

MATERIAL SAFETY DATA SHEET

Photochromic Dye – Turquoise 1

UD02/T1

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MSDS097 Revision 2
Revision Date 10/09/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product name	Photochromic Dye – Turquoise 1
Description	Turquoise photochromic dye
Item #	UD02/T1
Company	LCR Hallcrest 1911 Pickwick Lane Glenview IL 60026
Telephone	+1 847 998 8580
Fax	+1 847 998 6866
Emergency telephone number	+1 847 998 8580
Intended use	Manufacture of UV sensitive inks and coatings.

2. HAZARDS IDENTIFICATION.

Skin contact	Not expected to present a significant hazard to skin when handled carefully and good chemical hygiene procedures are followed.
Eye contact	Depending on duration and personal sensitivity, unprotected contact may cause mild irritation, discomfort, redness, watering, itching or other effect. Heavy contact or for prolonged period may increase effects.
Inhalation	Not expected to cause harmful respiratory effects under normal conditions when good chemical hygiene procedures are followed and properly selected dust and/or vapor respirator is correctly used. Heated processing, spraying or misting of liquids may cause irritation or other effects. Unprotected contact without PPE, adequate ventilation, or in confined spaces may cause varied health effects, depending on duration and individual sensitivity.
Ingestion	Not expected to be a hazard with proper handling and good chemical hygiene procedures being followed. Wear appropriate, chemically impervious gloves to avoid accidental transferring and swallowing of chemical residue. This chemical may be a greater health hazard if swallowed deliberately, or in a large amount. In such cases, some effects may parallel those of inhalation or skin absorption.

3. COMPOSITION / INFORMATION ON INGREDIENTS.

Photochromic colorant	100%	CAS#: Undisclosed
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4. FIRST AID MEASURES

Skin contact	Immediately remove contaminated clothing. Wash affected area with soap and rinse with plenty of water. Get medical attention, as a precaution.
Eye contact	Immediately rinse with flowing water for at least 15 minutes while holding eyelids open. Get immediate medical attention, as a precaution.
Inhalation	Immediately move person to fresh air. If breathing is difficult give oxygen, call 911, calm the individual. If not breathing, call 911, give artificial respiration (CPR) until medical help arrives. Have this Material Safety Data Sheet available.
Ingestion	Do not induce vomiting unless directed to do so by a doctor or by other emergency medical personnel. Forced vomiting of certain chemicals may cause aspiration and lung damage. Have this Material Safety Data Sheet available.

5. FIRE FIGHTING MEASURES

Extinguishing media	CO2, dry chemical, foam, water fog or spray depending on type of fire
Fire hazards	Dust/air mixtures may ignite or explode. Emits toxic fumes under fire conditions.
Protective equipment	Wear self-contained breathing equipment and fire-proof clothing. Use water spray to cool fire exposed containers if they cannot be safely moved.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Avoid generating dust. Ensure adequate ventilation of the working area.
Environmental precautions	Prevent material from entering floor drains, sewers, or any bodies of water. For powder spills, use sweeping compound, sawdust, or other appropriate material to contain dust. If possible, recover any uncontaminated materials to re-use.
Clean up methods	Use sweeping compound to minimize dust and pick up as much product as possible. Do not allow to seep into drains, sewers, lakes, rivers, etc. Dye residue may be cleaned by scrubbing with detergent, depending on type. All cleaning or scrubbing liquids used should be absorbed and placed in labeled containers for correct disposal. Absorbent material containing solvents may release combustible or flammable vapors and should be handled accordingly, properly labeled and disposed.

