNLITTM DIAMOND

### **CHARACTERISTICS**

Excellent lithographic stability at all press speeds Excellent performance on long perfecting presses Compatible with all absorbent substrates Very good mechanical resistance\* Fast work and turn\* Very good stack capability\* 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.org) and respect the CONEG regulation on toxic heavy metals. SunLit Diamond is vegetable based and 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, SunLit Diamond supports the realisation of ISO 12647:2 in an offset pressroom. SunLit Diamond 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**

SunLit Diamond 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.

# **WATER-BASED OVERPRINT VARNISHES**

Sun Chemical offers a full portfolio of water-based overprint varnishes. The final choice depends on individual press conditions, the substrate used and the expectations on the print regarding visual appearance. The following products are widely used:

SunCoat 2431 gloss coating, suitable for work & turn jobs on paper and board

SunCoat 9265 matt coating, suitable for work & turn jobs on paper and board

SunCoat 9205 primer for in-line UV coating

SunCoat 9206 primer for off-line subsequent UV coating

## **APPLICATION INFORMATION**

SunLit Diamond process inks dry by absorption and oxidation. They are duct fresh and supplied ready for use. The use of additives is not required.

SunLit Diamond is suitable for all types of offset printing plates.

SunLit Diamond is not recommended for sensitive food packaging and outdoor posters or for printing on impervious substrates (films, foils).

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



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