



MATERIAL SAFETY DATA SHEET

Photochromic UV Cure Screen Ink - Bis A Free

Page 1 of 5
MSDS137 Revision 2
Revision Date 10/10/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product name	Photochromic UV Cure Screen Ink – Bis A Free
Description	Bisphenol A free photochromic pigment dispersed in UV cure screen binder.
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 color changing UV-sensitive decorative effects.

2. HAZARDS IDENTIFICATION

Appearance	Viscous liquid
Emergency Overview	Irritant. Sensitizer. Possible risk of impaired fertility.
Eyes	Moderately irritating to the eyes. The liquid splashed in the eyes may cause irritation and reversible damage.
Skin	Moderate skin irritation. Prolonged or repeated skin contact with liquid may cause defatting resulting in drying, redness and possible blistering. May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. May be harmful if absorbed through skin.
Inhalation	May cause irritation of respiratory tract. Inhalation of high vapor concentration may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
Ingestion	Ingestion may cause irritation to mucous membranes.

3. COMPOSITION / INFORMATION ON INGREDIENTS.

Component	CAS #	Weight %
Glycol ether acrylate	Trade Secret	25-50
Acrylated oligomer	Trade Secret	25-50
Vinyl functional monomer	Trade Secret	10-25
Photoinitiator	Trade Secret	5-10
Acrylated oligomer	Trade Secret	0.5-5
Photoinitiator	Trade Secret	0.5-5
Formaldehyde...% (Formaldehyde)	50-00-0	0-0.5

4. FIRST AID MEASURES

Skin contact	May cause irritation or allergic skin reaction. In the case of skin irritation or allergic reactions see a physician. Wash off immediately with plenty of soap and water. Rinse immediately with plenty of water for at least 15 minutes. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist.
Eye contact	May cause irritation or allergic reaction. Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Seek medical attention immediately if irritation develops and persists.
Inhalation	May cause irritation to mucous membranes. Move the exposed person to fresh air. If breathing is irregular or stopped, administer artificial respiration. Get medical attention immediately.
Ingestion	May cause allergic reaction or irritation to mucous membranes. If swallowed DO NOT INDUCE VOMITING. Call a physician or Poison Control Center immediately. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Extinguishing media	Foam. Carbon dioxide (CO ₂). Dry chemical. Use extinguishing measures that are appropriate to the surrounding fire conditions.
Fire hazards	Burning produces irritating, toxic and obnoxious fumes.
Protective equipment	Wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool containers / tanks with water spray. Polymerization is a highly exothermic reaction and may generate sufficient heat to cause thermal decomposition and / or rupture containers. To avoid thermal decomposition, do not overheat. Fire or intense heat may cause violent rupture of packages.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Remove all sources of ignition. (Heat, flames and sparks) Ensure adequate ventilation of the working area. Avoid breathing dust or vapor. Avoid contact with skin, eyes and clothing.
Environmental precautions	Do not allow product to enter drains. Prevent further spillage if safe. If the product contaminates rivers, lakes or drains inform respective authorities.
Clean up methods	Contain spillage, soak up with non-combustible absorbent material, (sand, earth, vermiculite) and transfer to a container for disposal according to local / national regulations.

7. HANDLING AND STORAGE

Handling	Avoid contact with eyes, skin, and clothing. Ensure adequate ventilation of the working area. Remove and wash contaminated clothing before re-use. Take notice of labels and material safety data sheets for the working chemicals. Adopt best Manual Handling considerations when handling, carrying and dispensing. Do not take internally. Harmful or fatal if swallowed.
Storage	Keep at temperatures between 9.9°C and 31.9°C. Keep containers tightly closed. Store in correctly labeled containers. Keep out of the reach of children. Keep away from direct sunlight.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limit Values

Formaldehyde...%
 (Formaldehyde)

ACGIH TLV TWA: -	ACGIH TLV STEL: C 0.3 ppm
Notations: SEN; A2	OSHA PEL 8hr TWA ppm: -
OSHA PEL 8hr TWA	
mg m3: -	Skin Designation: -

Engineering Measures

Use only with adequate ventilation.

Respiratory Protection

Use the indicated respiratory protection is the occupational exposure limit is exceeded and / or in case of product release (dust). Respiratory with a vapor filter.

Eye protection

Ensure that eyewash stations and safety showers are close to the workstation location. Avoid contact with eyes. Safety glasses with side-shields. Goggles. Face-shield.

Skin Protection

Wear protective gloves / clothing. Solvent resistant apron and boots.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice. Wash hands before eating, drinking, or smoking. Remove and wash contaminated clothing before re-use. Regular cleaning of equipment, work area and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Description	Viscous liquid
Color	Varies according to type
Odor	Mild sweet acrylic
Boiling Point	>149°C / >300°F
Flash Point	>93°C / >200°F
Vapor Density	Heavier than air
Specific Gravity	1.138
Weight per gallon (lbs / gal)	9.488
VOC by weight %	0.139
VOC lbs / gal	0.013

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Conditions to Avoid	Temperatures above 93°C. Keep away from direct sunlight
Incompatible Products	Strong acids. Strong bases. Strong oxidizing agents. Reducing agents.
Hazardous Decomposition Products	Thermal decomposition can lead to release of irritating gases and vapors. Carbon dioxide. Carbon Monoxide.
Possibility of Hazardous Reactions	None under normal processing. Do not store for long periods at temperatures above 93°C.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity	Component	LD50 Oral	LD50 Dermal
	Glycol ether acrylate	4660 uL/kg (Rat)	2540 uL/kg (Rabbit)
Chronic Toxicity	No information available		
Sensitization	May cause sensitization of susceptible persons.		
Chronic Effects	Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure.		

12. ECOLOGICAL INFORMATION

Ecotoxicity	No data is available on this product.
-------------	---------------------------------------

13. DISPOSAL CONSIDERATIONS

General information	Dispose of contents / containers in compliance with all local and national regulations.
---------------------	---

14. TRANSPORT INFORMATION

Further information	The product is not classified as dangerous for carriage.
---------------------	--

15. REGULATORY INFORMATION

Inventories

Ingredient	TSCA	MA	SARA313	CALPROP6 5	CWA307	CAA112	CWA311	SARA302	SARA304
Formaldehyde...%	Y	Y	Y 0.1	Y	N	Y	Y	Y 500	Y 100
Glycol ether acrylate	Y	N	Y 1.0	N	N	Y	N	N	N

16. OTHER INFORMATION

Statement of Hazard

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.

TSCA

All components are TSCA compliant.

HMIS LABELLING

HEALTH: 2, FLAMMABILITY: 1, REACTIVITY: 1, PERSONAL PROTECTION: X