

LAMINATION INK RANGE

TECHNICAL DATA SHEET

GENERAL:

LAMINATION INKS are solvent-based ink designed for flexographic printing onto a variety of the most commonly used substrates. The ink exhibits good off-press adhesion to most films (OPP adhesion after 24hrs) and good lamination bonds of the printed web to a polyolefin secondary web with both solvent based and solvent-free adhesives. Lamination Inks are available as finished inks or as a base scheme.

PRODUCT FEATURES:

- Good lamination bonds on various substrates at 100% and 200% coverage.
- Excellent printability.
- Low levels of retained solvent when printed.
- Reducible with standard press-side thinners and solvents.
- Excellent compatibility with some of Inktech's other ink systems (Nitrocellulose and Polyurethane based)

PRODUCT BENEFITS:

- Highly pigmented.
- Clean printing.
- Reduced press set-up times.
- Excellent storage stability.

PRODUCT SUITABILITY:

LAMINATION inks are suitable for the following substrate combinations when used with MULTI-LAM WHITE.

Primary web Secondary web

Chemically treated PET Polyethylene

AlOx Coated PET Polyethylene

PVdC coated PET Polyethylene

Treated OPP Metallised OPP

Treated OPP Polyethylene



LAMINATION ADHESIVES:

The printed films should be laminated with an adhesive specifically designed for the application. For example, Pure-Flex 946/C45 from AkzoNobel. The actual bond strengths achieved will depend greatly on the choice of substrate and applied film weights of both inks and adhesive. Therefore, it is recommended that rigorous tests are carried out before commencing any commercial trials. Inktech can provide assistance to confirm suitability however it is recommended that all ink / substrate / adhesive combinations are tested and are considered fit for purpose both before starting and during each print-run. The laminates should be allowed to cure as per recommendations by the adhesive manufacturer.

GENERAL HANDLING AND STORAGE:

LAMINATION inks are classed as highly flammable. Suitable precautions should be observed to avoid ignition sources.

Temperature of storage: from 5°C to 35°C Shelf life: 12 months (under above conditions)

PRINTING CONDITIONS:

Printing viscosities

Inks must be thoroughly stirred and homogeneous before reducing with solvent. The optimum printing viscosity depends on press and running conditions. Good results have been achieved with LAMINATION inks at the following viscosities:

• Flexo: 20 - 28 sec (Zahn cup # 2)

Reducing solvents

Fast: TSDA / Ethyl Acetate MIX 80:20
Normal: TSDA / N.P. Acetate MIX 80:20

• Retarder: Ethoxypropanol or Dowanol

Wash up solvents

Standard wash up solvents can be used e.g. Alcohol / Ester blends.

Cylinders / Plates

LAMINATION inks are suitable for all types of anilox and cylinders (both chemical and mechanically engraved) and most commercially available standard plate types.

END-USE PRECAUTIONS:

Acceptable technical performance of LAMINATION ink is dependent on control of industry standard variables, some of which are:

- Control of film weight (inks and adhesives)
- Adequate drying on press
- Correct laminate structure
- Control of any migratable substances within the print, film or adhesives
- Suitable adhesive used in accordance with supplier recommendations



Choice and control of film weight, drying conditions, substrate and adhesives are technical requirements for which the Inktech Technical and Technical Sales team can provide assistance in the form of suggestions or support.

Food Packaging: It is the ultimate responsibility of the food packaging supply chain to ensure packaged food is safe. With regard to potential migration of substances into food from the printed packaging, it is the responsibility of the printer/converter and food packager to ensure that no such migration occurs beyond permitted regulatory levels.

To fulfill its responsibility within the supply chain Inktech will provide details to the customer of potential migratable components, where present in its inks, through the preparation and communication of a 'Statement of Composition' (available on request).

DISCLAIMERS:

LAMINATION inks are not intended for direct food contact applications. The list of applications, substrates and processes provided in this document is not exhaustive. Please contact Inktech's technical department for full evaluation of your application or process.

The performance of the product and its suitability for the customers' purpose depend on the particular conditions of use and materials being printed. Therefore, any statement provided in this document should not be construed as providing a guarantee of performance in a specific application area. Inktech always recommends that customers carry out a full evaluation of performance and safety-in-use prior to using our products in a commercial application.