

TECHNICAL SPECIFICATIONS

PRODUCT DESCRIPTION

The UVICARD TF is a non-CMR UV ink.

APPLICATIONS

Printing on PVC and RPVC for card production.

The above-mentioned substrates may differ according to their origin.

It is therefore essential to carry out preliminary tests.

PRINTING

All types of machines: semi-automatic, ¾ automatic and automatic (Cylinder).

MAJOR ADVANTAGES

- Fast drying.
- Accept offset overprinting.
- Accept lamination.
- Embossable.

APPEARANCE

Glossy.



Substrate	PVC, RPVC
Mesh	160 to 355 threads/inch (63 to 140 threads/cm)
Emulsion	All types of solvents and UV resistant emulsions
Squeegee	75shA
Drying	UV curing
Diluent and additive	Thinner UV 201
Cleaning	77 BIO
Storage	12 months stored between +5°C et +35°C

COLOR RANGES & PACKAGING

METALLIC GOLD

CC3001TF GOLD	5 KG
CC3014TF GOLD	5 KG
CC3600TF GOLD	5 KG
CC3601TF YELLOW GOLD	5 KG
CC3602TF GREEN GOLD	5 KG
CC3603TF RED GOLD	5 KG

METALLIC SILVER

CC302TF MEDIUM SILVER	5 KG
CC303TF LARGE SILVER	5 KG
CC9009TF FINE SILVER	5 KG

PEARL

CC311TF PEARL FINE	5 KG
CC312TF PEARL MEDIUM	5 KG
CC313TF PEARL LARGE	5 KG

BASIC COLORS

CC102TF WHITE	1 KG
CC404TF ORANGE	1 KG
CC406TF GOLDEN YELLOW	1 KG
CC501TF LEMON YELLOW	1 KG
CC612TF GREEN	1 KG
CC701TF VIOLET	1 KG
CC719TF BLUE	1 KG
CC801TF RED	1 KG
CC810TF CARMINE	1 KG
CC811TF PINK	1 KG
CC902TF BLACK	1 KG

TRANSPARENT COLORS

CC5601TF TRANS YELLOW	1 KG
CC7602TF TRANS BLUE	1 KG
CC8003TF TRANS BROWN	1 KG
CC8602TF TRANS RED	1 KG

OPAQUE BLACK

CC905TF OPAQUE BLACK	5 KG
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VARNISHES

CC0003TF PEARL VARNISH	1 KG - 5 KG
CC001TF BASE INCOLORE	1 KG - 5 KG

DILUENTS & ADDITIVES

UV201 THINNER	1 KG - 5 KG
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PRIMERS & ADHESIVES

UVPLATF PRIMER VARNISH*	5 KG
CC0006TF PVC PRIMER*	5 KG
CC0007TF ADHESIVE PVC/PVC*	5 KG
CC0008TF PET PRIMER*	5 KG

*pending validation

Non-exhaustive list of metallic and pearl shades. Custom color matching available upon request.

INSTRUCTIONS FOR USE

SCREEN

All mesh from 63 to 140 thread/cm.

Mesh size 63 to 100 threads/cm for printing metallic gold, silver and nacre shades.

Mesh 120 to 140 threads/cm for printing basic colors.

Emulsions and films must be solvent/UV resistant.

SQUEEGEE

Polyurethane 75shA.

PERFORMANCE

With a 90 threads/cm fabric, 1kg covers about 30 to 40m².

With a 140 threads/cm fabric, 1kg covers about 65 to 75m².

DILUTION

UVICARD TF inks can be diluted up to maximum 5% with thinner UV201.

MIXING

The different colors and bases can be mixed to obtain intermediate tones.

BASE-VARNISH

The addition of CC001TF Colorless Base makes it possible to adjust the shades intensities.

CC003TF varnish will be used for pearly shades.

PRIMERS AND ADHESIVES

Depending on the supports it may be necessary to use a primer.

CC0006TF (mesh 140 threads/cm, drying 120 mJ/cm²) to improve the adhesion of Offset inks on PVC.

CC0008TF (mesh 180 threads/cm, drying 140 mJ/cm²) to adhere to PET.

UVPLATF (mesh 180 threads/cm, drying 60 mJ/cm²) to obtain adhesion on PLA.

To improve the cohesion of the card, the use of a CC0007TF PVC/PVC adhesive (mesh 180 threads/cm, drying 120 mJ/cm²) between 2 PVC sheets may be necessary.

DRYING

UVICARD TF ink will polymerize under UV dryers, Mercury lamp.

We recommend a UV dose of 100 to 180 mJ/cm² depending on the references.

To avoid deformation of the support, it is possible to use 2 UV lamp.

OVERPRINT

UVICARD TF ink accepts offset UV ink marking intended for lamination.

LAMINATION

It is carried out at a minimum between 125° and 140° for 5 to 15 minutes and with the use of a coated overlay film.

Performance examples: CC TF inks printed on 400 µ PVC, laminated with a 80µ coated overlay in an Oasys OLA6E type device, and tested with a Lloyd LS1 dynamometer equipped with the TG113 accessory allowing peeling tests to be carried out at 90°, have a peel strength of 10 N/cm on average.

PRODUCTS PROPERTIES

On substrates with low surface energy, the treatment must be higher than 41 dynes/cm.

HANDLING

Homogenize before use.

After extraction of the ink, open containers need to be carefully and promptly closed. Artificial or natural light can cause the start of polymerization and lead to the formation of a skin on the surface. For this reason, it is advisable to work in a low lighting or safelight environment.

SCREEN CLEANING

Cleaning with the 77BIO bio solvent.

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

12 months in its original packaging stored between +5°C and +35°C.