

Starflex

Membrane switches market
High flexibility, suitable for embossing

APPLICATIONS

STARFLEX is a ready to use UV ink for semi flexible PC, UV coated PET sheets.

SUBSTRATES

- Semi-flexible polycarbonates
- Coated PET sheets

BENEFITS

Specially designed for membrane switch markets, it will give excellent results on all sorts of applications. Its outstanding flexibility allows cutting in printed areas and embossing. Highly intense and opaque color will provide excellent surface aspect on transparent substrates.

INK ADHESION

Given the diversity of these materials on the market, it is necessary to conduct full tests before printing. Substrates surface tension should be greater than 38 dynes/cm.

Always make sure that the substrate is at room temperature and clean of any anti-static or slip additives since these could influence ink's adhesion properties.

STARFLEX is a ready to use ink.

However, in order to obtain best possible adhesion on all substrates, adding 10 to 20% of base 095 in the ink before printing can be helpful.

INTERCOAT ADHESION

For optimum adherence the colours should be printed in line. If not, do not allow more than 24 hours between each coat.

Pay attention to the storage conditions: no dust remains between the 2 inks layers.

The addition of some hardener, cure promoter or anti scratch agent will damage Intercoat adhesion properties.

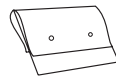
ASPECT

Glossy



SCREEN MESH

Mesh 140 to 165 (threads/cm)



SQUEEGEES

Recommended with this ink: single, double or triple durometer polyurethane blades with hardness between 85 and 75 shore



DRYING/CURING

UV curing ink. Optimal cure performance of 150 and 250 mJ/cm² is generally achieved with a UV curing unit of one or two 120 W/cm lamps at belt speed of 10 to 20 m/min (32 to 65 feet/min).



CLEANING

Solvents H, ECO N or 93801

THINNING

- STARFLEX is ready to use.
- Nevertheless, its viscosity can be adjusted by adding diluent SH0342
- For very fine printing, it is possible to make the ink more thixotropic by addition of 0.5 to 3% thixo powder additive SH0004

PRINTING EQUIPMENT

Manual, semi-automatic or automatic machines

PACKING

1 kg & 5 kg



STORAGE

The guaranteed shelf life of our inks, undiluted, in the original, unopened container is applicable to inks stored in a dry, well-aired environment at a temperature between 15 to 25 C (59-77 °F).

- Standard UV inks: 1 year
- Standard solvent based inks: 1 year
- Special shades in solvent or UV: 1 year
- Fluorescent colours: 3 months
- Gold and silver: 3 months
- Transparent shades: 6 months
- Special products, hardeners: 1 year

COLOUR MATCHING

DUBUIT offers a full in-house colour matching service from 1 kg. Please provide as much information as possible regarding the type of substrate, colour, mesh used...

RESISTANCES

STARFLEX series will pass tape test on most substrates it is designed for. It offers a high resistance to Pressure Sensitive Adhesives.

In most cases, the water resistance is excellent. However, it can be improved by adding the hardener SH0087 from 3 to 5%.

MULTIFLEX PIGMENT CONCENTRATES

It is possible to enhance the power of colours by adding the Multiflex pigment concentrates. Be aware, however, that the addition of an excessive amount of pigment concentrates may affect the polymerization; please do not use concentrates alone.

FLUORESCENT SHADES

They have to be used on white background. The pot life of these inks is about three months from the date shown on the packaging. The light resistance is limited in time, especially in outdoor exposure.

ADDITIVES AND SPECIAL PRODUCTS

Do not forget that additives must not be incorporated systematically in the inks, but must be used with caution as their dosage and their field of use can often present risks. The special products we deliver are of consistent quality. Encres Dubuit cannot guarantee the work using these products. Indeed, they cannot influence neither the working methods nor the operating parameters.

Hardener SH0087

Proportion: 3 – 5%.

Broadly used to increase water resistance and reduce ink sensitivity to humidity, this hardener also acts as an adhesion promoter on difficult substrates (i.e. poor treatment or pearled substrates). Mix inks fresh daily, and stir immediately and thoroughly. Maximum effect of hardener on adhesion and water resistance will be reached 24 hours after curing. Pot life of the ink will be reduced by adding SH0087.

Anti-scratch agent SH0003

Proportion: 0.5% to 1% maximum.

This additive will improve tape test results on difficult substrates.

Once added, inter coat adhesion properties will be affected.

Thixo powder SH0004

Proportion: 0.5% to 3% maximum.

Increases ink thixotropy for fine letters printing. Surface's glossiness will be affected when adding more than 1%.

Cure Promoter SH0005

Proportion: 1% to 3% maximum.

Improves speed of cure. Very useful when printing thick ink deposit or large block areas. The ink surface hardness will be increased, and glossiness will improve if curing conditions and production speed remain unchanged. The use of SH0005 may affect Inter-coat adhesion, depending on printing conditions and ink series. Monitor carefully curing and adhesion through out the production run.

Levelling agent SH0016

Proportion: 0.5% to 1% maximum

This additive will eliminate bubbles, pinholes, and will help reaching a smooth surface aspect.

HEALTH AND SAFETY

The vast majority of printing inks and related products formulated by Encres DUBUIT contain no substances of very high concern (SVHC) candidates for authorization (as of June 25, 2020) in concentrations greater than 0.1% by mass. Our products comply with the requirements of Directives 2011/65 / EU (RoHS 2), 2015/863 / EU (RoHS 3) and 94/62 / EC (heavy metal concentration levels present in packaging). For more information about our regulatory compliance, please consult our Eco System document, available on request.



STARFLEX INK RANGE			
SOLID COLOURS – 700 RANGE			
ARTICLE DESIGNATION		ARTICLE CODE	ARTICLE CODE
	REF.	1 KG	5 KG
Mid Yellow	710		
Golden Yellow	720		
Mandarin	730		
Vermillion	740		
Dark Red	750		
Pink	760		
Violet	770		
Primary Blue	780		
Emerald Green	790		
BLACK, WHITE, BASE & VARNISH			
Mixing Black	701		
Opaque Black	703		
Opaque White	704		
High Opaque White	706		
Base	095		
Varnish	090		

This product is not suitable for printing on food or beverage packaging where the printed ink can be in direct contact with the content. We cannot provide food safety certificate, therefore, we strongly recommend our customer to conduct ink migration tests through the substrate in order to fully validate the safety of the finished.

Product available through our factory in Shanghai

Encres DUBUIT garantit la qualité de ses produits. Cependant, nous ne pouvons pas garantir le résultat final, car nous n'exerçons aucun contrôle sur les procédures d'exploitation individuelles. Notre responsabilité se limite uniquement à l'échange d'encre ou de vernis. La qualité d'un substrat à imprimer peut varier. Par conséquent, les informations ci-dessus sont données de bonne foi sur la base de l'état de notre art et de l'expérience antérieure. Cette constatation vaut aussi pour notre assistance technique. Lors de l'utilisation de nos encres et vernis sur un nouveau substrat ou lors du changement des procédures d'exploitation, nous recommandons fortement de tester d'abord une production à grande échelle pour s'assurer de la compatibilité de l'encre. Veuillez-vous référer à nos Conditions Générales de Ventes.