Technical Information

Packaging printing | Gravure Printing / Flexo printing

Gecko® Frontal Matt

Solvent based printing inks for flexible packaging

Standard surface printing

Description

A full colour range of pigmented nitrocellulose printing inks designed for surface printed applications on flexible films, supplied as finished products for matt surface effect, or as mono pigmented components for use in a mixing station.

Applications

Flexible packaging for food, bottle labels, flower wrappers, carrier bags and beverage products printed on polyethylene, paper and polypropylene films.

Print Process

Surface print Flexographic and Rotogravure.

Properties

Ink adhesion	4
Heat resistance	160 – 180 °C

Rating scale (1 to 5 based on Gecko product range) 1 = worst value, 5 = best value
Note: All properties are a guideline only and must always be tested on the specific application.

Substrates: LDPE, HDPE, Coex OPP, CPP, Paper

Print viscosity

Diluents	Flexographic 20-25 sec. DIN 4		Gravure 13 – 18 s DIN 4	
Slow	n-Propanol/n-Propyl Acetate	9:1	n-Propanol/n-Propyl Acetate	3:1
Standard	Ethanol/Ethyl Acetate	9:1	Ethanol/Ethyl Acetate	3:1
			Ethanol/Ethyl Acetate	1:1
Retarder	Ethoxy Propanol		Ethoxy Propanol	

Auxiliaries

Additives Gecko Frontal Matt will give adhesion when printing directly on OPP and PE films

Process Inks A range of slow drying flexo half-tone process colours are available. **The reducing medium / Extender or Diluent Varnish can be used also as overprint varnish.**

Custom formulation of Gecko Frontal Matt inks

With mixing stations or other equipment, it is possible to produce ready-made Inks of the Gecko Frontal Matt Series using the concentrates of the Gecko Base Series and the appropriate System additive Gecko Frontal Matt.
For this operation, it is required a mixing ratio of:

60% of System additive GFM
40% of Gecko Base or concentrate.

It is not possible to mix products from other manufacturers with hubergroup products

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

For information on the use of printing inks 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 µ. printed weight: 6 g/m2, with 95 % ethanol as the food simulant) and PE film (film thickness: 50 µ, printed weight: 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 inks, especially when retarders have been added. Residual solvent content must be regularly monitored.

The inks 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 120 °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

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