SOLVENT BASED INKS

TECHNICAL DATA SHEET

POLYGLOSS - Two-component ink

Aspect :	Glossy.
Applications :	Printing on tin plate, aluminium, non-ferrous metals, glass, ceramic, melamine, acetates, polyester, polyurethane, treated polyethylene and polypropylene, PVC substrates..
Major advantages :	The two-component Polygloss inks allow the marking and decorating of substrates usually considered as difficult to print on. High resistance : very stable ink-hardener mixture, usable up to 48 hours (closed pail). Good resistance to chemical products (acids, alcohol, detergent, household products). Good flexibility of the ink film. Rapid drying on the surface.
Printing :	Manual, automatic and semiautomatic machines. The Polygloss inks are supplied in two separate packagings that have to be mixed together for use in the following proportions : add 10% in weight of PG.280. Particular cases : on glass, ceramic, polyester and difficult substrates.

Technical characteristics

Screens
Fabrics : All types of nylon and polyester fabrics can be used with a mesh between 60 and 120 threads/cm, as well as metallic linen of corresponding numbers.
Transfers : All direct, indirect or capillary procedures, as well as water cutting films can be used.

Opacity - Aspect
The Polygloss inks have an excellent opacity. They have a glossy aspect. The pigments used do not migrate, and the colours can be overprinted once the previous layers are dried to the core.

Coverage
With a 120 thread/cm mesh, the print area is of about 55-65m²/L.

Storage
5 years in closed pails kept between +5 and +35°C.

Squeegees
To obtain a minimum deposit, we recommend hard polyurethane squeegees (shore hardness A-75 to 80), with a minimum slope and an excellent sharpening.

Mixings
All available colours and bases can be mixed together to obtain intermediate tones.
Special tints : They can all be produced for quantities of 5 L or more per colour.

Cleaning
We recommend the cleaning solvent 77205. The screen must be cleaned immediately after use, because the ink's hardener would make the Polygloss ink's dissolution impossible after drying in the screen.

Packaging
In 1 Litre pails.

Applying conditions

Dilution : The ink/hardener mixture will exclusively be diluted with the PG.201 normal thinner, the PG.203 slow thinner, or a mixing between the two.
Base / Varnish : To reduce to printing cost, it is possible to use the PA.001 base. This does not really affect the opacity, but it reduces the resistance to light.In order to reduce the intensity of the colours, or to obtain semi-transparent effects, add the overprinting varnish base PG.003, but the light resistance will be affected.

Drying
It is only after the printing and its drying, by solvent evaporation, that the chemical reaction between the two components starts.
Stacking is possible immediately after drying, without influencing the hardening to the core.
In ambient air : it is possible to manipulate the printed substrates after 10 to 15 minutes. Dry in depth after 48 hours, depending on
ambient temperature and hygrometry.
In forced air : the drying time in the tunnel depends on the temperature, the fabric fineness, the printed material, etc...

Adherence - Resistance
In ambient air, the final hardening allowing the adherence test is obtained after three days. A rise in temperature allows the complete core hardening.
As an indication : 5 to 10mn at 150°C, or 25 to 30mn at 120°C.
A staining (yellowing) of the PG.102 white and PG.103 opaque white colours, as well as the PG.003 varnish can happen in the case of a polymerisation of more than 10mn at a temperature exceeding 120°C. The Polygloss inks have a resistance for example to alcohol, detergent, mineral oils, cosmetics, soaps, washing powders, petrol, and sea water, but they don't resist to light hydrocarbon, keton, and strong acids.

Light resistance
Printed with a mesh inferior to 77, the non-based Polygloss standard colours (without adding of white) resist three years to light, on a substrate having the same guarantees. The overprinting of PG/UV03 varnish with a 77 mesh allows the improvement of this result.

Preparation of the substrate
Ensure that the substrates to be p rinted do not have oxidation or grease. The surface to be printed should be cleaned , the metals by sandblasting, and then perfectly dried.

Hygiene and safety
Although the products chosen for use in formulating the POLYGLOSS ink are not dangerous, they can produce allergic reactions in some particularly sensitive people. Ink or thinner stains on skin will be washed immediately using soapy water.

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