



MATERIAL SAFETY DATA SHEET

Thermochromic Solvent Screen Ink – Bis A Free

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MSDS130 Revision 1
Revision Date 10/10/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product name	Thermochromic Solvent Screen Ink – Bis A Free
Description	Thermochromic pigment dispersed in solvent based ink
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 temperature-indicating products and temperature-sensitive decorative effects.

2. HAZARDS IDENTIFICATION.

DANGER	EXTREMELY FLAMMABLE LIQUID AND VAPOR, VAPOR MY CAUSE FLASH FIRE MAY CAUSE EYE IRRITATION MAY CAUSE ALLERGIC SKIN REACTION (POSSIBLE) REPRODUCTIVE HAZARDS (CONTAINS MATERIAL THAT) MAY CAUSE ADVERSE REPRODUCTIVE EFFECTS (IN FEMALES) (IN MALES) (BASED ON ANIMAL DATA)
Properties	Color: Various colors according to type Odor: Aromatic State: Viscous liquid
Main Hazards	May cause sensitization by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Harmful: may cause lung damage if swallowed. Repeated exposure may cause skin dryness or cracking. Vapors may cause drowsiness and dizziness.

3. COMPOSITION / INFORMATION ON INGREDIENTS.

Hazardous Ingredients

Chemical Name	Conc. (%w/w)	CAS #
Heavy aromatic naptha solvent	10-20%	64742-95-6
Light aromatic naptha solvent	10-20%	64742-95-6
Formaldehyde...% (Formaldehyde)	0-0.5%	50-00-0

4. FIRST AID MEASURES

Skin contact	Irritating to skin. Wash off immediately with plenty of soap and water for at least 15 minutes. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist.
Eye contact	Irritating to eyes. Remove contact lens and rinse immediately with water for at least 15 minutes holding the eyelids open. Seek medical attention if irritation or symptoms persist.
Inhalation	Irritating to respiratory system. Inhalation may cause coughing, tightness of the chest and irritation of the respiratory system. Move the exposed person to fresh air. If symptomatic, seek medical attention.
Ingestion	Ingestion may cause nausea and vomiting. Seek medical attention if irritation or symptoms persist. DO NOT INDUCE VOMITING.

5. FIRE FIGHTING MEASURES

Extinguishing media	Carbon oxides
Fire hazards	Burning produces irritating, toxic and obnoxious fumes.
Protective equipment	Wear approved pressure demand, self contained breathing apparatus and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Ensure adequate ventilation of the working area. Wear suitable protective equipment. Eliminate all sources of ignition.
Environmental precautions	Do not allow product to enter drains. Prevent further spillage if safe.
Clean up methods	Absorb with inert, absorbent material. Sweep up. Transfer to suitable, labeled containers for disposal. Clean spillage area thoroughly with plenty of water.

7. HANDLING AND STORAGE

Handling	Avoid contact with eyes, skin, and clothing. Ensure adequate ventilation of the working area. Use explosion proof equipment. Keep away from sources of ignition – No smoking.
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Storage Keep in a cool, dry, well ventilated area. Keep containers tightly closed.
Store in correctly labeled containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limit Values

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

Engineering measures Ensure adequate ventilation of the working area.

Respiratory protection Wear suitable respiratory equipment when necessary.

Hand protection Chemical resistant gloves (PVC).

Eye protection Approved safety goggles.

Protective equipment Wear chemical protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Description	Viscous liquid
Color	Various colors according to type
Odor	Aromatic
Flash point	>23C

10. STABILITY AND REACTIVITY

Stability Stable under normal conditions.

Possibility of hazardous reactions Oxidizing agents

Conditions / Materials to avoid Oxidizing agents. Heat, sparks and open flames.

11. TOXICOLOGICAL INFORMATION

Formaldehyde...%	Inhalation Rat LC50/2H h: 250 ppm	Oral Rat LD50: 500 mg/kg
	Oral Mouse LD50: 500 mg/kg	Inhalation Mouse LC50/2H h: 505 mg/m3
	Dermal Rabbit LD50: 270 mg/kg	
Heavy aromatic naptha solvent	Oral Rat LD50: 8400 mg/kg	

12. ECOLOGICAL INFORMATION

Ecological information Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

General information Dispose of in compliance with all local and national regulations.

14. TRANSPORT INFORMATION

UN number UN1263

UN proper shipping name PAINT

Transport hazard class(es)

DOT 3

Subsidiary risk -

IMDG 3

Subsidiary risk -

IATA 3

Subsidiary risk -

Packing group III

Environmental hazards No

Marine pollutant No

ADR

Hazard ID 33

Tunnel category (D/E)

IMDG

EmS Code F-E S-E

IATA

Packing instruction (Cargo) 366

Maximum quantity 220 L

Packaging instruction (Passenger) 355

Maximum quantity 60 L

15. REGULATORY INFORMATION

Ingredient	TSCA	MA	SARA 313	CALPROP 65	CWA307	CAA112	CWA311	SARA302	SARA304
Heavy aromatic naptha solvent (Solvent naptha (petroleum), light arom.)	Y	N	N	N	N	N	N	N	N
Light aromatic naptha solvent (Solvent naptha (petroleum), light arom.)	Y	N	N	N	N	N	N	N	N
Formaldehyde...% (Formaldehyde)	Y	Y	Y 0.1	Y	N	Y	Y	Y 500	Y 100

16. OTHER INFORMATION

Statement of Hazard	EXTREMELY FLAMMABLE LIQUID AND VAPOR, VAPOR MY CAUSE FLASH FIRE MAY CAUSE EYE IRRITATION MAY CAUSE ALLERGIC SKIN REACTION (POSSIBLE) REPRODUCTIVE HAZARDS (CONTAINS MATERIAL THAT) MAY CAUSE ADVERSE REPRODUCTIVE EFFECTS (IN FEMALES) (IN MALES) (BASED ON ANIMAL DATA)
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 comply or are exempt, with TSCA, European EINECS & REACH, and Canadian DSL / NDSL regulations.
HMIS LABELLING	HEALTH: 1, FLAMMABILITY: 3, PHYSICAL HAZARD: 0, PERSONAL PROTECTION: G