



SCREEN PRINTING TEXTILE INK

AMAZONIA BASE + PIGMENT CONCENTRATES

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

This « Base + Pigment concentrates » color range is intended for direct printing on cotton and cotton/polyester textiles. The inks are available in transparent colors and four-colors process for light colored textiles, and in opaque colors for dark textiles. According to the colors used, two modes of drying are proposed : hot or cold. The ink is printable on manual, semi-automatic and automatic carousels.

The AMAZONIA 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 :**
 - Transparent colors : no touch.
 - Opaque colors : soft.
- **Colors :** AMAZONIA inks are declinable in Pantone® colors. The AMAZONIA and AMAZONIA ELASTIC series can be mixed.
- **Average yield :**
 - Transparent colors : 49 t/cm screen : 20 sqm/kg.
 - Opaque colors : 49 t/cm screen : 10 sqm/kg.
 - White OP : 49 t/cm screen : 10 sqm/kg.
- **Washability :** Good at 40°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

- **Transparent colors :** Base T (35C4065T)
+ 7% maximum pigment concentrates.
⚠ Possible use of Concentred Base (35C4093).
- **Opaque colors :** Base OP (35C4068OP)
+ 10% maximum pigment concentrates.
- **Four-colors process :** Process base (35C4067Q)
+ 2% 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.
 - White OP : 43-80 t/cm to 49-70 t/cm.
 - Under base White OP : 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 the White OP : 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.

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 time by stabilizing viscosity. Add 2 to 5%.

Retardant spray (35C1298) : Prevents the ink from drying 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 colors :

- Transparent colors : 4 seconds.
- Four-colors process : 4 seconds.
- 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.

■ Caution :

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

■ Wet-on-wet (transparent colors) :

Possible with warm palettes (40-45°C).

■ Drying :

	Tunnel drying	Cold drying
All bases + pigment concentrates	3 min at 160°C.	Not applicable.
Base T + pigment concentrates OR Process base + pigment concentrates	- 3 min at 160°C. OR - 2 min at 160°C with 5% 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 OP + pigment concentrates	2 min at 165°C - 3 min at 160°C.	Not applicable.
White OP	- 2 min at 165°C. OR - 1 min at 165°C - 2 min at 160°C with 5% of Catalyst 0564.	With 5% of Catalyst 0564. Wait 5 days for optimal washability.

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.

⚠ OP inks must be dried imperatively in a dryer.

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

Whites

■ White OP (35C4087OP) :

Uses as stand alone or as under base white. High stability in the screen.

■ Mixing white OP (35C4085OP) :

To be used for processing of special colors.

Special recommendations

■ Use of Concentred base (35C4093) :

Weigh and mix the base under low agitation, then gradually add the same amount of water while continuing to agitate the mixture.

Add 2,5% of Thickener (**35C0263**). This operation requires strong agitation (vortex effect).

Mix the whole for 10 to 15 minutes until it's homogeneous. The final mixture is Base T (**35C4065**).

⚠ Mechanical agitation is essential to obtain a good homogeneity of the mixture.

■ 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.

Example : 30 minutes of break are possible in case of printing in mesh 49 at a temperature ranging between 18 and 25°C, and a relative humidity of at least 50% (ideally between 60 and 70%).

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

* 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.

Compliance

The AMAZONIA 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 OP	35C2087OP	35C4087OP	35C7087OP
Mixing white OP	35C2085OP	35C4085OP	35C7085OP

BASES	Ref. 1 kg	Ref. 5 kg	Ref. 60 kg
Base T	35C2065T	35C4065T	35C7065T
Base OP	35C2068OP	35C4068OP	35C7068OP
Process base	35C2067Q	35C4067Q	35C7067Q
Concentred base	35C2093	35C4093	35C7093

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 THINNERS		Ref.
Catalyst 0564	100 g	35A0564
Catalyst 0588*	100 g	35C0588
Blocked hardener	1 kg	3Y551120
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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⚠ The pigment concentrates are not approved **GOTS Chemical Inputs V7**.



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