

## SAFETY DATA SHEET Thermochromic Dispersion BPA Free

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SDS111 Revision 5  
Revision Date 08/12/2020

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name** Thermochromic Dispersion BPA Free  
**Additional Names** None  
**Description** Aqueous temperature sensitive color change pigment dispersion.  
**Intended Use** Manufacture of color change inks and coatings.

**Company** LCR Hallcrest  
1911 Pickwick Lane  
Glenview  
IL 60026 USA

**Web** [www.hallcrest.com](http://www.hallcrest.com)  
**Telephone** +1 847 998 8580  
**Fax** +1 847 998 6866  
**Email** [sales@hallcrest.com](mailto:sales@hallcrest.com)

**Emergency telephone number** Chemtel Domestic: 800-255-3924  
Intl: +01-813-248-0585

### 2. HAZARDS IDENTIFICATION.

**GHS Classification** - CLP: Skin Sens. 1, Carc.

**GHS Label Elements**  
**Pictograms**



**Signal Word** Danger  
**Hazard Statements** May cause cancer by inhalation  
May cause an allergic skin reaction  
Repeated exposure may cause skin dryness or cracking

**Precautionary Statement** Avoid breathing dust / fume / gas / mist / vapors / spray.  
Wear protective gloves / protective clothing / eye protection / face protection  
If exposed or concerned: Get medical advice/attention  
Use personal protective equipment as required  
If skin irritation or rash occurs: Get medical advice/attention

### 3. COMPOSITION / INFORMATION ON INGREDIENTS.

Hazardous ingredients	Classification
Formaldehyde	CAS Number: 50-00-0 EC Number: 200-001-8 Concentration: 0.2- 0.5% Categories: Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, Skin Corr. 1B, Skin Sens. 1, Muta. 2, Carc. 1B Symbols: GHS08;GHS06;GHS05 H Statements: H350;H341;H331;H311;H301;H314;H317
Color Developer	CAS Number: Proprietary EC Number: Proprietary Concentration: 4-8 % Categories: Skin Irrit. 2; Eye Irrit. 2; STOT SE 3 Symbols: WARNING H Statements: H319, H315, H335

### 4. FIRST AID MEASURES

#### Description of first aid measures

<b>Skin contact</b>	IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. If exposed or concerned: Get medical advice/attention.
<b>Eye contact</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention.
<b>Inhalation</b>	If exposed or concerned: Get medical advice/attention.
<b>Ingestion</b>	If exposed or concerned: Get medical advice/attention.

#### Most important symptoms and effect, both acute or delayed.

<b>Skin contact</b>	May cause an allergic skin reaction
<b>Eye contact</b>	Causes redness and irritation
<b>Inhalation</b>	May cause cancer by inhalation
<b>Ingestion</b>	May cause irritation

#### Indication of any immediate medical attention and special treatment needed.

If exposed or if you feel unwell: Call a Poison Center or doctor/physician  
Treat symptomatically

### 5. FIRE FIGHTING MEASURES

<b>Extinguishing Media</b>	Not flammable. In case of fire use extinguishing media appropriate to surrounding conditions.
<b>Specific hazards arising from the chemical</b>	May give off noxious and toxic fumes in a fire.
<b>Special protective actions for fire-fighters</b>	Wear suitable respiratory protection

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions, protective equipment and emergency procedures</b>	Ensure adequate ventilation
<b>Environmental Precautions</b>	Avoid release to the environment.
<b>Methods and material for containment and cleaning up</b>	Absorb with inert, absorbent material. Transfer to suitable, labelled containers for disposal. Clean spillage area thoroughly with plenty of water.

**7. HANDLING AND STORAGE**

**Precautions for safe handling** Contaminated work clothing should not be allowed out of the workplace.  
 Wear protective gloves/protective clothing/eye protection/face protection.  
 Use personal protective equipment as required.  
 Wash contaminated clothing before reuse.  
 Dispose of contents/container to hazardous waste.

