



## DATA SHEET

### PHOTOCHROMIC PVC-FREE / PHTHALATE-FREE TEXTILE SCREEN INK

#### DESCRIPTION

CTI's photochromic textile screen inks are plastisol inks that are off-white when not exposed to UV radiation, and gain color as they are exposed to UV light. These inks are available in various colors. The color change is "reversible," i.e., the color will fade again upon removal from UV exposure. CTI's textile screen ink is ideal for T-shirts and other apparel, promotional items, etc. See Color Availability Chart for a complete list of available colors.

#### TYPICAL PROPERTIES

Viscosity (at 25° C)	100-150 poise
Density (Approx.)	9.0 lb./gal
Appearance	Off-White Paste
Percent Solids (Approx.)	100%
Percent Volatiles (Approx.)	Negligible
Yield Range (Approx.)	5,000-20,000 in <sup>2</sup> /lb. (depending on film thickness)
Recommended Substrates	Textiles

#### STORAGE AND HANDLING

CTI's products should be stored in a cool, dry place and away from sources of UV light. The inks are stable when stored away from heat. The material is combustible and should not be used near open flame. Store Below 80° F. Product must be used within twelve months of purchase. Consult MSDS prior to use.

#### SPECIAL CARE INSTRUCTIONS

CTI's photochromic textile screen plastisol ink changes color with changes in light intensity. They print and cure as easily as other plastisol inks. They will not dry in your screen and do not contain solvents. They may be printed on 100% cotton synthetic/cotton blends. CTI's inks should be printed on white or light colors. The following suggestions should be kept in mind when running the ink.

**Recommended screen mesh: 130-200 mesh count with 150 preferred.**

**Deposit thickness: 1-3 mils**

**Curing: 310-320° F (155-160° C) for 30 - 90 seconds. (Inks should not be overcured)**

#### PRINTING ON DARK COLORED TEXTILES

It is possible to print CTI's photochromic inks on textiles other than white. Contact CTI to obtain a discharge ink prior to printing the photochromic ink. This will remove the dye from the textile and provide a suitable substrate for the photochromic ink to easily bond. Do not attempt to print directly on to a dark textile or a pre-printed white. Contact Chromatic Technologies, Inc. at 719-592-1557 for more information on printing on colored textiles

NOTE: Residual color may be a problem with colorless to color inks. This can be controlled by putting down a thinner film, though this may affect color intensity as well. Residual color can also become a problem if too much heat is used in drying the inks.

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