

# SCREEN PRINTING TEXTILE INK **DREAMFLASH** PVC-FREE AND PHTHALATE-FREE LOW CURE

**Flexible plastisol ink, PVC-FREE and PHTHALATE-FREE :** DREAMFLASH is designed to polymerize at low cure (140°C) to meet the requirements of synthetic and/or colored textiles that are sensitive to temperature. DREAMFLASH can be used for direct printing and transfer printing (Adhesive powder imperative) on light colored and dark textiles.

#### The DREAMFLASH series is approved GOTS Chemical Inputs V7.

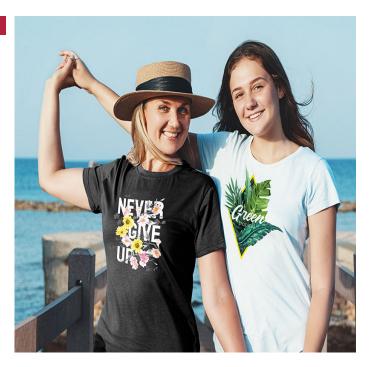
# **Technical specifications**

**Composition :** Free from PVC, phthalates, heavy metal salts, azo derivatives.

- Aspect : Satin.
- Feel : Soft.

■ **Colors :** DREAMFLASH inks can be color matched according to the Pantone® colors. Our Color Matching System software is available directly on our website www.tiflex.com.

- Average yield : 62 t/cm screen: 25 sqm/l.
- Washing resistance : Very good at 40°C.
- Ironing : On the reverse side.
- **Shelf life :** Refer to the product labelling.



# Use

#### ■ Drying :

- 2 minutes at 140°C in infrared tunnel.

#### Screens :

- 54 to 62 t/cm for printable adhesives.
- 48 to 90 t/cm for colors and highlight whites.
- 90 to 120 t/cm for four-color process.
- Printing :
- Manual, semi-automatic and automatic carousels.

#### Emulsions :

- Solvent-resistant emulsions like Tiflex emulsions : 19S, 149S, UST, 400ST, 200S. Depending on exposure system.

#### ■ Squeegees\* :

- Polyurethane 3C Green (245604) recommended.
- Scraping angle as straight as possible (15 to 22°).
- \* This information is given as an indication and may vary according to the material used.

#### Adhesives for paletts :

- Aerofix S (25D1815), Takter 4000 (25D1830), Takter 1 (25D1720).
- Adhesive 0381 (3344079) for roller application,
- Water-based adhesive (25D3911) for spray application.

For time saving, you can apply an adhesive Tape on to the paletts **(25D9900)**.

#### Cleaning :

- Manual : Solvents 2895, NS-95, NS-55, Plastisol solvent.
- Washer : Solvents NS-95, Plastisol solvent.

1 Plastisol solvent is approved GOTS Chemical Inputs V7.

#### Additive and thinner :

**Hardener GE (3981297) :** Add 5% to improve washability and textile adhesion.

**Plasticizer thinner DRF (3194061) :** Reduced ink viscosity. Up to 2%.

**Gelling agent DRF (39A2061) :** Increase of deposit and viscosity. Add 0,2 to 1%. High density printing ; add up to 2%.

A Mechanical agitation required. This effect is optimal 24 hours after mixing ; it's recommended to prepare small quantities.

#### **Direct printing**

**Preparation :** Stir the ink first and, if necessary, add plasticizer to obtain the desired viscosity.

**Flash cure :** 4 to 5 seconds.

For best results, flash settings should be made on warm paletts.

■ Wet-on-wet : Possible with warm paletts. In case of backing, increase the off-contact.

**Drying :** 2 minutes at 140°C in infrared dryer.

Polymerization conditions must be tested according to the washing program intended for the textile articles.

#### Transfer printing

**Transfer media :** Polyester sheet for matte transfer available in various formats.

- 35 x 50 cm 100 sheets (**2543850**).
- 50 x 70 cm 100 sheets (**2543870**).
- 70 x 100 cm 250 sheets (**2543750**).

Put your blank transfer media in Infrared dryer before printing to remove moisture. Protect your transfer media after each pre-gelling to avoid moisture pick-up again. These are harmful to color registration.

■ Inks: The DREAMFLASH series can be used in its entirety.

■ Transfer adhesives : PET Adhesive powder (3863327) imperative.

■ Pre-drying on transfer media : 2 minutes at 120°C.

■ Heat press : 20 seconds at 140-160°C. The dryer and press conditions must be revalidated by washing tests.

