

# SCREEN PRINTING SOLVENT INK **POLYWORKS FIREPROOF** FIRE-RESISTANT

**Low-odour, physically drying ink** : POLYWORKS FIREPROOF is designed for direct or transfer printing on fabrics, especially thick synthetics, coated fabrics and leathers (handbags and luggage, covers and cases, awnings). POLYWORKS FIREPROOF is **fire-resistant to NF EN ISO 15025** (test associated with ISO 14116).

### **Technical specifications**

- **Composition :** Free of heavy metal salts.
- Aspect : Satin.
- Average yield : 21 to 43 t/cm screen : 15 to 20 sqm/kg.

#### Resistance :

Washability : Very good, including industrial washing at 90°C. The use of hardener is imperative and washing must be carried out at least 72 hours after printing.
Fire resistance : NF EN ISO 15025 test.

- Ironing : On the reverse side.
- **Shelf life :** Refer to the product labelling.



#### Use

- Drying :
- 30 minutes in open air (20°C).
- 2 minutes at 60°C in in forced-air dryer.

#### Screens :

- 21 to 43 t/cm.
- Printing :
- Manual, semi-automatic and automatic carousels.
- Emulsions :

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

#### ■ Squeegee\* :

- 3C Green (245604) or Green 75° recommended.
- \* 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 2891, 2895, 2899, NS-81, NS-85, NS-91, NS-95, NS-99, NS-55.
- Washer : Solvents 2881, NS-81, NS-85, NS-91 NS-95, NS-99.

#### Additives and thinners :

Hardener XF 822 (3470503) or Hardener GE (3981297) : Add 10% to obtain optimum properties (adhesion, flexibility, weathering resistance).

Thinner 4908 (3142020) : Reduced ink viscosity.

**Retarder 4966 (3112030) :** Delayed drying in the screen under certain conditions of use (high working temperatures).

**Pot-life ink + hardener :** 12 hours.

# Direct printing

#### ■ Preparation :

Stir the ink first, add imperatively Hardener XF 822 **(3470503)**, or Hardener GE **(3981297)**, then if necessary appropriate thinners.

#### ■ Flash cure :

Simultaneous flashing and blowing recommended («continuous» position on Tiflex Flash units).

#### Drying :

- 30 minutes in open air (20°C).
- 2 minutes at 60°C in forced-air dryer.

# **1** Definitive resistance of « ink + hardener » are achieved 72 hours after printing.

A Fire resistance is achieved under optimum printing and drying conditions.

#### **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 POLYWORKS series can be used in its entirety. It is essential to add 10% XF 822 Hardener **(3470503)** or Hardener GE **(3981297)**.

#### Transfer adhesive :

PET Adhesive powder (3863327) imperative.

#### **Special recommendations**

#### Resistance :

A Definitive resistance of « ink + hardener » are achieved 72 hours after printing.

A Fire resistance is achieved under optimum printing and drying conditions.

🛕 Textile must be imperatively flame-retardant.

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

Poor transfer hold is due to non-compliance with recommended parameters or fabric treatments. In this case, use direct printing.

#### 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. To prevent dye migration, pass the polyester textile through the drying tunnel before printing to evacuate the humidity.

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#### ■ Pre-drying on transfer media :

Open air (20°C) or 1 minute at 110°C.

#### Heat press :

- A Wait 72 hours after completion of printing.
- 15 to 20 seconds at 160-180°C.

The dryer and press conditions must be revalidated by washing tests.

