

## **ASTRA ECO**

#### PRODUCT DESCRIPTION

Pre-polymer diazo photoemulsion suitable for the preparation of screen for screenprinting.

#### **APPLICATION SECTORS**

ASTRA ECO is suitable for the preparation of frames intended for screen printing with water-based inks, plastisol and sublimatic inks.

#### **CHARACTERISTICS**

- · Color: blue
- Solid content: 43%
- Viscosity: about 8,000 cps (25 °C)
- Recommended fabrics from 43 threads/cm to 140 threads/cm
- Excellent chemical/mechanical resistance
- · Good definition of contours

#### **APPLICATION PROCESS**



#### PREPARATION OF THE FABRIC

New fabric: degrease with products of the Cleanser series

. Recovered fabric: operate in advance with Polistrip series products and then with Cleanser series.



#### **SENSITIZATION**

Add *Diazo Micro HD Powder* directly into the emulsion, without dissolving the diazo in demineralized water. Let stand for a few hours to allow the necessary disaeration.

The mixture has a four-week pot-life if stored in a cool place (4-10 3-C) and protected from light.



#### **APPLICATION**

The application is related to the used mesh.

The recommended range is from 55 threads/cm to 140 threads/cm. For example, with 55 threads/cm fabric it is recommended to apply a coat of emulsion on the print side and a hand on the squeegee side (following the order indicated).



#### **DRYING**

After application, dry the frames horizontally with the print side down in a ventilated oven for about 60 minutes. It is recommended to dry at a temperature between 30 °C - 40 °C. C. Too high temperatures could compromise the development of the frame. Drying times vary depending on the amount of photoemulsion applied.



#### **EXPOSURE**

The exposure times are conditioned by:

- · quality and type of light source
- Thickness of the photoemulsion (EOM)



We recommend using a 5000 Watt UV metal-halogen lamp. The table below shows indicative exposure times for different tissues at a distance of 140 cm.

Fabric	Application step (printing side + doctor blade side)	Exposure time
43.80 W	1 + 1	300 s
77.48 W	1 + 1	120 s
120.34 Y	1 + 1	160 s

It is recommended to carry out preliminary tests to find the correct exposure time.

#### **DEVELOPMENT**



After exposure, wet the picture internally and externally, leave a few moments and then rinse with a water jet on the printing side until the details of the drawing are completely opened. If possible, it is recommended to immerse the framework in water at room temperature for about five minutes before development.

Dry in a ventilated oven at a maximum temperature of 30 °C.

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#### **RETOUCHING**

Any adjustments can be made with the sensitized emulsion. Carry out a re-exposure afterwards.



### **RECOVERY**

If necessary, the recovery of the frames after printing is recommended the use of Polistrip series products. Catalyzed frames cannot be recovered.



#### **CATALYSIS**



If necessary to have significant chemical/mechanical resistance, the photoemulsion must be catalysed with Catalyst 210 (cod. M160210K001000). The treated frame can be used after:

- 12 hours, when dried at room temperature
- 45 minutes, when dried in a ventilated oven at 50 °C

Note: Catalyzed photoemulsion can no longer be recovered (removed from the frame).

#### **SPECIAL RECOMMENDATIONS**

- Always test the characteristics of the product before proceeding to the application.
- Always use the product in a yellow light protected environment.
- $\bullet$  The sensitized and stored emulsion at a maximum temperature of 20  $^{\rm o}{\rm C}$  has a shelf-life of one year.
- Sensitized emulsion, when stored at a temperature between 4,5 and 10,3 has a 4-6 weeks pot life.
- Safety data sheet available on request.

#### **PACKAGING**

M22800EK001000	1 Kg
M222800EK00100	5 Kg

#### **IMPORTANT INFORMATION NOTE**

The information in this data sheet is not to be considered exhaustive, but anyone who uses the product for any purpose other than that specifically recommended on this document without a precise written confirmation from us, He does it at his own risk.

Although we strive to ensure that all the product recommendations contained here are correct, we do not have any control over the quality and conditions of the support, or the multiple factors that may affect the use and application of the product.

Therefore, except for specific written agreements, we do not accept any liability - of quality nature and in any way it may occur - regarding the performance of the product, nor for any loss or damage resulting from the unauthorized use of the product.

The information contained in this document is subject to periodic reviews, based on experience and our policy of constant product improvement.