



# TECHNICAL DATA SHEET

Date: 23.03.2020, Version: 6

Range name :

## SICURA LOW NRGY/LED – Process inks

Description :

**SICURA LOW NRGY/LED** is a high reactivity free radical system especially developed for UV sheetfed presses equipped with either the low energy UV technology (iron doped Mercury lamp) or LED UV (**L**ight **E**mitting **D**iode) dryers with wavelength output 385-395 nm.

This series is presenting excellent deinkability properties independently of the UV lamp type.

Formulation of this series is following the EuPIA exclusion Policy Guidelines

For further information, please refer to safety data sheet of the product on <https://www.siegwerk.com/en/our-responsibility/product-responsibility/safety-data-sheets.html>.

Application Fields / Market :

All types of high quality commercial printing jobs requiring out-standing image quality and excellent rub resistance. Particularly recommended for luxury magazines, covers, and any high-end jobs. The use for packaging applications is also possible depending on the substrate and on the drying equipment of the press.

Product safety:

This series is not suitable for: Food packaging, pharma or hygiene.

In case of food packaging application, please contact our technical department.

For further information, please refer to Siegwirk’s Customer Guidance: printing Inks for Food Packaging (“Know-How”) on: <https://www.siegwerk.com/en/our-responsibility/product-responsibility/customer-communications/food-packaging-safety.html>

Substrates:

All types of papers & plain boards

Adhesion on non-absorbent substrates and other resistances properties require to be primarily checked for each new application

Features - Performances:

- ⇒ **ON THE PRESS SIDE**
  - Exceptional stability of ink / water balance
  - Compatibility with all types of dampening systems using either alcohol minimizer or conventional water fountain solutions
  - Inks remain very stable on the rollers
  - No misting even on high speed presses
  - Very high reactivity
    - Reactivity is influenced by the substrate, efficiency of the lamps and reflectors, the thickness of the ink layer, colours and superposition, etc...
  - Suitable for 4+4 presses
  - Compatible with mix rollers



⇒ **ON THE PRINTING SIDE**

- These inks have successfully passed the INGEDE test n°11 for the deinkability
- Super dot sharpness
- Excellent flexibility for folding and creasing finishing operations
- Excellent rub resistance
- Over printable with Sicura Flex OPV or Offset OPV suitable for the type of dryer installed on the press. For a more appropriate offer please consult our technical department

**The range :**

**PROCESS INKS**

Colours	Reference numbers	IWS ( 1 )	Alcohol	Solvent	Alkali	Laser or UV varnishing
Process Yellow L-NRGY/LED	70-301069-4	5	5	5	5	Yes
Process Magenta L-NRGY/LED	70-802375-9	5	5	5	3	Yes
Process Cyan L-NRGY/LED	70-120994-2	8	5	5	5	Yes
Process Black L-NRGY/LED	70-900825-4	8	5	5	3	Yes
Intense Black L-NRGY/LED	70-900840-3	8	5	5	3	Yes

(\* ) These inks are compliant with ISO 2846-1

We do not recommend to use above process inks nor the complementary black for mixing system.

( 1 ) These light fastness values refer to a solid tone printing. Light fastness decreases when colour strength is reduced or if colours are intermixed

**Warning :**

- These UV inks are guaranteed for a period of 12 months after manufacture. Please check use by date indicated on the cans.
  - Storage temperatures should not exceed 20°C for weeks or 25°C for days. Higher storage temperature reduce the shelf life
  - Open containers must be kept away from light sources and be closed after usage.
- Please consult material safety data sheets (MSDS) for more information.
- We do not recommend the use of these inks for the printing of posters or other displays/jobs destined to be exposed to outdoor climatic conditions

**Auxiliary printing additives :**

When certain substrates or machine conditions imply adjustments of the ink properties, the additives should be chosen in function of this substrate and of the further processing of the printed matter.

Role	Designation	Reference numbers	Proportions
Thinner	Thinner	81-470072-0	1 to 3 %
Tack reducer	Anti-tack paste	81-470071-2	1 to 3 %
Cure booster	Photo-initiator	71-470108-3	2 to 5 %
Roller saturator	Roller saturator paste	81-470537-2	Direct on rollers

For Fountain additives and Cleaning products please contact our technical department.



**Packing size:**

✓	Plastic Tins	2.5 kg	Packaging code	1200
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This information is based on our experience and on results obtained in the laboratory, using specific processes and types of application. In view of the diversity of substrates and printing conditions, this data is communicated for information purposes only and is provided without any warranty on our part and must be authenticated by industrial tests before the products are used. Improvements are being made to our products on an ongoing basis and we therefore reserve the right to modify their composition as well as the contents of our technical data sheets. We disclaim any liability for applications for which this ink series is not foreseen.