

DYNACOLOR™ DATA SHEET

GLOW-IN-THE-DARK UV SCREEN INK

DESCRIPTION

DYNACOLOR™ Glow-in-the-dark screen inks have a light, cream color when they are printed. The pigments are charged by a broad spectrum of wavelengths but ideally with UV light. The charge time varies between 5 and 30 minutes depending on light intensity. After the ink is fully charged the afterglow will last up to 8 hours. Because the pigments have such a high specific gravity the ink must be **stirred well** to ensure uniform pigment distribution.

TYPICAL PROPERTIES

Viscosity (at 25° C) 50-100 poise
Density (Approx.) 10.4 lb./gal
Appearance Viscous Liquid

Percent Solids (Approx.) 99% Percent Volatiles (Approx.) <1.0%

Food Contact Compliance Status Approved for Indirect Food Contact

Yield Range (Approx.) 10,000-50,000 in²/lb. (depending on film thickness)

Recommended Substrates Paper, Film

STORAGE AND HANDLING

The inks have excellent stability when stored away from heat. The material is combustible and should not be used near open flame. Store Below 90° F. Should be used within nine months of purchase. Storage longer than twelve months not recommended. Consult product MSDS prior to use.

SPECIAL CARE INSTRUCTIONS

DYNACOLORTM UV screen ink is simple to use, but it is a little different from other UV screen inks. The differences between our ink and regular UV screen inks are outlined below. The instructions below should be followed carefully to achieve optimal results.

- Ink-Do not allow DynaColor(to come in contact with water and acids. Always dry the screen completely before adding the ink to the screen. Always be sure that equipment that comes in contact with the ink is completely dry and free of all solvents. Also, when cleaning the screen in the middle of the run, do not allow any solvent to touch the unused ink.
- Mixing-Be sure to stir the ink well before and during use.
- <u>Screen Mesh</u>-A coating thickness of at least 1 mil is recommended for best results. Finer meshes may work with some formulations. Coarse screens, such as a 120-180 mesh are needed to achieve the heavy lay-down necessary to get good afterglow. Rotary screen emulsions can be over-exposed to insure best resistance to emulsion breakdown. You may wish to experiment to achieve the best results.
- Clean Up-Use normal solvents, but be sure screens are dry before adding DYNACOLOR™ ink.
- Thinning-CTI has extenders and thinners should you need them. Use CTI approved thinners only.
- <u>Substrates</u>-This ink will work well with most types of coated and uncoated stocks, as well as many plastics. Compatibility of ink, coating and substrate must be determined prior to production runs. A white base coat can enhance the afterglow but is not required.

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SENSITIVITY

Glow-in-the-dark materials are fairly stable. However, there are a few considerations that are worth mentioning.

LIGHT: The light fastness of these materials is excellent. This makes the inks suitable for a variety of outdoor applications.

CHEMICALS: Glow-in-the-dark materials are sensitive to water and acid exposure. However, once the ink has been printed and cured/dried, the resins and vehicles provide excellent protection.

CONCLUSION: In short, this ink has good stability and can be used for many applications that were previously not possible.

For further information or assistance, please contact Chromatic Technologies, Inc. at (888) 294-4CTI.

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