



Gecko® Silver and Polychromatic Inks

Solvent based printing inks for flexible packaging

Description

A range of NC-based Silver and polychromatic inks designed to offer a high quality metallic effect of various applications for flexible packaging solutions.

Printing Process

Flexo and gravure printing.

Applications

Surface and Lamination Reverse Printing

Suitable for food and beverage flexible packaging.

Depending on exact application, Gecko NC Silver inks are prepared on Standard Gecko Ink Series! Please refer to appropriate Technical Information of used Gecko ink series. There you find further information concerning suitable substrates, fastness properties, dilutions etc.

Available Silver Types

Silver portfolio of hubergroup offers wide range of different types. For detailed information and availability, please contact Technical Service of hubergroup.

Suitable Concentrates

For color shade corrections, please use reinforced Gecko Base concentrates we use in several NC-Silver formulation. Before using other Gecko Base concentrates, please consult our technical field service department.

Notes

The special combination of aluminium based silver pigments and Gecko BASE pigments provide superior printability as well as excellent visual appearance of the printed ink layer. However, combination of certain pigments can lead to chemical reactions like nitrous gassing which harms human organism, especially at temperatures above 50°C.

As an indication, even under favourable storage conditions in a cool and well-ventilated environment, shelf life is not expected to exceed a period of 6 months. We are not able to provide any guarantee for ink shelf life. We strongly recommend ordering the inks individually per production run rather than keeping excessive stocks.

The metallic pigment tends to settle. An in-can sedimentation is perfectly normal. Therefore, it is mandatory to stir the inks well prior to transferring them to the ink reservoir. During production, the ink also needs to be stirred or agitated adequately to guarantee a homogeneous dispersion and prevent pigment sedimentation.

Before starting commercial print run, we recommend to check adhesion, gloss, blocking and fastness properties.

We recommend cleaning cylinder or anilox intensively immediately after stopping press, because dried ink or silver pigments can harden in cells and disturb printing process.

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/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 are applied for extended periods. For details, please see document "Food Packaging Inks for High Temperature Applications".

Disposal

For proper disposal, please consult your local disposal company.

Health & Safety

The material safety data sheets contain all relevant information for the generation of appropriate internal plant instructions. The user is responsible to fulfill 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 between 5°C and 25° and not in direct contact with sunlight. Bear in mind the fact that higher temperatures will lead to a decrease in viscosity.

Shelf Life

Nitrocellulose-based Gecko inks containing silver pigments have a shelf life of 6 months, in line with what is indicated in the General Guidelines for handling inks for flexible packaging. We strongly recommend ordering this kind of inks individually per specific production campaigns, rather than keeping excessive stocks.

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

Due to the many variables in materias 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.