**Conditions for safe storage, including incompatibilities:** Store at ambient temperature.  
 Keep container tightly closed.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Control Parameters**

Formaldehyde **%WEL: 8** **Min limit 2 ppm WEL: 15**  
**hr limit: 2 ppm WEL: 8 hr**  
**limit: 2.5 mmg/m3 WEL: 15**  
**Min limit: 2.5 mg/m3**

**Individual Protection Measures** Use personal protective equipment as required  
 Wear protective gloves/protective clothing/eye protection/face protection.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance** Liquid  
**Colors** Various according to type  
**Odor** Formaldehyde odor  
**pH** 5.0 – 5.5  
**Melting Point** No information available  
**Boiling Point** No information available  
**Flash Point** No information available  
**Evaporation rate** No information available  
**Solubility** Miscible with water  
**Specific Gravity** 0.8 – 1.1 g/cm3  
**Other Information** Volatile organic compound content 0.4%

**10. STABILITY AND REACTIVITY**

**Reactivity** No hazardous reactions known if used for its intended purpose  
**Chemical Stability** Stable  
**Possibility of hazardous reactions** No hazardous reactions known if used for its intended purpose  
**Conditions to avoid** No information available  
**Incompatible materials** Contact with strong acids may generate formaldehyde  
**Hazardous Decomposition Products** Burning products obnoxious and irritating fumes  
 Formaldehyde may be generated and other harmful fumes

**11. TOXICOLOGICAL INFORMATION**

**Formaldehyde** Inhalation Rat LC50: 250ppm  
 Oral Rat LD50: 500mg/kg Skin Rabbit LD50: 270 mg/kg  
 Oral Mouse LD50: 500mg/kg  
 Inhalation Mouse LC50: 505 mg/kg

**Color Developer** Oral Rat LD50: 3400 mg/kg

**Acute Toxicity** Exposure above the recommended occupational exposure limit (OEL) may cause adverse health effects

**Skin corrosion/irritation** May cause irritation to skin

**Serious eye damage/irritation** No data available

**Respiratory or skin sensitization** No data available

**Germ cell mutagenicity** No data is available on this product  
**Carcinogenicity** Contains formaldehyde which is classified as Carcinogen 1B

**Reproductive Effects** No information available  
**STOT-single exposure** No data is available on this product  
**STOT-repeat exposure** No data is available on this product  
**Aspiration hazard** No data is available on this product  
**Repeated or prolonged exposure** No data is available on this product

**12. ECOLOGICAL INFORMATION**

<b>Toxicity</b>	No information available
<b>Persistence and degradability</b>	No information available
<b>Bioaccumulative potential</b>	No information available
<b>Mobility in soil</b>	Miscible in water
<b>Results of PBT and vPvB assesment</b>	No information available
<b>Other adverse effects</b>	No data available on this product.

**13. DISPOSAL CONSIDERATIONS**

**General information** Dispose of contents/container to hazardous waste

**14. TRANSPORT INFORMATION**

<b>UN Number</b>	This product is not classified as dangerous for carriage.
<b>UN Proper Shipping Name</b>	This product is not classified as dangerous for carriage.
<b>Transport Hazard class(es)</b>	This product is not classified as dangerous for carriage.
<b>Packing Group (if applicable)</b>	This product is not classified as dangerous for carriage.
<b>Environmental Hazards</b>	This product is not classified as dangerous for carriage.
<b>Special Precautions for the User</b>	This product is not classified as dangerous for carriage.
<b>Transport in bulk according to ANNEX II of Marpol and IBC</b>	This product is not classified as dangerous for carriage.

**Further information** This product is not classified as dangerous for carriage.

**15. REGULATORY INFORMATION**

Ingredient	TSCA	SARA313	CALPROP65	CERCLA 40	CAA112
Formaldehyde	Compliant	Yes	Yes	Yes	Yes

**16. OTHER INFORMATION**

**Further Information** Text not given with phrase codes where they are used elsewhere in this safety data sheet: H301: Toxic if swallowed. H311: Toxic in contact with skin. H314: Causes severe skin burns and eye damage. H315: Causes skin irritation. H317: May cause an allergic skin reaction. H319: Causes serious eye irritation. H331: Toxic if inhaled. H335: May cause respiratory irritation. H341: Suspected of causing genetic defects. H350: May cause cancer.

This information supplied in this Safety Data Sheet is designed only as guidance for the safe use and storage 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 only relates 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.