Technical Information

11.C.041 | Solvent-based Liquid Systems | Coatings, Lacquers, Varnishes, Primers





Gecko® Overprint Varnish 18056 Label

Solvent based overprint varnish for flexible packaging. 70GL327915

Description

A plurisolvent-, NC-based overprint varnish for surface printing, formulated to offer high slip (e.g. low COF values) when printed on paper and a wide range flexible films in combination with Gecko Frontal whites and colours.

Printing process

Flexographic and Gravure printing.

Applications

Surface printing.

Suitable for food and beverage packaging.

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

Minimum surface LDPE, HDPE, Coex OPP, CPP: 38 mN/m (mN/m = dynes/cm)

tension:

Properties

Dry content 70GL327915	21% ± 2	Viscosity (DIN4)	22 – 26 s
Adhesion	5	Water resistance	5
Rub resistance	5	Deep freeze resistance	5
Scratch resistance	4	Vegetable oils resistance	5
Heat-resistance	180° C	C.O.F (dynamic)	0,22 - 0,24
Gloss	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 final application. COF value will depend on specific printing conditions, such as printing substrate, ink system and lacquer coat weight. Usually final COF value will be reached after several days only. 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.

Printing viscosity

Diluents	Flexographic printing 20 – 25 s DIN 4		Gravure Printing 13 – 15 s DIN 4	
Slow	n-Propanol/n-Propyl Acetate	90:10 to70:30	Ethanol/Ethylacetate	75:25
Standard	Ethanol/Ethylacetate	90:10 to70:30	Ethanol/Ethylacetate	30:70
Fast			Ethylacetate	100%
Retarder	Ethoxypropanol	Max 5%	Ethoxypropanol	Max 3%

Auxiliaries

Additives In general, use of additives is not needed

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: $35 \, \text{u.}$ printed wet ink: $6 \, \text{g/m}^2$, with $95 \, \%$ ethanol as the food simulant) and PE film (film thickness: $50 \, \text{u.}$ printed wet ink: $6 \, \text{g/m}^2$, 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 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 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.