

SAFETY DATA SHEET

Thermochromic WB Screen Ink BIS A FREE

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MSDS162 Revision 0
Revision Date 08/23/2017

1. PRODUCT AND COMPANY IDENTIFICATION

Product name	Thermochromic WB Screen Ink Bis A Free		
Additional Names	None		
Description	Temperature sensitive color change ink.		
Intended Use	Manufacture of temperature indicating devices		
Company	LCR Hallcrest 1911 Pickwick Lane Glenview IL 60026 USA		
Web	www.hallcrest.com		
Telephone	+1 847 998 8580		
Fax	+1 847 998 6866		
Email	sales@hallcrest.com		
Emergency telephone number	Chemtel	Domestic:	800-255-3924
		Intl:	+01-813-248-0585

2. HAZARDS IDENTIFICATION.

GHS Classification Skin Sens. 1: H317 - May cause an allergic skin reaction.
Carcinogen 1B: H350 – May cause cancer.

GHS Label Elements
Pictograms



Signal Word Danger
Hazard Statements Skin Sens. 1: H317 - May cause an allergic skin reaction.
Carcinogen 1B: H350 – May cause cancer.

Precautionary Statement

- P201 – Obtain special instructions before use
- P202: Do not handle until all safety precautions have been read and understood.
- P261: Avoid breathing dust/fumes/gas/mist/vapors/spray.
- P272: Contaminated work clothing should not be allowed out of the workplace.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P281 – Use personal protective equipment as required.
- P302+P352: IF ON SKIN: Wash with plenty of water
- P308 + P313: If exposed or concerned: Get medical advice/attention.
- P310: Immediately call a POISON CENTER/doctor
- P321: Specific treatment (see ... on this label)
- P333+P313 - If skin irritation or a rash occurs: Get medical advice/attention.
- P363 - Wash contaminated clothing before reuse.
- P405 - Store locked up.

3. COMPOSITION / INFORMATION ON INGREDIENTS.			
Hazardous ingredients	Classification	Conc.	CAS
Formaldehyde	Flam. Liq. 4; Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Skin Sens. 1; Muta. 2; Carc. 1A; Quatic Acute 3; H227, H301+H311_H331, H314, H317, H318, H341, H350, H402	<0.5%	50-0-0

4. FIRST AID MEASURES

Description of first aid measures

- Skin contact** Wash off immediately with plenty of soap and water. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist.
- Eye contact** Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Seek medical attention if irritation or symptoms persist.
- Inhalation** Move the exposed person to fresh air. Seek medical attention.
- Ingestion** Seek medical attention if irritation or symptoms persist. DO NOT INDUCE VOMITING.

Most important symptoms and effect, both acute or delayed.

- Skin contact** May cause sensitization by skin contact. Avoid contact with skin.
- Eye contact** Irritating to eyes.
- Inhalation** Irritant, moderate respiratory.
- Ingestion** Ingestion may cause nausea and vomiting.

Indication of any immediate medical attention and special treatment needed

- Skin contact** May cause sensitization by skin contact.
- Eye contact** Irritating to eyes. Seek medical attention if irritation or symptoms persist.
- Inhalation** Coughing, difficulty in breathing.
- Ingestion** If you feel unwell, seek medical advice (show the label where possible). Ingestion may cause nausea and vomiting.

5. FIRE FIGHTING MEASURES

- Extinguishing Media** Carbon Oxides
- Specific hazards arising from the chemical** Burning produces irritating, toxic and obnoxious fumes.
- Special protective actions for fire-fighters** Wear suitable respiratory equipment when necessary.

6. ACCIDENTAL RELEASE MEASURES

- Personal Precautions, protective equipment and emergency procedures** Ensure adequate ventilation of the working area. Wear suitable protective equipment.
- Environmental Precautions** Do not allow product to enter drains. Prevent further spillage if safe.
- Methods and material for containment and cleaning up** Absorb with inert, absorbent material. Sweep up. Transfer to suitable, labelled containers for disposal. Clean spillage area thoroughly with plenty of water.

