

SCREEN PRINTING TEXTILE INK

AMAZONIA ELASTIC

AMAZONIA ELASTIC is a water-based polyurethane ink, FORMALDEHYDE FREE, for textile screen printing.

This « ready to use » color range is intended for direct printing on cotton, polyester and cotton/polyester textiles. The inks are available in opaque colors for light colored and dark textiles. AMAZONIA ELASTIC is characterized by its excellent elasticity, offering very beautiful prints on elastic cottons (body, jersey). This ink is printable on manual, semi-automatic and automatic carousels.

The AMAZONIA ELASTIC series is approved GOTS Chemical Inputs V7.

Technical specifications

- Composition: Free of formaldehydes, PVC, phthalates, APEO (alkylphenol ethoxylates) and heavy metals.
- Aspect: Satin, glossy.
- Touch feel: Soft.
- Colors: AMAZONIA ELASTIC inks are declinable in Pantone® colors. The AMAZONIA ELASTIC and AMAZONIA series can be mixed.

■ Average yield :

- 49 t/cm screen: 10 sqm/kg.

■ Washability:

- Bluish black TE and White OPE: Good at 40°C.
- Colors and Opaque white OPE: Good at 60°C.
- Ironing: On the reverse side.
- **Shelf life:** Unopened pail, 1 year in a dry and ventilated room, temperature 15 to 35°C.



Use

■ Drying :

- In forced air tunnel, in IR tunnel with hot air circulation or in cold drying.

Refer to the « Tips - Drying » section.

■ Mesh count:

- Colors: 43-80 t/cm to 77-55 t/cm.
- Whites: 43-80 t/cm to 49-70 t/cm.
- Opaque white OPE: 62-64 t/cm to 77-55 t/cm.

■ Emulsions :

- Water resistant emulsions like Tiflex emulsions : 19 T, 200 T, 400 ST.

Depending on the exposure system.

Squeegee :

- For whites: 3C RED or RED 65° recommended.
- For other colors : 3C GREEN or GREEN 75° or GOLD 80° 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).

*This product is **GOTS Chemical Inputs V7** approved.

■ Cleaning:

- Water.

Use

■ Additives and thinners:

Catalyst 0564 (35A0564): 5% addition for drying at room temperature or to reduce the time in the dryer. Use within 8 hours after mixing at room temperature below 25°C (possibility of repeating the operation once, without altering the ink).

Catalyst 0588* (35C0588): 3% addition for drying at room temperature. Use within 4 hours after mixing. Ink cannot be re-catalyzed.

Blocked hardener (3Y551120): In case of use of technical textile and/or short dryer (< 2m60), add 5 to 10%. The operation should not be repeated as this hardener does not alter the ink and retains its chemical properties during tunnel drying.

Bonding agent (35C2089): For fabrics that lay down adhesion problems. Add 10 to 20%.

Thinner and retarder (35C2062): Improves open time by reducing viscosity. Add 0,5 to 5%.

Thickener (35C0263): Increases ink deposit. Add 0,2 to 0,5%.

Retardant gel (35C2099): Improves open time at constant viscosity. Add 2 to 5%.

Retarder (35C2061): Greatly improves open timeby stabilizing viscosity. Add 2 to 5%.

Retardant spray (35C1298): Prevents the ink from drying ink in the screen during a prolonged break or a production with frequent use of flash.

To be used on a topped or emptied screen during production break. Also recommended on screens awaiting washing.

Tips: Flash cure and drying

■ Flash cure:

If necessary, flash opaque colors: 6 seconds.

The flashing time required may vary depending on the nature of the banner (aluminum or other), the flashing material the distance between the flash and the print, the color of the ink and the composition of the textile printed.

Drying:

■ Caution:

Too much flashing can burn the ink. Therefore, it is imperative to test.

	Séchage en tunnel	Séchage à l'air libre
All colors	2 min at 165°C - 3 min at 160°C.	Not applicable.
Opaque colors and Opaque white OPE	- 2 min at 165°C - 3 min at 160°C. OR - 1 min at 165°C - 2 min at 160°C with 5% of Catalyst 0564.	 With 5% of Catalyst 0564. Wait 15 days for optimal washability. OR With 3% of Catalyst 0588*. Wait 2 days for optimal washability.
White OPE and Bluish black TE	2 min at 165°C - 3 min at 160°C	Not applicable.

