

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. For more information on this point, please refer to the Technical Information "Gecko Tobacco Additives" (11A040)
- 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 **hubergroup** 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 **hubergroup** Tobacco Technical Service (Tobacco-Team-hgd@hubergroup.com) 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 **hubergroup** laboratories with printed samples made from commercially available OPP film (film thickness: 35 u, printed wet ink: 6 g/m², with 95 % ethanol as the food simulant) and PE film (film thickness: 50 u, printed wet ink: 6 g/m², 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.

It is recommended to stir up well before the use any ink, especially products like metallic inks and pearlescent or matt inks and varnishes.

Storage Conditions

Store the material in the original packaging at a temperature not below 5°C and not in direct contact with sunlight. Bear in mind the fact that higher temperatures will lead to a decrease in viscosity.

Shelf Life

Gecko Tobacco inks prepared with monopigmented Gecko Base have a shelf life of 24 months, in line with what is indicated in the General Guidelines for handling inks for flexible packaging.

Gecko tobacco inks containing silver-based metallic pigment and NC-based components (e.g. Systemadditive, Varnish, Gecko Base) have a shelf life of 6 months, in line with what is indicated in the General Guidelines for handling inks for flexible packaging.

Gecko tobacco inks containing bronze-based metallic pigment and NC-based components (e.g. Systemadditive, Varnish, Gecko Base) have a shelf life of 3 months. We strongly recommend to plan the order of this kind of inks individually per specific production campaigns, rather than keeping excessive stocks.

Metallic Gecko tobacco acrylic inks (non NC-Based) have a shelf life of 12 months.

Contact addresses for advice and further information can be found under www.hubergroup.com

Due to the many variables in materials for printing, design construction, processing conditions and test criteria, this Technical Data Sheet can only be of an advisory nature. Our data reflect the latest state of our knowledge and are based on the characteristics established in the laboratory and on practical experience. Because there are many factors under the control of the user which may affect processing or application/use, it is necessary for the user to carry out appropriate tests to determine whether the product(s) is technically and safely suitable for the particular purpose, prior to use. **hubergroup** disclaims any liability for applications for which this ink series is not foreseen. No warranties of any kind, either expressed or implied, are made regarding the products here described. The English version is the master document, on which to refer for any translations.