

SCREEN PRINTING TEXTILE INK AMAZONIA ELASTIC

BASE + PIGMENT CONCENTRATES

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

This « Base + pigment concentrates » 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.

Ink preparation

- **For all colors :** Selected base
- + 8% maximum pigment concentrates.



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.

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

Caution :

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

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

■ Drying :

printed.

■ Flash cure :

Tunnel drying		Cold drying	
All bases + pigment concentrates	2 min at 165°C - 3 min at 160°C.	Not applicable.	
Base OP + pigment concentrates 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. 	
Base TE + Black pigment concentrates (3522044) and White OPE	- 2 min at 165°C - 3 min at 160°C.	Not applicable.	

To obtain the Bluish black TE (35C2081TE), it is necessary to use Base TE (35C4058) + Black pigment concentrates (3522044).

Drying parameters (time and temperature) can vary tunnel drying. 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

■ White OPE (35C40000PE) :

To be used alone. High elasticity.

Special recommendations

■ Washability :

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

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.





* 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

■ Opaque white OPE (35C4086OPE) :

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

Good elasticity.

Stability in the screen.

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	35C70000PE	
Opaque white OPE	35C2086OPE	35C40860PE	35C7086OPE	
DAGEG	Def 4 les			
BASES	Ref. 1 kg	Ref. 5 kg	Ref. 60 kg	
Base TE	35C2058TE	35C4058TE	35C7058TE	
Base OPE	35C2090OPE	35C40900PE	35C70900PE	

PIGMENT CONCENTRATES	Ref. 1 kg	
Yellow	3522002	
Gold yellow	3522004	
Orange	3522006	
Bright red	3522008	
Rubis red	3522012	
Carmine red	35C2020	
Fuchsia	3522015	
Violet	3522016	
Primary blue	3522020	
Royal blue	35C2028	
Mint green	3522035	
Black	3522044	

ADDITIVES AND THIN	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

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

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1 The pigment concentrates are not approved **GOTS Chemical Inputs V7**.





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