



Gecko[®] 2K PAPER TOUCH OVERPRINT MATT VARNISH

70GLR527C4

Solvent based overprint varnish for flexible packaging.

Description

An Ethylacetate, NC-based 2-component matt varnish designed for a wide range of applications, with low odour and low solvent retention. This product provides outstanding chemical and mechanical resistance, and a special tactile paper touch effect.

Printing process

Gravure and Flexographic printing.

Applications

Surface printing.

Suitable for food and beverage packaging.

Substrates: PE, BOPP, Coex OPP, Acrylic OPP*, chem PET.
* Applicability on acrylic coated PP has to be industrially tested properly in relation to potential blocking risk.

Minimum surface tension: PE, BOPP, Coex OPP: 38 mN/m.

Hardener Hardener 2K (70GHR955B4).

Curing conditions This product can be used only in combination with the hardener 70GHR955B4, with the following ratio: 100 parts of varnish, 40 parts of hardener (Temp > 10°C).
The varnish becomes tacky-free with the usual timing of the printing process. The below mentioned fastness properties are normally achieved after 7 days at room temperature.

Properties

Dry content 70GLR527C4	39% ± 1	Dry content Hardener (70GHR955B4)	47% ± 1
Adhesion	5	Water resistance	5
Rub resistance	5	Deep freeze resistance	5
Scratch resistance	5	Vegetable oil resistance	5
Heat-resistance	200° C		

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. 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 FCB4		Gravure Printing 18 – 23 s FCB4	
Slow	Ethyl Acetate/n-Propyl Acetate	50:50	Ethyl Acetate/n-Propyl Acetate	80:20
Standard	Ethyl Acetate/n-Propyl Acetate	80:20	Ethyl Acetate	100
Fast				
Retarder	Methoxy Propyl Acetate	5% max	Methoxy Propyl Acetate	3% max

Notes

Diluents	All solvents and equipment must be water and alcohol free in order to prevent non-curing of the 2 component reaction.
Mixing	This product must be mixed with the hardener before the dilution. After the preparation, the 2-component mixture must be used within 24 hours.
Printing	This product can only be used for flexographic printing when rubber or ethyl acetate resistant photopolymer printing plates are used.
Final effect	<p>In order to achieve an adequate paper touch effect an adequate selection of the gravure cylinder or anilox rolled should be made and the following parameters need to be monitored carefully:</p> <p>Viscosity: Please follow the viscosity recommendations stated above. Even small variations in viscosity may have a significant influence on the haptic properties</p> <p>Based on our experience, for flexographic printing, we recommend anilox configurations with 50 l/cm and volume 20 cm³/m² (traditional). For Gravure printing, good results can be achieved using a cylinder with 40 lines/ 80 μ engraving (better if laser autotypic).</p> <p>The final requested paper effect is normally achieved applying a quantity not less than 4 g/m² (solids).</p>

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.

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.

Contact addresses for advice and further information can be found under www.hubergroup.com
This Technical information sheet reflects the current state of our knowledge. It is designed 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.