



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.
- **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.

* This information is given as an indication and may vary according to the material used.

Use

■ 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.

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

⚠ **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.

■ Pre-drying on transfer media :

Open air (20°C) or 1 minute at 110°C.

■ Heat press :

- ⚠ 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.**

Special recommendations

■ Resistance :

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

⚠ **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.

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.

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 overprint varnish	34A2058

ADDITIVES AND THINNERS		Ref.
Hardener XF 822	100 g	3470503
Hardener GE	250 g	3981297
Thinner 4908	1 l	3142020
	5 l	3144020
Retarder 4966	1 l	3112030

TRANSFER ADHESIVE	Ref. 3 kg
PET Adhesive powder	3863327





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