## TECHNICAL DATA SHEET

**Date:** 27.11.2020, **Version:** 6

### Range name:

**SICURA LOW NRGY Plast – Process inks**

### Description:

**SICURA LOW NRGY Plast** is a high reactivity free radical system especially developed for UV sheetfed presses equipped with the low energy/LED UV technology destined to be printed on non-absorbent substrates.


### Application Fields / Market:

All types of commercial printing jobs in sheetfed UV application. 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.


### Substrates:

All types of papers, plain boards and non-absorbent substrates.

Adhesion on non-absorbent substrates to be primarily checked for each new application. For high mechanical resistance the application of an overprint varnish is recommended.

### 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…
- Compatible with mix rollers

**ON THE PRINTING SIDE**

- Very good adhesion on a wide range of substrates
- Excellent flexibility for folding
- Good rub resistance
- Super dot sharpness
- 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:

<table>
<thead>
<tr>
<th>Colours</th>
<th>Reference numbers</th>
<th>IWS (1)</th>
<th>Alcohol</th>
<th>Solvent</th>
<th>Alkali</th>
<th>Laser or UV varnishing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process Yellow ISO* 2846-1</td>
<td>70-300804-5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>Yes</td>
</tr>
<tr>
<td>Process Magenta ISO* 2846-1</td>
<td>70-801797-5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>Yes</td>
</tr>
<tr>
<td>Process Cyan ISO* 2846-1</td>
<td>70-120599-9</td>
<td>8</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>Yes</td>
</tr>
<tr>
<td>Process Black ISO* 2846-1</td>
<td>70-900645-6</td>
<td>8</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>Yes</td>
</tr>
<tr>
<td>Fast Yellow</td>
<td>71-311238-1</td>
<td>7</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>Yes</td>
</tr>
<tr>
<td>Fast Rubine</td>
<td>71-823354-7</td>
<td>7</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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

We do not recommend to use above process inks nor the complementary black for mixing system. For spot colours please address your demand to your usual Siegwerk contact.

(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.

<table>
<thead>
<tr>
<th>Role</th>
<th>Designation</th>
<th>Reference numbers</th>
<th>Proportions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thinner</td>
<td>Thinner</td>
<td>81-470072-0</td>
<td>1 to 3 %</td>
</tr>
<tr>
<td>Tack reducer</td>
<td>Anti-tack paste</td>
<td>81-470071-2</td>
<td>1 to 3 %</td>
</tr>
<tr>
<td>Cure booster</td>
<td>Photo-initiator</td>
<td>71-470108-3</td>
<td>2 to 5 %</td>
</tr>
<tr>
<td>Roller saturator</td>
<td>Roller saturator paste</td>
<td>81-470537-2</td>
<td>Direct on rollers</td>
</tr>
</tbody>
</table>

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

Packing size:

- Plastic can 2.5 kg Packaging code 1200
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.