

Technical Information

Solvent-based Liquid Systems | Opaque White Inks



Gecko[®] Xtreme White

Solvent based printing inks for flexible packaging
Lamination Printing

Description

A universal lamination white supplied as finished product for use in combination with Gecko[®] Bond Top and Gecko[®] Bond Star ink series. Gecko[®] Xtreme White offers the best possible bond strength level and extends application range of Gecko[®] Bond ink series to all typical substrates.

Printing Process

Flexographic and Gravure printing.

Applications

Lamination Reverse Printing.

Suitable for all typical reverse printed lamination applications when printing on films of the range OPP, PET chem., OPA and corona-treated PET. Produces in all cases superior bond strength values compared to standard Top and Star lamination whites.

Gecko Bond Star: When printing on BOPA or PET corona the use of Xtreme White is recommended.

Note: Xtreme White must not be contaminated or mixed with other ink series.

Substrates: Coex OPP, Acrylic OPP, PET chem., PET corona*, BOPA
It is highly recommended to work with PET corona qualities having a surface tension of at least 52 dyne.

Minimum surface tension: Coex OPP, BOPP : 38 mN/m. BOPA: 48 mN/m
Corona Pet: 52 mN/m (mN/m = dynes/cm)

Secondary Web Coex OPP, PE, PET chem., Alu/PE, metalized films

Properties

Adhesion	5
Lamination bond	Bonding values depend on substrate quality as well as adhesive type and solids applied.

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 pigment choice and 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 13 – 15 s FCB4	%
Standard	n-Propanol/n-Propyl Acetate	90:10 to 70:30	Ethyl acetate /n-Propyl acetate/ n-Propanol	35:50:15
Fast	Ethanol/Ethyl Acetate	90:10 to 70:30	Ethyl Acetate	100
Retarder	Ethoxy Propanol		Ethoxy Propanol	

Auxiliaries

Additives Gecko® Xtreme White gives good adhesion on all films. Addition of any other additive types should be avoided.

2% hardener is recommended with few selected grades of solvent less adhesive and 2 – 3% hardener is recommended for Extrusion lamination. Please consult tech support for Hardener

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 f or 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

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.