



Coates Screen

# Product Data Sheet

## COATAZOL PA EMULSION

PDS No. 941

Coatazol PA is a quality photo emulsion designed for use in the making of photostencils for screen printing. The emulsion is light green in colour and is suitable for use with solvent based and UV ink systems. Coatazol PA is a rapid exposure diazo sensitized emulsion which provides excellent resolution. Coatazol PA also has high solvent and mechanical resistance.

Coatazol PA is a two pack system and is available in pack sizes of 0.9kg and 4.5kg.

### INSTRUCTIONS FOR USE

#### SENSITIZING

Half fill the sensitizer container with warm water to dissolve the sensitizer powder, reseal and shake the bottle for a few moments to dissolve the diazo powder. Add the entire contents of the bottle to the emulsion and mix thoroughly with a non-metallic spatula. Allow 2-3 hours, or preferably overnight, for air bubbles in the mixture to disperse.

#### SCREEN PREPARATION

All screens must be degreased before the emulsion is applied. Coatazol Mesh Cleanser is recommended. Using a brush or sponge, apply thoroughly to both sides of the screen and allow to stand for two minutes. Thoroughly rinse with cold water. The screen must be allowed to dry before applying the emulsion.

#### COATING

The degreased screen can be coated as follows:- 2 coats on the underside of the screen and 1 coat on the squeegee side. The coating may be reduced to 1 coat each side depending on requirements. When coating wet-on-wet, it is important to ensure the squeegee side is coated last so as to push the emulsion through the mesh to the substrate side. This drying application is suitable for meshes of 90:34 and finer.

After coating, the screen should be dried in a horizontal position, squeegee side up in light safe and dust free conditions. Drying can be assisted with a fan heater but the temperature should not exceed 40°C.

#### EXPOSURE

Exposure time depends upon many variables such as mesh count and colour, thickness of emulsion film, strength and distance of light source.

The table shown at the end of this leaflet is a guide only and is based on a 2 + 1 coating on a 100:34 dyed mesh at a distance of 1 metre. (this distance is from the UV bulb to the screen, not from the UV bulb protective glass to the screen). To achieve a more accurate exposure time, the use of the Coates One Shot Exposure Calculator is recommended.

#### DEVELOPING

The squeegee side should be wetted with cold water, then the stencil completely washed out from the print side using a high pressure jet (15-20 bar water pressure) at a distance of approximately half a metre. Complete the process by gently rinsing the squeegee side to remove any emulsion residue.

## RE-CLAIMING

All traces of ink should be removed from the screen using Universal Screenwash 11-00. Apply Coatazol Strip Liquid to both sides of the screen and allow it to react for approximately 3 minutes. The stencil can now be removed by spraying with water. Any ink residue can be removed by the use of Emulsifiable Screenwash YC26-04, alone or in conjunction with Coatazol Alkaline Paste.

High pressure guns will enable quicker removal of residues but care must be taken to avoid skin or eye contact with chemicals blasted off the screen

## SAFETY

Coatazol PA emulsion is not hazardous if used under normal conditions of industrial hygiene. Detailed Health and Safety Data Sheets will be provided upon request by your local Coates screen branch.

## STORAGE

The unsensitized emulsion can be stored for 12 months in cool surroundings. Sensitized, emulsion can be stored for approximately 4 to 6 weeks, if kept cool, preferably in a refrigerator.

## EXPOSURE

Light Source (Metal Halide)	Distance (Metres)	Exposure Time
1000W	1	4-5 mins.
3000W	1.00	2.5 - 3.5 mins
5000W	1	1.5 mins.

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**MARCH 1999** *This information has been carefully compiled from experience gained in the laboratory and under commercial conditions. However, the product's performance and its suitability for the customer's purpose depend on the particular conditions of use and the material being printed. We recommend that customers satisfy themselves that each product meets their requirements in all respects before commencing a print run. Since we cannot anticipate or control the conditions under which our products are used it is not possible to guarantee their performance. All sales are subject to our standard terms and conditions of sale.*

*We would point out that the information contained in this leaflet is only a recommendation and may need to be altered to suit the conditions and efficiency of the equipment employed. Coates Screen products are not designed for use in conjunction with those of any other ink maker or similar supplier unless agreed in writing.*