7. HANDLING AND STORAGE

- Individual protection measures** Avoid contact with eyes and skin. Ensure adequate ventilation of the working area. Adopt best Manual Handling considerations when handling, carrying and dispensing
- Conditions for safe storage, including incompatibilities:** Keep in a cool, dry, well ventilated area. Keep containers tightly closed. Store in correctly labelled containers.
- Further Information:** Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits

Formaldehyde	WEL 15 min limit ppm: 2	WEL 15 min limit mg/m3: 2.5
	WEL 8-hr limit mg/m3 total - inhalable dust:	WEL 15 min limit mg/m3 total - inhalable dust:
	WEL 8-hr limit mg/m3 total - respirable dust:	WEL 15 min limit mg/m3 total - respirable dust:

Control Parameters

Individual Protection Measures

Individual protection measures	Wear chemical protective clothing.
Eye/face protection	Approved safety goggles
Skin protection – Hand protection	Chemical resistant gloves (PVC).
Respiratory protection	Wear: Suitable respiratory equipment.
Environmental Exposure Controls	Appropriate local exhaust ventilation is required.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Paste
Colors	Various colors according to type
Odor	Characteristic
Odor threshold	N/A
pH	No testing available.
Melting Point/Freezing Point	0°C
Initial Boiling Point and Boiling Range	No testing available.
Flash Point	No testing available.
Evaporation rate	No testing available.
Flammability	No testing available.
Upper/Lower Flammability or Explosive Limits	No testing available.
Vapor Pressure	No testing available.
Solubility	No testing available.

10. STABILITY AND REACTIVITY

Reactivity	No data available
Chemical Stability	Stable under normal conditions.
Possibility of hazardous reactions	No significant hazard
Conditions to avoid	Protect from frost.
Incompatible materials	Alkalis
Hazardous Decomposition Products	Formaldehyde may be generated and other harmful fumes.

11. TOXICOLOGICAL INFORMATION

Toxicological Information		
Formaldehyde	Inhalation Rat LC50/2H h: 250 ppm Oral Mouse LD50: 500 mg/kg Dermal Rabbit LD50: 270 mg/kg	Oral Rat LD50: 500 mg/kg Inhalation Mouse LC50/2H h: 505 mg/m3

Skin corrosion/irritation	No test data available
Serious eye damage/irritation	No test data available
Respiratory or skin sensitization	No test data available
Germ cell mutagenicity	No test data available
Carcinogenicity	No test data available

Reproductive toxicity No test data available
 STOT-single exposure No test data available
 STOT-repeat exposure No test data available
 Aspiration hazard No test data available
 Likely routes to exposure

12. ECOLOGICAL INFORMATION

Toxicity Formaldehyde Daphnia 1 EC50 – 54mg/l
 Persistence and degradability No data available
 Bioaccumulative potential No data available
 Mobility in soil No data available
 Other adverse effects No data available

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods Absorb with inert, absorbent material.
 General Information Dispose of in compliance with all local and national regulations.
 Disposal Methods Do not empty into drains; dispose of this material and its container in a safe way.

14. TRANSPORT INFORMATION

UN Number This product is not classified as dangerous for carriage.
 UN Proper Shipping Name This product is not classified as dangerous for carriage.
 Transport Hazard class(es) This product is not classified as dangerous for carriage.
 Packing Group (if applicable) This product is not classified as dangerous for carriage.
 Environmental Hazards This product is not classified as dangerous for carriage.
 Special Precautions for the User This product is not classified as dangerous for carriage.
 DOT This product is not classified as dangerous for carriage.
 IMDG This product is not classified as dangerous for carriage.
 IATA This product is not classified as dangerous for carriage.
 Further Information

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

15. REGULATORY INFORMATION

Ingredient	TSCA	MA	SARA313	CALPROP65	CWA307	CAA112	CWA311	SARA302	SARA304
Formaldehyde	Y	Y	Y 0.1	Y	N	Y	Y	Y 500	Y 100

16. OTHER INFORMATION

Revision
 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 0, PHYSICAL HAZARD 0 PERSONAL PROTECTION: B.