

Screen Chemicals



ZERO IN ASTRA

Code M*ASTRA

PRODUCT DESCRIPTION

PRE-POLYMER DIAZO photoemulsion, indicated for the preparation of screens for screen printing

APPLICATION FIELDS

Photoemulsion indicated for printing with:

- · Plastisol and water-based inks
- Sublimation inks

TECHNICAL FEATURES

- COLOUR = BLUE
- SOLID CONTENT = 43%
- VISCOSITY = about 8000 cPs (25°C)

APPLICATION PROCESS

Sensitizer	DIAZOSENSITIZER MICRO HD
	POLVERE
	It doesn't need to be diluted into water
Application	Depending on the used mesh
Drying	30°C – 40°C
Exposure	Depending on the applied photo-
	emulsion quantity
Development	Water
Retouching	In case, with the sensitized photo-
	emulsion
Catalysis	In case, with CATALYST 210
Varnishing	Not needed
Recovery	With products of the series
	POLISTRIP
Package	M1ASTRA = 1 Kg Kit (1 x 1 Kg ZERO
	IN ASTRA + 1 dose of DIAZO)
	M5ASTRA = 10 Kg Kit (2 x 5 Kg di
	ZERO IN ASTRA + 2 doses of DIAZO)
Safety Data Sheet	Available upon request

SENSITIZING:

Add **DIAZOSENSITIZER MICRO HD POLVERE** directly into the photoemulsion. The de-aeration time is about 2 hours. The mixture has a pot-life of 4 weeks, if kept in a dark and cold (4-10°C) place.

APPLICATION:

The application depends on the mesh, the suggested range is from 55 Th/cm to 140 Th/cm. For example, with a 55 Th/cm screen, it is recommended to apply an emulsion layer onto the "printing side" and a layer onto the "squeegee side" (by following the indicated sequence).

DRYING:

It is recommended not to exceed 30°C – 35°C. The times may vary depending on the applied photoemulsion quantity.

GENERAL FEATURES

- PRE-POLYMER DIAZO photoemulsion
- It needs to be sensitized through DIAZO-COMPOUNDS
- Excellent resistance to plastisol and water-based inks
- Excellent resistance to sublimation inks
- Excellent chemical/mechanical resitances
- High solid content
- Free from risk labelling

EXPOSURE:

The exposure depends on the applied photoemulsion quantity.

The use of a METAL-HALOGEN UV 5000 W lamp is recommended. For example:

- Screen = 55 Th/cm
- Lamp = metal-halogen UV 5000 W
- Distance = 140 cm
- Exposure time= 70-80 seconds

DEVELOPMENT:

It is recommended to dip the screen into water at room temperature for about 5 minutes. Rinse off through a water jet, and subsequently dry into oven at a temperature of about $30^{\circ}\text{C} - 40^{\circ}\text{C}$.

RETOUCHING

After the possible retouching with the sensitized photoemulsion, some minutes of re-exposure are needed.

CATALYSIS

If large printing runs are required and, as a consequence, remarkable chemical/mechanical resistances are needed, the photoemulsion has to be catalyzed through **CATALYST 210**. The so treated screen may be used after:

- 12 hours, if dried at room temperature
- 45 minutes, if dried into air oven at 50°C

<u>Note:</u> The catalyzed photoemulsion may not be recovered (removed from the screen) anymore.

RECOVERY:

If the recovery of the screen after printing is needed, the use of the products of the series **POLISTRIP** is recommended.





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SPECIAL INSTRUCTIONS

- Always test the characteristics of the products, before starting application.
- Always use the product in a yellow light screened environment.
- The sensitizers must be kept at a temperature of about 5°C. In these conditions, the product has a shelf-life of about 1 year.
- The non-sensitized emulsion, if kept at a maximum temperature of 20°C, has a shelf-life of about 1 year.
- The sensitized emulsion, if kept at a temperature of about 4°C - 10°C, has a pot-life of 4 weeks.

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 endeavor 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 develop-

