

# BASELAYR I LONG LASTING EMULSION



## **DESCRIPTION:**

Baselayr Long Lasting Emulsion is a high performance, high solids, dual cure emulsion designed for printers who are either new to screen printing, do not have a proper light safe darkroom, or do not have an LED or better exposure unit. The emulsion works with water-based and plastisol ink types — the dominant ink types on the market today. Formulated with both novice and advanced screen printers in mind, images will rinse out effortlessly and screens will reclaim easily when the stencil is properly dried and exposed. Baselayr Long Lasting will work with virtually all exposure units. Baselayr Long Lasting was specifically created to be user-friendly, an emulsion all printers can rely on.

NOTE: This emulsion comes with a bottle of Diazo. Diazo must be added to the emulsion for it to work. Details on usage below.



### **INSTRUCTIONS:**

Add the appropriate amount of distilled water to your bottle of diazo. Do not use tap water. Tap water contains minerals that can interfere with proper adhesion of the emulsion to the mesh. Shake the container, completely dissolving the diazo into the water. Add mixed diazo to the container of Baselayr Long Lasting. Carefully stir in the diazo completely. Let sit for a couple hours to let the air bubbles settle out. Apply emulsion to a clean, degreased, and dried screen mesh with a scoop-coater using appropriate application techniques. We recommend using Baselayr Emulsion Prep screen mesh degreaser and adhesion promoter whenever possible.



## **APPLICATION:**

Depending on your screen and stencil thickness needs, use either the sharp edge or round edge of the scoop coater, coating once or twice per side. More coats means a thicker stencil. Be sure to rotate the screen so that you are pushing the emulsion from both sides to bond around the knuckles of the mesh. Experiment to find what works best for you within your shop. Allow your freshly coated screen to dry, shirt side down. Expose your screen with the recommended light source. As with all emulsions, test for appropriate exposure time for your unit before exposing your design. Use a Step Wedge Calculator to determine the proper amount of time required to fully cure your stencil.



If needed, you can harden your stencil by post-exposing it (make sure the stencil is completely dry like a fresh screen), putting it back in your exposure unit and exposing for 3x the initial exposure time. You can also place your screen in direct sunlight. Reclaiming Baselayr Long Lasting is easy and works with most stencil removers or reclaimers that are available in concentrate and ready-to-use formulas. Follow proper instructions for reclaiming.



#### **EXPOSURE VARIABLES:**

Exposure variables depend on mesh count, mesh color, stencil thickness and moisture level in the coated screen. Keep humidity levels below 40% at all times. Use a dehumidifier to ensure proper darkroom humidity levels.

Lower mesh = slower exposure / Higher mesh = faster exposure

Thicker stencil = slower exposure / Thinner stencil = faster exposure

More moisture = Under Exposed and difficult to rinse out Less moisture = proper exposure and maximum detail resolution.

Yellow mesh = slower exposure and more detail resolution White mesh = faster exposure



## **SUGGESTED EXPOSURE TIMES:**

Mesh: 156 standard mesh color: white X-Vactor LED Unit: 2:20 - 2:50

Mesh: 230 standard mesh color: Yellow X-Vactor LED Unit: 2:00 - 2:30

Mesh: 156 Hi-Dro / Thin Thread mesh color: Yellow X-Vactor LED Unit: 3:50 - 4:20

Mesh: 230 Hi-Dro / Thin Thread mesh color: Yellow X-Vactor LED Unit: 3:00 - 3:30



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## **STORAGE:**

Store in a cool area. The emulsion will break down much faster in heat. Keep the emulsion lid on tight to preserve air and light leaks. Gently mix the emulsion each time before use to help extend the life. To ensure best results, date your emulsion if mixed with diazo and keep an extra container on hand once the emulsion is about to expire. Environmental factors such as temperature and humidity can cause the emulsion to expire more quickly.\*



### **FREEZE WARNING:**

When ordering emulsion during the winter, please note that it's possible for emulsion to freeze during transit. Frozen emulsion is unusable. We recommend to plan accordingly when ordering so shipping is uninterrupted and to pull all delivery packages inside the building and store in a warm place immediately.

### **SHELF LIFE:**

With Diazo, Add the appropriate amount of distilled water. Do not use tap water. Tap water contains minerals that can interfere with proper adhesion of the emulsion to the mesh. It's important to note that diazo is sensitive to heat. Where you store diazo-mixed emulsion will make a difference to its shelf life: If kept in a cool environment around 40° (in a refrigerator), you can extend your shelf life to ~12 weeks. The hotter your environment is, the faster the diazo will break down. At 90°-100°, mixed emulsion has a pot life of ~1 week. At 70° it's ~6 weeks.