**Peeling :** Cold peel. Remove polyester when it cold.

#### Fire resistance is achieved under optimum printing and drying conditions.

**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.

Use

## Compliance

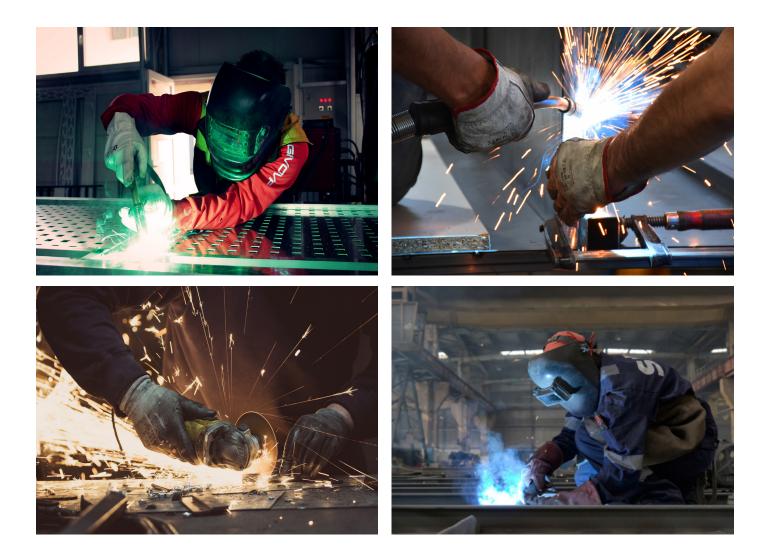
POLYWORKS FIREPROOF is fire-resistant to NF EN ISO 15025 (test associated with ISO 14116). This serie comply with EN 71-3, the ROHS directive and REACH/CLP regulations.

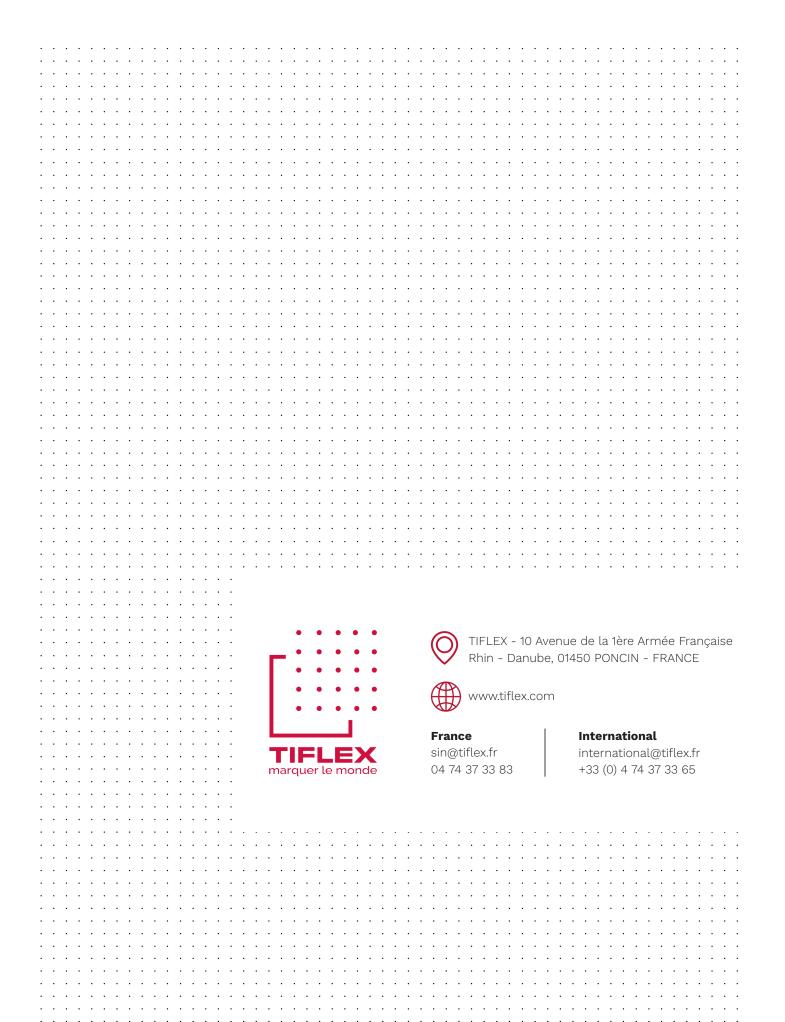
**Product range** 

STANDARD COLORS		Ref. 1 kg
	White OP	34A2012
	Lemon OP	34A2002
	Bright red OP	34A2008
	Medium blue OP	34A2022
	Medium green OP	34A2033
	Black OP	34A2072

The colors reproduced in this document are non-contractual. On request, we can provide you a color chart reproducing the shades more faithfully.

BASE	Ref. 1 kg	
Mixing base and overpr	34A2058	
ADDITIVES AND THINNER	Ref.	
Hardener XF 822	100 g	3470503
Hardener GE	250 g	3981297
Thisses 4000	1 l	3142020
Thinner 4908	5 l	3144020
Retarder 4966	1 l	3112030
TRANSFER ADHESIVE	Ref. 3 kg	
PET Adhesive powder	3863327	





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