



# VIVID ZEBRA DZ 133

Premium Water based Diazo Photo Emulsion for  
Discharge & Plastisol Inks  
PHTHALATE FREE

## EMULSION FOR GARMENT PRINTING

Our Product **ZEBRA DZ 133** Diazo Photo Emulsion is a high quality 44 % Solid Content (Unsensitised) and a very durable water and plastisol resistant garment printing with excellent resolution and high definition Photo Emulsion.

Zebra DZ 133Tex is used for the production of high-quality stencils, water resistant, discharge base water stencils & Plastisol base inks. The print run resistance can considerably be increased by chemical hardening with Zebra Hardener . Before hardening, and DZ 133Tex can be de coated with Zebra Strip.

- High Solids Content 44 % ( Unsensitised )
- Medium High Viscosity
- Screens have excellent definition and resolution
- Excellent coat ability on a variety of mesh counts
- Extremely durable, yet reclaimable with very high pressure washer
- Highly Resistant to Water Based and Plastisol Inks
- Can be post hardened with **Vivid Zebra Hardener** for permanent screens

### Application:

**ZEBRA DZ 133** is particularly recommended for fabric printing, textile and garment printing applications for four colour halftones and speciality printings. **ZEBRA DZ 133** is easy to handle and has a long shelf life, applications for high build with minimum coatings with fast drying, good print durability, and produces sharp print definition. This Emulsion is resistant to all water based dye and pigment systems found in textile printing and as well as water based inks, plastisols, adhesives and pastes used in Garment Printing

### DIRECTIONS FOR USE:

- 1. Sensitizing with Diazo-** Fill the Diazo bottle upto the 1/2 shoulder with water and shake well to dissolve completely. Add this liquid to the emulsion and once again fill the Diazo bottle upto the 1/2 shoulder with water and shake well to dissolve completely the remaining Diazo in the bottle as well. Add this liquid also to the emulsion and mix thoroughly with a wooden paddle. After these components are completely mixed allow to sit the Emulsion in a cool and dark place with the lid tightly closed for 8 hours prior to coating to eliminate bubbles.
- 2. Degreasing-** Before coating it is recommended Zebra Prep. to clean and degrease the screen mesh to achieve reproducible coating results. Ensure proper tension of the screen, Zebra Prep use for degreasing, After thorough rinsing with water and drying the screens are ready for coating.
- 3. Coatings -** The coating of the screen generally begins from the printing side in order to fill the mesh openings. Only then begin with the emulsion build-up from the squeegee side, e.g. 2-1, 2-2, 2-3, machine is especially recommended because it achieves an even and reproducible coating result.
- 4. Drying-** Dry emulsion coated screens in complete darkness, or under safelight conditions, in a horizontal position with the substrate side facing down. Temperature, relative humidity and airflow affect the drying time. Screens must be dried thoroughly before exposing to achieve highest chemical (ink and ink wash up cleaners) and mechanical (abrasion) resistance. Environmental conditions play a vital role. Temperatures of 30°-40°C (86°-104°F) with a relative humidity of 30% - 50% maximum and moderate airflow are optimum conditions. Drying at room temperature and in uncontrolled conditions may lead to inconsistent results and varying screen resistance.

NOTE: Keep screens and all screen handling areas dry until exposure is complete. This includes storage, exposure preparation, and exposure areas, as photo emulsions reabsorb moisture if reintroduced to high humidity environments. Emulsions do not become humidity resistant until exposure, washout and drying are complete.

**5. Exposure-** Expose with ultra-violet light at a wavelength of 395 – 445 nm. UV Dose mj/cm, Metal halide lamps provide the best results. Due to the many variables that determine optimum exposure time, accurate exposure times cannot be given. The following examples are offered as a guide only.

Lamp: 5000 Watt metal halide at 40" (1m) distance:

Mesh Count.T tpi (tpcm), Mesh Color, Coating Technique

Exposure Time

60-64T (156-64) Yellow 2-2 Violet ~ 120 sec.

Undyed (White Mesh) ~ 100 sec.

120-34T (305-34) Yellow 2-2 Violet ~ 60 sec.

Undyed (White Mesh) ~ 50 sec.

Correct exposure times for your equipment and mesh selection must be determined through exposure tests using an exposure calculator such as the Expo Check by Exposing Calculator.

Under-exposed screens feel slimy on the squeegee side during developing. At correct exposure time, the screen is not slimy

Overexposure leads to loss of small details. Correctly exposed screens will withstand high water pressure during washout.

Please contact: Contact: Zebra Technical Team if you have further questions regarding exposure time.

**6. Developing/ Washout-** Develop the screen using full pressure tap water and a medium spray pattern. Adjust the water temperature to lukewarm or slightly colder. Rinse thoroughly from both sides of the screen. Vacuum off any excess water or blot it off with blank newsprint paper. This will avoid runs or scum from under-exposure in the open areas.

**7. Post- Exposure-** Post-exposing the screen after developing and drying is not very effective. To improve the resistance 10-15% the post-exposure time needs to be four times the original exposure time. Exposing the screen fully with the primary exposure offers better resistance than under exposing initially, then post-exposing to improve resistance. Post exposure is most often used for long printing runs when water based and/or abrasive inks are used.

**8. Post Hardening ( Chemically )-** The emulsion can be chemically post-hardened using one of Zebra Stencil hardeners. Stencil hardeners can be classified as reclaimable or un-reclaimable.

If reclaiming ability is desired, use Zebra Cure P.

If a permanent un-reclaimable stencil is desired, for example when Cataloging screens for future use, or when aggressive inks are used for very large print runs,

See separate technical Information sheets for further details regarding Zebra Hardener's stencil hardeners.

**9. Reclaiming-** Zebra 133tex Violet can be reclaimed sample printed screen before hardening, and DZ 133Tex can be de coated with Zebra Strip.

#### ADDITIONAL INFORMATION

For additional product information, please

Thank you for choosing VIVID CHEM.

Disclaimer- This data sheet is for your information, Please check the product's suitability for a peculiar application before use.

No responsibilities can be undertaken for occurring damages. Our products are subject to a continuous production and quality control and leave our factory in perfect condition.

**Vivid Manufacturing Co. Pvt. Ltd.**

---

14/7, Site-IV, Industrial Area, Sahibabad-201010, U.P.  
E-mail : [info@vividchem.com](mailto:info@vividchem.com) WebSite: [www.vividchem.com](http://www.vividchem.com)