

UVICARD TF

TECHNICAL SPECIFICATIONS

PRODUCT DESCRIPTION

The UVICARD TF ink is a UV ink.

APPLICATIONS

Rigid PVC in the card area.

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.
- · Offset printable.
- · Accept lamination.
- Embossable.

APPEARANCE

Glossy.





Substrate	PVC, RPVC			
Mesh	200 to 230 threads/inch (79 to 90 threads/cm)			
Emulsion	All types of solvents and UV resistant emulsions			
Squeegee	65shA or 75shA			
Drying	Solvent evaporation			
Diluent and additive	Ready to use			
Cleaning	77 BIO			
Storage	12 months stored between +5°C et +35°C			

COLOR RANGES & PACKAGING							
METALLIC GOLD		BASIC COLORS		OPAQUE BLACK AND WHITE			
CC3001 TF GOLD	1 KG - 5 KG	CC102 TF WHITE	1 KG	CC905 TF OPAQUE BLACK	1 KG - 5 KG		
CC3014 TF GOLD	1 KG - 5 KG	CC404 TF ORANGE	1 KG	CC103V3 TF* OPAQUE WHITE	5 KG		
CC3600 TF GOLD	1 KG - 5 KG	CC406 TF GOLDEN YELLOW	1 KG	CC107CA TF* OPAQUE WHITE	5 KG		
CC3601 TF YELLOW GOLD	1 KG - 5 KG	CC501 TF LEMON YELLOW	1 KG				
CC3602 TF GREEN GOLD	1 KG - 5 KG	CC612 TF GREEN	1 KG	VARNISHES			
CC3603 TF RED GOLD	1 KG - 5 KG	CC701 TF VIOLET	1 KG	CC0003 TF PEARL VARNISH	1 KG - 5 KG		
		CC719 TF BLUE	1 KG	CC001 TF BASE INCOLORE	1 KG - 5 KG		
METALLIC SILVER		CC801 TF RED	1 KG				
CC302 TF MEDIUM SILVER	1 KG - 5 KG	CC810 TF CARMINE	1 KG	DILUENTS & ADDITIVES			
CC303 TF LARGE SILVER	1 KG - 5 KG	CC811 TF PINK	1 KG	UV201 THINNER	1 KG - 5 KG		
CC9009 TF FINE SILVER	1 KG - 5 KG	CC902 TF BLACK	1 KG				
				PRIMERS & ADHESIVES			
PEARL		TRANSPARENT COLORS		UVPLA TF PRIMER VARNISH	5 KG		
CC311 TF PEARL FINE	1 KG - 5 KG	CC5601 TF TRANS YELLOW	1 KG	CC0006 TF PVC PRIMER	5 KG		
CC312 TF PEARL MEDIUM	1 KG - 5 KG	CC6600 TF TRANS GREEN	1 KG	CC0007 TF ADHESIVE PVC/PVC	5 KG		
CC313 TF PEARL LARGE	1 KG - 5 KG	CC7602 TF TRANS BLUE	1 KG	CC0008 TF PET PRIMER	5 KG		
		CC8003 TF TRANS BROWN	1 KG				
		CC8602 TF TRANS RED	1 KG	*Non conforme TSCA			

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 100 to 120 threads/cm for printing opaque whites. 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 $40m^2$. With a 140 threads/cm fabric, 1kg covers about 65 to $75m^2$.

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-VARNIS

The addition of CC001 Colorless Base makes it possible to adjust the shades intensities.

CC003 varnish will be used for pearly shades.

PRIMERS AND ADHESIVES

Depending on the supports it may be necessary to use a primer. CC0006 (mesh 140 threads/cm, drying 120 mJ/cm²) to improve the adhesion of Offset inks on PVC.

CC0008 (mesh 180 threads/cm, drying 140 mJ/cm²) to adhere to PET.

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

To improve the cohesion of the card, the use of a CC0007 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 130° and 140° for 5 to 15 minutes and with the use of a coated overlay film.

Performance examples: \dot{CC} inks printed on 400 μ PVC, laminated with a 60 μ coated overlay in an Oasys OLA6H 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

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

Refer to the MSDS

STORAGE

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

Guarantee reserves: Although the data in this leaflet have been established after careful testing, it is provided as a guide; no liability can arise from this for VFP, it being understood that we advise you to carry out preliminary tests before any commercial draw. No seller, representative or agent has the right to give any guarantee or insurance, which would be in contradiction with what is said above. In any case, refer directly to our general conditions of sale.