Peeling : Cold peel. Remove glossy polyester only after complete cooling (cold peel).

**Flash white (39A4086) :** To be used an under base.

A Fast flashing only on TIFLEX flash cure.

#### Whites

■ White (39A4000)\*: Very fast flashing. To be used an under base or highlight and for processing of Pantone® colors.

■ **High opacity white (39A4080)\*:** Fast flashing. To be used an under base or highlight.

\*For their creaminess and stable whiteness, even in hot tunnels.

# **Special effects**

#### ■ High density :

DREAMFLASH ink requires no additional elastic base.

Thickness is obtained by using thick capillary film type 400  $\mu$  (2044010) or multi-coated of emulsion 400ST (25C2050) or Textil PV (25C2050).

When prints are to have corners, it is necessary to use Gelling Agent DRF **(39A2061)** ; add 0,5 to 2%.

■ Sparkle gold (39A4091) and Sparkle silver (39A4094) :





# Washability :

Insufficiently cured ink is the main cause of poor washout resistance.

Polymerization parameters should be adapted to suit the material and the customer's conditions of use.

# Polymerization conditions must be tested according to the washing program intended for the textile articles.

Poor transfer hold is due to non-compliance with recommended parameters.

Waterproofing treatments on certain fabrics can prevent ink adhesion and reduce wash fastness.

When direct printing with DREAMFLASH gives insufficient results, we recommend using two-component PU solvent inks : **POLYWORKS**.

1 This ink is not approved GOTS Chemical Inputs V7.

# ■ Fibrillation:

Appears when printing on cotton textile with short and loose fibers (uncombed).

The fibers tend to straighten by capillary action through the ink film. Higher ink deposit increase fibrillation effect resulting in a grainy aspect and a rough feel. Too low ink deposit will fade after first print wash given a vintage effect to the print. The solution is to print the underlay with a 62 t/cm mesh screen. Doins so, the fibers will be fixed and the final finish will be soft.

If the viscosity of the ink is too low, the deposit will be reduced. In this case, use Gelling Agent DRF **(39A2061)**.

#### Bleeding :

Bleeding (or dye migration in inks) is visualized by an instantaneous or slow coloration of white (or light) inks. For example, a white print will turn pink on red fabric.

Phenomenon appears mainly on 100% polyester or recycled polyester mainly black, red, dark blue.

To prevent dye migration, pass the polyester textile through the drying tunnel before printing to evacuate the humidity. **Contact us for antibleeding under bases.** 

# TIFLEX would like to draw your attention to the following points :

Before starting production, we recommend that you check the ink's various compatibilities and resistances on a textile by washing the finished article under the conditions stipulated on its label. Wash fastness may also be reduced by fibrillation (fibers rising through the print). This phenomenon is independent of ink polymerization.



# Compliance

DREAMFLASH inks are approved GOTS Chemical Inputs V7. They comply with EN 71-3, the ROHS directive and REACH/CLP regulations.

# **Product** range

	1
STANDARD COLORS	Ref. 5 l
White*	39A4000
Flash cure white	39A4086
High opacity white	39A4080
Lemon yellow*	39A4002
Gold yellow*	39A4004
Orange*	39A4006
Solid red*	39A4013
Rubis red	39A4012
Fuchsia*	39A4015
Violet*	39A4016
Primary blue*	39A4020
Mint green*	39A4035
Black*	39A4044

NEON COLORS	Ref. 5 l
Neon yellow	39A4050
Neon magenta	39A4052
Neon cyan	39A4054
Neon black	39A4056

BASE	Ref. 5 l
Mixing base*	39A4058

EFFECT SPECIAL	Ref. 5 l
Sparkle silver	39A4091
Sparkle gold	39A4094

ADDITIVES AND THINNERS		Ref.
Hardener GE	250 g	3981297
Plasticizer thinner DRF	5 kg	3194061
Gelling agent DRF	1 kg	39A2061

ADHESIVE TRANSF	ER	Ref.	
PET Adhesive powder	3 kg	3863327	

ADHESIVE FOR PALETTS		Ref.
Adhesive 0381*	5 kg	3344079

\*This product is approved GOTS Chemical Inputs V7.



GOTS Approved Additive Approved by: ECOCERT GREENLIFE GOTS-ECOCERT-08-01150



**Pantone® Formulation guide online :** The inks marked with an asterisk \*, can be color matched according to the PANTONE® colors. PANTONE® colors are available directly on our website by using our Color Matching System software.

The colors reproduced on this document are not contractual. Upon request, we can provide you with a color chart reproducing the colors in a more faithful way.



