POLYGLOSS

TECHNICAL SPECIFICATIONS

PRODUCT DESCRIPTION
POLYGLOSS is a NON-CMR solvent- ink.

APPLICATIONS
Tinplate, aluminum, non-ferrous metals, lacquered substrates, melamine, acetates, polyesters, polyurethane, polycarbonate, treated polyester, treated polyethylene and polypropylene, PETG, PVC, PMMA, road signs (Polygloss R).

The above-mentioned substrates may differ according to their origin.
It is therefore essential to carry out preliminary tests.

PRINTING
Manual, semi-automatic, 3/4 automatic, and automatic machines.

MAJOR ADVANTAGES
- Single, dual, or triple-component ink enabling marking and decoration of substrates considered difficult to print.
- High resistance
- Ink and hardener mixture highly stable (up to 48 hours in closed containers)
- Good resistance to chemicals (acid, alcohols, detergents, household products).
- Good ink flexibility.
- Rapid surface drying.
- Suitable for pad printing.
- Easy cleaning on machinery.

APPEARANCE
Glossy.

Substrate	Tinplate, aluminum, non-ferrous metals, lacquered substrates, melamine, acetates, polyesters, polyurethane, polycarbonate, treated polyester, treated polyethylene and polypropylene, PETG, PVC, PMMA, road signs (Polygloss R)
Mesh	200 to 355 threads/inch (79 to 140 threads/cm)
Emulsion	All types of solvents resistant emulsions
Squeegee	65shA or 75shA
Drying	Solvent evaporation
Diluent and additive	Thinner MP201 Retarder MP203
Cleaning	77 BIO
Storage	5 years stored between +5°C et +35°C

COLOR RANGES & PACKAGING

BASIC COLORS	
PG 102 WHITE	1 L
PG 404 ORANGE	1 L
PG 406 GOLDEN YELLOW	1 L
PG 501 LEMON YELLOW	1 L
PG 612 GREEN	1 L
PG 701 VIOLET	1 L
PG 719 PERMANENT BLUE	1 L
PG 801 RED	1 L
PG 810 CARMINE	1 L
PG 811 PINK	1 L
PG 902 BLACK	1 L

STANDARD COLORS	
PG 433 SUPER ORANGE	1 L
PG 526 MEDIUM YELLOW	1 L
PG 531 RICH YELLOW	1 L
PG 638 BRILLIANT GREEN	1 L
PG 722 BRILLIANT BLUE	1 L
PG 727 BLUE	1 L
PG 743 FRENCH BLUE	1 L
PG 828 FIRE RED	1 L
PG 830 BRIGHT RED	1 L
REFLECTIVES COLORS	1 L
PG 40 R REFLECT ORANGE	1 L
PG 50 R YELLOW	1 L
PG 60 R VERT RETROREFL	1 L
PG 70 R REFLECTIVE BLUE	1 L
PG 80 R REFLECTIVE RED	1 L

OPAQUE BLACK / WHITE	
PG 103 OPAQUE WHITE	1 L
PG 905 OPAQUE BLACK	1 L
VARNISH	
PG003	1 L
PGUV03	1 L
DILUENTS AND ADDITIVES	
PG/TG 201 POLYGLOSS/TGLASS THINNER	1 L
PG/TG 203 POLYGLOSS RETARDER	1 L
PG 280 POLYGLOSS HARDENER	100 - 500 CC
PG/TG 291 GLASSBOND IMPROVER	100 - 500 CC
PG/PBI-100 POLYESTER BONDING IMPROVER	100 CC
PG/TG 2023 DILUANT TAMPOGRAPHIE	100 CC

INSTRUCTIONS FOR USE

SCREEN
Meshes from 63 to 140 threads per centimeter.
Emulsions or films used must be solvent-resistant.

SQUEEGEE
Polyurethane 75 shA.

PERFORMANCE
With a fabric of 120 threads/cm, 1KG will cover 40 to 50m².

DILUTION
The ink/hardener mixture is diluted exclusively with the normal diluent PG201, the retarder diluent PG203, or a mixture of both.
Dilution rate of 10 to 20% depending on the mesh.

MIXING
The inks of MPI range are miscible with each other to obtain intermediate tones.

BASE-VARNISH
To reduce color intensity or achieve semi-transparent effects, the overprint varnish base PGUV03 can be added, but light resistance will be proportionally affected.

OPACITY-APPEARENCE
Polygloss inks have good opacity. They have a glossy appearance.
The pigments used do not migrate, and colors are stackable once the previous layers are fully dried.

PREPARATION OF THE SUBSTRATE
Ensure that the substrates to be printed are free from oxidation or grease. The printing surface should be cleaned, if necessary, by sandblasting, and thoroughly dried.

CURING
For substrates with difficult adhesion, add 10% by weight of PG280 hardener to the ink (pot life of the mixture: 48 hours).
For very difficult substrates, particularly polyesters and certain lacquered metals, add 10% by weight of PG/TG290, then 20% of PG.PBI (Polyester Bonding Improver). The pot life of this mixture is reduced to 8 hours.

DRYING
With ambient air, final curing allowing adhesion testing is achieved after 3 days.
An increase in temperature allows for complete curing throughout:
As an indication: 5 to 10 minutes at 150°C, or 25 to 30 minutes at 120°C. Yellowing of whites PG.102 and PG.103, or varnish PG.003, may occur if polymerization occurs for more than 10 minutes at a temperature above 120°C.

ADHESION-RESISTANCE
Polygloss inks notably resist alcohols, detergents, mineral oils, cosmetic products, soaps, detergents, gasoline, and seawater, etc.
Polygloss inks are approved in the industry.

PRODUCT PROPERTIES
On substrates with low surface energy, the treatment must be higher than 41 dynes/cm.
After the support has completely cooled to room temperature, the printed ink film must withstand the 3M810 tape test after gridding.

HANDLING
Homogenize before use.

SCREEN CLEANING
Cleaning with the 77BIO bio solvent is recommended.
The screen should be immediately cleaned after use because the hardener would make it impossible to dissolve the ink after drying on the screen.

WASTE MANAGEMENT

Packaging contaminated with hazardous substances.
Do not dispose into the environment.
VFP Ink Technologies encourages all users to develop a responsible environmental policy.

HEALTH AND SAFETY

Refer to the MSDS.
We recommend that you wear Personal Protective Equipment recommended by the MSDS and follow its handling precautions.

STORAGE

5 years in its original packaging stored between +5°C and +35°C