

SCREEN PRINTING UV INK

UVIPRIM GL

The mono-component UViprim GL range is based on a DUAL CURE system (UV light + oven drying). It is dedicated to a high speed screen printing on glass, with or without coating, for interior use. The dual cure system makes these inks insensitive with the extra thickness obtained on objects having a broad dimensional tolerance. Most of all, Uviprim GL inks are glossy, highly reactive and chemically resistant.

Use

Characteristics

- Ready to use
- Glossy
- Resists on dish washing
- Heavy metal free
- -Basic shades are intermixable and allow the matching of color reference systems like Pantone®
- High reactivity
- Resistance to alcohol, G1 test blend
- Dual cure: UV light + oven drying

Choice of the mesh:

Directly function of the printing speed and the required opacity. Generally, we will use a 165, 150, 140 down to 120 mesh fabric tended to 16N. The diameter of the wire will be selected to obtain the best compromise between the deposit, the solidity and the definition.

Supports and pretreatments

The quality of glass and its chemical structure are related to its manufacturing method. Its surface quality will have to be perfect i.e. free from release agent or any other residue (finger marks, dust, grease, silicone etc).

Untreated glass:

A flame treatment (surface tension > 44 mN/m) according to the UVitro® process (trade mark of ISIMAT GmbH) is necessary to obtain maximum performances.

Coated glass:

Many glass containers are covered with a water or solvent-based coating to modify the surface aspect (colour, opalescent, scratch resistance...): a flame treatment, right before printing, is then essential to obtain a sufficient surface tension and thus a good adherence.

Curing conditions

Being based on a DUAL CURE system, this ink dries in two steps: under UV light, to obtain a dry ink surface and to authorize the immediate overprinting of it, and with hot air to obtain optimal chemical and physical resistances.

UV DRYING: at a printing speed of 3600 prints/h, use a lamp of 180-200W/cm minimum.

OVEN DRYING: only one 20 min at 165°C passage for the whole of the decoration.

The performances of the system are function of the material and the products used. Its industrial validation is imperative before final production run.

Specifications

>Appearance: glossy > Average density: 1,2

➤ Viscosity: 2 - 3 Pa.s

➤ Opacifying power:

• Coloriflex system: low

• Opaque inks: excellent • White, black: excellent ➤ Thinner: 31965*, 5 % maxi 2891, 2895, 2899, NS-91, > Cleaning solvent:

NS-95, NS-99 and NS-55

refer to the label ➤ Expiry:

* diluent 31965 : Skin irritation, Category 2 ; Eye irritation, Category 2 ; Skin sensitisation, Catégory 1 ; Specific target organ toxicity (single exposure), Category 3 ; Hazardous to the aquatic environment -Chronic hazard, Category 2

Toxicology

The **UViprim GL** inks comply with EN 71-3 standard.

STANDARD COLOURS		Ref. 1 kg
	COLORIFLEX SYSTEM	
	Lemon*	3782002
	Gold yellow*	3782004
	Orange*	3782006
	Scarlet*	3782007
	Red*	3782008
	Cyclamen*	3782014
	Purple / Violet*	3782016
	Blue*	3782020
	Royal blue*	3782028
	Green*	3782032

EXTRA OPAQUE	
Opaque white*	3782080
Opaque lemon	3782082
Opaque orange	3782083
Opaque red	3782084
Opaque green	3782085
Opaque black*	3782081

Non contractual colours and pictures

On simple request, we can propose you a color panel card displaying accurate shades.

All the marked inks with an asterisk *, can be colour matched according to the Pantone® colour guide through the online Colour Matching System developped by Tiflex.

Additives

OPALESCENT BASE: its use in inks lightens the colour while increasing the reactivity and opalescence by transmission with a loss of brilliance.

METALLIC INKS: to use the dluting base with our metallic pastes in a 85/15 or 80/20 proportion. The shelf-life of the blend is of 4 hours.

Photoinitiator: 1-3% Gelling agent: 0-1% Thickener powder: 0-1%

STANDARD COLOURS	Ref. 1 kg			
4-COLOURS PROCESS				
4-colours yellow	3782050			
4-colours magenta	3782052			
4-colours cyan	3782054			
4-colours black	3782056			
TINTING				
Tinting white	3782042			
Tinting black	3782044			

BASE				
Thinner base*	3782066			
ADDITIVES				
Opalescent varnish	3782068			
Etching varnish	3782069			
Window varnish	3782067			
Photoinitiator, per 100 g	38C0595			
Gelling agent, per kg	3952061			
Thickener powder	3761295			

Also available in metallic, pearlescent, fluorescent, iridescent, two-tones, etc ... shades. Please, contact us for details.