7. HANDLING AND STORAGE

Handling	No special precautions anticipated. Wear all PPE in section 8 as a precaution, and avoid physical contact with material.
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Storage Keep containers tightly sealed in cool & dry area, out of direct sunlight. Maintain good ventilation. Limit indoor storage to approved areas with automatic sprinklers. Vapors expected to be released when material is heated during process operations. At minimum, follow all Section 8 recommendations for Exposure Controls and Personal Protection. FOR WATER-BASED PRODUCTS: DO NOT FREEZE. Also ground containers when filling or mixing powders.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures	Ensure adequate ventilation of the working area.
Respiratory protection	Depending on type of material handled and processing conditions, it is recommended that an appropriate NIOSH approved organic vapor/mist respirator, or dust respirator (with proper filters as required) be worn when exposure to product is expected. After each shift or when equipment becomes contaminated, clean respirator and replace filters in compliance with 29 CFR 1910.134. The type or extent of protection needed should be determined by the product end-user or shift supervisor.
Skin protection	Always wear impervious, chemical-resistant synthetic or rubber gloves. Check with manufacturer for best glove for the material being handled. Wear good quality long sleeved work shirt, coveralls, and a rubber or plastic apron. Wash hands after handling and before eating, drinking or using restroom. Shower after each shift. Clean contaminated but reusable protective equipment and clothing before reusing and wearing again. Discard contaminated disposable gloves and clothing. The type or extent of protection needed should be determined by the product end-user or shift supervisor.
Eye protection	As a precaution, wear indirectly vented, splash-proof chemical safety goggles. The type or extent of protection needed should be determined by the product end-user or shift supervisor.
Eye washes	Eye wash stations and drench showers should be located within 100 feet or 10-second walk of the work area per ANSI standard Z358.1-1990.

9. PHYSICAL AND CHEMICAL PROPERTIES

Description	Solid, powder.
Color	Greenish
Odor	Slight or none
Melting point	191°C
Solubility in water	Negligible
Solvent solubility	Soluble in toluene, tetrahydrofuran, dichloromethane, chloroform. Slightly soluble in alcohols and acetone.

10. STABILITY AND REACTIVITY

Stability	Product is expected to be stable under normal, ambient (controlled) conditions concerning heat, moisture, pressure, fire and ignition hazards, and ventilation. Contact with incompatible or reactive materials may cause hazardous reactions in some products if indicated. Check information below.
Hazardous Polymerization	Product will not undergo polymerization.
Conditions / Materials to avoid	High temperatures
Thermal decomposition products	In fire: May decompose releasing toxic gases.

11. TOXICOLOGICAL INFORMATION

Oral LD50 (Rat):	> 5000 mg/kg
Dermal LD50(Rabbit):	No data currently available
Eye Effects (Rabbit):	Slight irritant
Skin Effects (Rabbit):	No data currently available
Mutagenicity:	No data currently available
Inhalation LC50 (Rat):	No data currently available
Skin Sensitization (Guinea Pig):	No data currently available
Respiratory Sensitization:	No data currently available
Additional Toxicity Data:	No data currently available
Supplemental Test Data:	No data currently available
Other Data:	No data currently available
Carcinogenicity Status	Not known to contain carcinogens

12. ECOLOGICAL INFORMATION

Ecological information	No data currently available
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13. DISPOSAL CONSIDERATIONS

General information	Dispose of in compliance with all local and national regulations. Do not release into sewers, water systems, ground systems or ecosystems without proper authorization.
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14. TRANSPORT INFORMATION

DOT regulations	Not regulated
IATA regulations	Not regulated

15. REGULATORY INFORMATION

TSCA	Low Volume Exemption has been granted by the EPA. Follow all use and control restrictions as outlined here, and in this Safety Data Sheet. This colorant is approved by the U.S. EPA for the following applications: Lens coatings, printing inks, and all polymers (LM-07-0025).
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NOTE: Commercial uses beyond those listed above constitute willful violation of EPA regulations, subject to citations and civil or criminal penalties.

16. OTHER INFORMATION

Further information

The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.

HMIS LABELLING

HEALTH: 1, FLAMMABILITY: 1, PHYSICAL HAZARD: 0, PERSONAL PROTECTION: F