



Mixing Your 2 Part Emulsion and Sensitizer – Factsheet

These instructions are for mixing a sensitizer to a photosensitive emulsion used in screen printing. These emulsions are known as Dual Cure or Diazo. Photopolymer emulsions have the sensitizer pre mixed into the emulsion. Wicked Printing Stuff sells a 2-Part Proclaim emulsion, which is a pre-sensitized emulsion.

There are 2 types of sensitizer used in the screen printing world, powder and liquid. The powder sensitizer is harder to dissolve, so you need to spend more time shaking the bottle ensuring that the powder has been fully dissolved.

It is normal for the sensitizer to change the emulsions colour after mixing. WPS proclaim emulsion is blue and turns green when sensitized. After exposure, the emulsion turns back to its original blue colour on the mesh.

Before you start opening containers you need to have

- *A wooden spatula for stirring*
- *Towels for clean up*
- *An area under low light conditions. Usually a yellow or red light subdued light.*
- *Access to tap water*
- *A table covered with newspaper for fast clean up*
- *Spare tubs for mixing smaller quantities / rations*

Mixing the Emulsion with the sensitizer.

1. *Open the emulsion container and the sensitizer bottle.*
2. *Fill the sensitizer to the neck with tap water, preferably lukewarm or distilled water.*
3. *Replace the cap and shake well.*
4. *Pour contents from the diluted sensitizer bottle into the emulsion container*
5. *Stir the emulsion extremely well, ensuring that you scrape the sides of the pot and the bottom of the pot so that the whole tub is sensitized*
6. *Replace the lid and wait for at least 1 hour until add bubbles have dispersed before using.*

Preserving your emulsion

Adverse weather conditions may cause your emulsion to shorten its shelf life. If the room temperature is too hot or too cold, this may cause problems when exposing. Another alternative is to only mix what is required i.e. a smaller amount of the emulsion as follows:

Instructions for mixing a smaller quantity of Emulsion with the sensitizer.

1. *Open the emulsion container and the sensitizer bottle.*
2. *Divide the emulsion into two separate tubs equally in half.*
3. *Pour the sensitizer onto a sheet of paper and divide the sensitizer equally in half as accurate as possible.*
4. *Replace the half unused sensitizer back into its original container and store with the unused half of emulsion. Place the other half of sensitizer powder into a new 30ml container and fill up half way with water, preferably lukewarm or distilled water. Replace the cap and shake well.
Pour contents from the diluted sensitizer bottle into the emulsion container*
5. *Stir the emulsion extremely well, ensuring that you scrape the sides of the pot and the bottom of the pot so that the whole tub is sensitised.*
6. *Replace the lid and wait at least 1 hour or until all bubbles have dispersed before use.*

Note: *Always stir the emulsion well before it is used. If it is not mixed thoroughly, the solids go to the bottom, and the sensitizer floats to the top. The emulsion on top with all of the sensitizer exposes great, but when you get half way down the container, your emulsion does not expose properly.*

Sensitized Emulsion Storage- Keep sensitized emulsion in a cool dark place like the refrigerator.