Drying parameters (time and temperature) can vary depending on the type of dryer used, its location in the workshop (beware of air currents), the thickness of the ink deposit and the printed color and the nature of the textile.

For specific or treated textile supports, TIFLEX can offer you adapted catalysts (please consult us).

The addition of Thinner and retarder (35C2062) requires tunnel drying.

^{*} Catalyst 0588 : Acute Oral Toxicity, Category 4; Serious Eye Damage, Category 1; Skin Sensitization, Category 1; Germ Cell Mutagenicity, Category 2; Specific Target Organ Toxicity (Repeated Exposure), Category 2; Chronic Aquatic Toxicity, Category 2.

Whites

■ White OPE (35C40000PE):

To be used alone. High elasticity.

■ Opaque white OPE (35C4086OPE):

To be used alone, as an under base or for processing of special colors.

Good elasticity.

Stability in the screen.

Special recommendations

■ Washability:

Textile substrates have varying textures, and may have been previously primed, causing risks in terms of adhesion, resistance and temperature reaction (yellowing).

We remind you that it is essential to carry out preliminary test on cotton and synthetic fabrics before proceeding with production.

In addition, we recommend that you accurately test and set up your dryer, as the main cause of poor washout resistance remains insufficient ink drying.

■ Printing:

When necessary, spray water on the screen before applying the ink. Indeed, a dry screen can cause either a bad printing, or a lack of ink on some parts of the pattern, especially for fine mesh designs.

Perform a thick topping when printing.

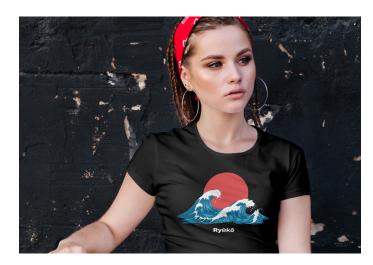
During breaks and stops, the screen should be immediately covered with a thick layer of ink.

This prevents parts of the design from drying. The ink is sufficiently stable in the screen and allows short breaks in printing during a long print run.

Under no circumstances should you scrape the dried ink residue off the sides of the pot, as this could cause them to fall into the ink and cause printing problems later.

■ Screen cleaning:

After long print runs or in case of frequent flashing, the use of soapy water will allow a more efficient cleaning. In case of persistent ink residue, we recommend the use of cleaning solvent.





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





Compliance

The AMAZONIA ELASTIC series is approved GOTS Chemical Inputs V7. They comply with the EN 71-3 standard, ROHS directive and REACH/CLP regulation.

Product range

WHITES	Ref. 1 kg	Ref. 5 kg	Ref. 60 kg
White OPE	35C2000OPE	35C40000PE	35C7000OPE
Opaque white OPE	35C2086OPE	35C4086OPE	35C7086OPE

BASES	Ref. 1 kg	Ref. 5 kg	Ref. 60 kg
Base TE	35C2058TE	35C4058TE	35C7058TE
Base OPE	35C2090OPE	35C4090OPE	35C70900PE

C	PAQUES COLORS	Ref. 1 kg	Ref. 5 kg
	Lemon OPE	35C2002OPE	35C4002OPE
	Gold yellow OPE	35C2004OPE	35C4004OPE
	Orange OPE	35C2006OPE	35C4006OPE
	Red OPE	35C2010OPE	35C4010OPE
	Fuchsia OPE	35C2015OPE	35C4015OPE
	Violet OPE	35C2016OPE	35C4016OPE
	Reflex blue OPE	35C2025OPE	35C4025OPE
	Process blue OPE	35C2027OPE	35C4027OPE
	Bright green OPE	35C2030OPE	35C40300PE
	Dark green OPE	35C2034OPE	35C4034OPE
	Bluish black TE	35C2081TE	35C4081TE

ADDITIVES AND THI	Ref.	
Catalyst 0564	100 g	35A0564
Catalyst 0588*	100 g	35C0588
Blocked hardener	1 kg	3Y551120
Bonding agent	1 kg	35C2089
Thinner and retarder	1 kg	35C2062
Thickener	25 g	35C0263
Retardant gel	1 kg	35C2099
Retarder	1 kg	35C2061
Retardant spray	250 ml	35C1298

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⚠ The Catalyst 0564 (35A0564) and the Catalyst 0588 (35C0588) are not approved GOTS Chemical Inputs V7.

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