TECHNICAL DATA SHEET

Date: 13.10.2021, Version: 3

Range name:

SICURA Low NRGY LED Metallic

Description:

SICURA LOW NRGY LED Metallic is a high reactivity free radical system of metallic inks especially developed for UV sheetfed presses equipped with either the low energy UV technology (iron doped Mercury lamp) or LED UV (Light Emitting Diode) dryers with wavelength output 385-395 nm.

Formulation of this series is following the EuPIA exclusion Policy Guidelines

Application Fields / Market:

All types of commercial printing and packaging 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

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 dampering 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**
  - Bright and metallic results
  - Excellent flexibility for folding and creasing finishing operations
  - Excellent rub resistance
  - Over printable with Sicura Flex Low NRGY or Sicura Offset Low NRGY OPV’s: see separate TDS
Warning:

- These UV inks are guaranteed for a period of 9 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>
</tbody>
</table>

For fountain additives please contact our technical department.

The range:

<table>
<thead>
<tr>
<th>Colours</th>
<th>Reference numbers</th>
<th>Light (1)</th>
<th>Alcohol</th>
<th>Solvent</th>
<th>Alkali</th>
</tr>
</thead>
<tbody>
<tr>
<td>L- NRGY / LED Rich Gold – PMS 871</td>
<td>71-400081-7</td>
<td>7</td>
<td>2</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>L- NRGY / LED Rich Pale Gold – PMS 873</td>
<td>71-400082-5</td>
<td>7</td>
<td>2</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>L- NRGY / LED Pale Gold – PMS 875</td>
<td>71-400086-6</td>
<td>7</td>
<td>2</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>L- NRGY / LED Silver – PMS 877</td>
<td>71-400091-6</td>
<td>7</td>
<td>2</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

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

Packing size:

✓ Metallic pastes : Plastic can 1.0 kg Packaging code 1821

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.