

# TEXTILE STRETCH. ELECTRONICS ENCAPSULANT

SEPRTR17010

## PRODUCT DESCRIPTION

Water-based, transparent, one-component, stretchable encapsulant ink. It is used as protective encapsulant in combination with conductive inks to print stretchable circuits on textile.

## APPLICATION FIELDS

- The ink is printed in combination with conductive functional inks and a thermoplastic adhesive (like EPTAINKS TEXIFLOCK E-FF) on sacrificial supports.
- The ink set is then transferred on fabric by means of a heated press following the "transfer printing" process, commonly used in the Textile Industry.
- Suggested transfer conditions:  
180°C, 4 bar, 15 seconds or  
130°C, 4 bar, 30 seconds  
Peel – off cold
- Its softness and elasticity makes it especially well-suited for wearable applications with comfort requirements.

## GENERAL FEATURES

- High flexibility and elasticity
- Good hydrophobicity
- Formaldehyde, phthalates and heavy metal free

## PREPARATION

- Ready-to-use ink. It can be diluted with water.

## APPLICATION PROCESS

<b>Support</b>	Polyester release film
<b>Th/cm</b>	From 43 th/cm (110 Th/inch) to 77 th/cm (196 Th/inch)
<b>Suggested Emulsions</b>	Eptatech ZERO-IN UNIVERSAL PLUS, ZERO-IN KS 200
<b>Squeegee</b>	Square edge Hardness 60-65 Shore
<b>Drying</b>	120°C, 2 minutes 110°C, 3 minutes
<b>Thinner</b>	In case, max 3% water
<b>Cleaning</b>	Water or Screen clean ST
<b>Storage</b>	Away from solar light Temperature 15°-35°C
<b>Package</b>	Available in 1 or 5 Kg
<b>Safety Data Sheet</b>	Available upon request

## APPLICATION

- During printing, it is recommended to adjust the off contact and the pressure of the squeegee at their best, in order to obtain an ink film that can remain onto the surface of the substrate.
- Keep the screen wet, by nebulizing water

## DRYING

- Drying must take place at 110° - 120°C.

## SPECIAL INSTRUCTIONS

- Always test the printing characteristics, before starting production.
- These inks do not resist dry cleaning and bleaching.
- Squeegees, screens and cases, that are used with other ink series, must be cleaned well, in order to avoid any possible contamination and to grant eco-labelling specifications.
- In order to avoid a quick drying, due to environmental conditions:
  - Print and lay an adequate ink quantity
  - In case of long breaks, do not cover the drawing in the screen, and spray small quantities of water, before starting again
  - Nebulize small quantities of water, in order to compensate the loss in humidity
- In case of medium-high print runs, a viscosity increment of the ink on the screen may take place. It is recommended to load small ink quantities and to replenish frequently.

## WARNING

This technical data sheet does not replace either the Safety Data Sheet or the specific Conformity Declaration. These documents may be required to our SHEQ (Product safety office), at the following e-mail address: [safety@eptainks.com](mailto:safety@eptainks.com) The technical data sheet does not relieve the printer, who remains the only responsible of the respect of the regulations, the specifications and the related required certifications of the finished items.

## EQUIPMENT

Indicated for using onto automatic, semiautomatic and manual machines

## IMPORTANT NOTE

The information given in this technical sheet is not intended to be exhaustive and any person, using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us to the suitability of the product for the intended purpose, does so at his own risk. While we endeavour to ensure that all advice we give about the product is correct, we have no control over either the quality or condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage arising out of the use of the product. The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.