



Gecko® Xtreme Lamination White

Solvent based printing inks for flexible packaging

Universal lamination white

77GW405334

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 Lamination White offers the best possible bond strength level and extends application range of Gecko Bond ink series to all typical substrates. Gecko Xtreme Lamination White is indicated for high temperature applications, such as steam sterilization, however a preliminary test for the final evaluation of the required performances, depending on the substrates and adhesives used, is strongly recommended before proceeding with the industrial production.

Printing process

Flexographic and gravure printing for lamination.

Applications

Reverse Print

Suitable for food and beverage packaging printing.

Substrates: LDPE, HDPE, Coex OPP, BOPP, Acrylic OPP, chemPET, Corona PET, BOPA.

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


Association with GBT series To be used in combination with Gecko Bond Top when printed film is chemPET. When printing on polyolefins (such as OPP or PE), normal Gecko Bond Top White gives sufficient bond strength, but Xtreme Lamination White raises the overall bond strength level.

Association with GBS NP series When printing on BOPA or PET corona the use of Xtreme Lamination White is recommended

High performance lamination Using some solvent-less adhesives normally related to general purpose and high-speed applications, a penetration of the adhesive into the white layer has been noticed by an initial aesthetic effect. This is caused by the low molecular weight of PU used in these adhesives.

Normally, in case of proper converting application, this effect disappears when the curing of the adhesive is completed. The customer nevertheless has to perform a preliminary industrial test in order to fully evaluate the final effect. Our Technical Support team is available for any further suggestion.

Properties

Adhesion		Dry content	41% ± 2
Viscosity (DIN 4)	20 – 30 s		
Lamination bond	Exact values are dependent on substrate quality as well as adhesive type and film weight applied.		

■ = positive rating point on a scale from zero to max. Ten points for highest value / best suitability

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.

Auxiliaries

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

Additives The addition of any additive should be avoided. Gecko Xtreme Lamination White gives good adhesion on all films. In some cases (such as poorly treated OPP) initial adhesion may not be fully given but will be reached after a few hours. Addition of adhesion promoter is therefore not necessary.

Print viscosity

Diluents	Flexographic 18 – 22 s DIN 4		Gravure 13 – 15 s DIN 4	
Slow	n-Propanol/n-Propyl Acetate	90:10	n-Propanol/n-Propyl Acetate	50:50
Standard	Ethanol/Ethyl Acetate	70:30 to 90:10	Ethanol/Ethyl Acetate	50:50
Retarder	Ethoxy Propanol		Ethoxy Propanol	

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).

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 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.