# Technical Datasheet

**Product Name**

SICURA Nutriflex Metal 369 free

## 1. Description / Application

High-quality, brilliant UV-curing metallic inks suitable for label applications in flexo printing. This series is BPA free.

## 2. Product Safety

### Intended Use

Food packaging, pharma, or hygiene: **YES**

**Only for food packaging inks**

These inks are only suitable for use on the non-food-contact side of food packaging, provided that they are applied using the relevant Good Manufacturing Practices (a system for ensuring that products are consistently produced and controlled according to quality standards) and according to the guidelines in this Technical Data Sheet.

The printer, converter and the packer/filler each have a responsibility to ensure that the finished printed article is fit for the intended purpose(s) and that the ink and coating components do not migrate into the food at levels that exceed legal, regulatory and industry defined requirements.

Please refer to Siegwerk’s “Statement of Composition” for further regulatory information. In case of specific applications, please contact your technical application service.


## 3. Properties / Substrates

### Properties

- high opacity

### Substrates

Adhesion, scratch and scuff resistance, water resistance (wet scratch and wet scuff resistance) as well as resistance to cosmetics, shampoos, alcohol and cleaning agents are (measured on standard requirements) obtained on following substrates:

- In-line Corona-treated polyethylene, with a surface tension of at least 40 - 45 mN/m.
- In-line Corona-treated polypropylene, with a surface tension of at least 42 - 45 mN/m.
- Varnished / primered polyethylene and polypropylene.
- Coated and uncoated papers and boards.

Other substrates after proper technical evaluation.

### Filling goods resistance

It is always recommended to approve the resistance against filling goods.

In case of doubt, please contact in time our technical department.
4. Printing and processing instructions

Anilox rollers

10 - 12 cm³/m² with 100 - 120 l/cm

This information is only a recommendation. In order to achieve an optimal result, please carry out some tests.

Guidelines for use

Before the print job is started, new materials must be checked for compatibility with the inks of this series or with the planned ink-/overprinting varnish combination, even if their suitability on a comparable type of the same substrate group is proved.

The test prints, especially on self-adhesive labels, have to be examined after die-punching (in particular at the edges), for adhesion, resistance to scratching and water (resistance to wet scratching and scuffing), adhesion and scratch resistance after heat-sealing, resistance of the printed ink to the packaging contents and other application-specific requirements.

Due to the post-curing process, these properties may change during the first 24 hours after printing. Therefore please make a re-check after one day.

Consequently, for every new job in which printing is done on a known material, but with untested ink and printing combinations, the aforementioned tests have to be carried out as well.

Stir up well each ink before use. Gold and silver inks show sedimentation of essential components during storage. Please stir up the inks carefully, since strong shear forces can damage the metallic pigments and thus worsen the metallic effect.

Do not handle products without having consulted the corresponding safety data sheets. We supply them together with the first shipment to your safety manager.

Cleaning

The inks can be removed from tools by using methoxypropanol. Reactive UV-thinners are not suitable for cleaning.

5. Shelf life

The inks of this series have under normal conditions a shelf life of at least 4 months. Within this period the products are usable in conformity with the indications of this data sheet.

Normal conditions mean:
- Storage in firmly closed, not yet tapped containers.
- Temperatures not exceeding 20°C for weeks or 25°C for days.
- Do not expose open containers to direct sunlight or strong light sources.
## 6. Product list

<table>
<thead>
<tr>
<th>Product name</th>
<th>Product code</th>
<th>Lightfastness Woolscale DIN 16525</th>
<th>Alkali-/soap resistance DIN 16524</th>
<th>Alcohol resistance DIN 16524</th>
<th>Solvent resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutriflex Rich Gold E03</td>
<td>81-404671-0.1825</td>
<td>7</td>
<td>2</td>
<td>5</td>
<td>4</td>
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<td>Nutriflex Rich-Pale Gold E03</td>
<td>81-404672-8.1825</td>
<td>7</td>
<td>2</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Nutriflex Silver E03*</td>
<td>85-400371-2.2730</td>
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<td>2</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

### Light Resistance

The light fastness values refer to a solid tone printing. Light fastness decreases when colour strength is reduced or if colours are intermixed. This applies also to other resistances mentioned in the product list.

- Silver E03 with lower viscosity and improved ink transfer