# Technical Information

11.P.022 | Solvent-based Liquid Systems | Ink series, Process Inks

## Gecko® Tobacco

Solvent based printing inks for Cigarette packaging printing

### Description

A full range of plurisolvent, nitrocellulose based highly pigmented printing inks designed for printing carton boxes, soft packs, bundle paper and inner-frames. Ink formulations meet the requirements of the tobacco industry. Ingredients are listed and evaluated according to the relevant regulations, e.g. BfR IX, 2002/72 EEC, Synoptic Document. Basic formulations are approved by leading cigarette manufacturers.

### Printing Process

Gravure and flexographic printing.

### Applications

Surface printing.

Suitable for printing of tobacco packaging.

**Substrates:** Paper, coated paper, primed metalized paper, primed aluminium

### Properties

| | | | |
|---|---|---|---|
| Ink adhesion | 4 - 5 | Rub resistance | 4 |
| Heat-resistance | 160° C – 180 ° C | Light fastness (BWS) | ≥ 5 |

**Rating scale** (1 to 5 based on Gecko product range) 1= worst value, 5= best value

**Note:** All technical properties are a guideline only and depend on pigment choice and final application. For details about exact test methods which are the basis for info about fastness properties given above please refer to the general test method overview.

### Print viscosity

| **Diluents** | **Flexographic**<br>20 – 25 s DIN 4 | | **Gravure**<br>15 – 20 s DIN 4 | |
|---|---|---|---|---|
| **Slow** | n-Propanol/n-Propyl Acetate | 90:10 | n-Propanol/n-Propyl Acetate | 75:25 |
| **Standard** | Ethanol/Ethyl Acetate | 90:10 | Ethanol/Ethyl Acetate | 75:25 |
| **Fast** | | | Ethanol/Ethyl Acetate | 50:50 |
| **Retarder** | Ethoxy Propanol | | Ethoxy Propanol (*) | |

(*) Ethoxy Propanol can be subjected to customer restrictions. Please contact **huber**group technical service for further details.

### Auxiliaries

**Metallics:** A full range of Gecko imitation gold and silver inks is available.

**Additives:** For Solvents and retarders see above. For printing on films or aluminium, appropriate additives and primers are available.

**Lacquers:** The application of an overprint lacquer is always required. For such purpose, a wide range of lacquers is available.

## Gecko Tobacco inks from Concentrates

With mixing stations or other equipment, it is possible to produce ready-made Inks of the Gecko Tobacco Series using the concentrates of the Gecko Base Series and the appropriate System Additive Gecko Tobacco (00GC307035).

For this operation, it is required a mixing ratio of:

- 20% of System Additive GTOB (00GC307035)
- 60% of Gecko Base products (Colour Concentrates and NC varnish 00GB274057).
- 20% of free solvent

No warranties can be given if products from other manufacturers are mixed with **huber**group products.

Depending on end-customer requirements, only a limited selection of Gecko Base concentrates is available for formulating Gecko Tobacco inks. In addition, some widely used diluting solvents (e.g. Ethoxypropanol) can be subjected to customer restrictions. Please contact **huber**group technical service for further details.

## Instructions for the use of printing inks for the production of primary food packaging

For information on the use of printing inks, varnishes and additives for the manufacture of food packaging please refer to the respective „**Statement of Composition**". This information is provided to allow the calculation of possible levels of migration of evaluated substances in a worst case situation.

Migration tests at **huber**group laboratories with printed samples made from commercially available OPP film (film thickness: 35 u. printed wet ink: 6 g/m$^2$, with 95 % ethanol as the food simulant) and PE film (film thickness: 50 u, printed wet ink: 6 g/m$^2$, with 95 % ethanol as the food simulant) showed no migration of substances above legal limits. Based on the results of these migration tests, we expect that the printed inks enable the final printed products to comply with the legal requirements for packaging for all kinds of foodstuff.

The manufacturer of the finished article and the filler have the legal responsibility to prove by appropriate migration testing that it is fit for its intended purpose.

In order to maintain low residual solvents concentration in the printed film, the printer must ensure sufficient drying of the product, especially when retarders have been added. Residual solvent content must be regularly monitored.

The products must not be used in the manufacture of packaging where the printed ink layer is intended to come into contact with foodstuff (direct food contact).

There are restrictions for the use of printing inks for applications where temperatures above 100 °C for extended periods of time are applied. For details, please see document "Food Packaging Inks for High Temperature Applications".

## Health & Safety

The material safety data sheets contain all relevant information for the generation of appropriate internal plant instructions. The user is responsible for all local legislation requirements.

## Ink Handling

Please refer to General Guidelines for handling inks for flexible packaging.

## Storage Conditions

Store the material in the original packaging at a temperature not below 5°C and not in direct contact with sunlight.