

## SAFETY DATA SHEET Thermochromic Dispersion

Page 1 of 4

SDS005 Revision 7  
Revision Date 08/12/2020

### 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Product name</b>	Thermochromic Dispersion
<b>Additional Names</b>	None
<b>Description</b>	Aqueous temperature sensitive color change pigment dispersion.
<b>Intended Use</b>	Manufacture of color change inks and coatings.
<b>Company</b>	LCR Hallcrest 1911 Pickwick Lane Glenview IL 60026 USA
<b>Web</b>	<a href="http://www.hallcrest.com">www.hallcrest.com</a>
<b>Telephone</b>	+1 847 998 8580
<b>Fax</b>	+1 847 998 6866
<b>Email</b>	<a href="mailto:sales@hallcrest.com">sales@hallcrest.com</a>
<b>Emergency telephone number</b>	Chemtel Domestic: 800-255-3924 Intl: +01-813-248-0585

### 2. HAZARDS IDENTIFICATION.

**GHS Classification** - CLP: Skin Sens. 1, Eye Dam. 1, Carc. 1B, Repr. Cat. 1B

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



**Signal Word** Danger

**Hazard Statements** May cause cancer  
May damage fertility or the unborn child if swallowed  
Causes serious eye damage.  
May cause an allergic skin reaction.

**Precautionary Statement** Avoid breathing dust / fume / gas / mist / vapors / spray.  
IF IN EYES: Rinse cautiously with water for several minutes.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
Wear protective gloves / protective clothing / eye protection / face protection.  
Do not handle until all safety precautions have been read and understood.  
If exposed or concerned: Get medical advice/attention.  
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
4,4'-Isopropylidenediphenol (Bisphenol A)	CAS Number: 80-05-7 EC Number: 201-245-8 Concentration: 2 - 6% Categories: Eye Dam. 1, Skin Sens. 1, Repr. Cat. 1B, STOT SE 3 Symbols: GHS08; GHS05; GHS07 H Statements: H360F; H335; H318; H317

### 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>	See Section 2 and/or in section 11
<b>Eye contact</b>	See Section 2 and/or in section 11
<b>Inhalation</b>	See Section 2 and/or in section 11
<b>Ingestion</b>	See Section 2 and/or in section 11

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

No information available

### 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>	Wear protective clothing as per section 8 Ensure adequate ventilation
<b>Environmental Precautions</b>	Avoid release to the environment.
<b>Methods and material for containment and cleaning up</b>	Absorb spillage in suitable inert material. Collect spillage.

**7. HANDLING AND STORAGE**

**Precautions for safe handling** Forms hazardous decomposition products.  
 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 **LTEL (8 hr TWA ppm) 2**  
**STEL (ppm) 2**  
**LTEL (8 hr TWA mg/m<sup>3</sup>) 2.5**  
**STEL (mg/m<sup>3</sup>) 2.5**

4,4'-Isopropylidenediphenol **LTEL (8hr TWA mg/m<sup>3</sup>) 2**  
 (Bisphenol-A)

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

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance** Liquid  
**Colors** Various  
**Odor** Characteristic  
**pH** 5.0 – 5.5  
**Melting Point** Not known  
**Freezing Point/Range** 0°C  
**Boiling Point** Not known  
**Evaporation Rate** Not known  
**Flammability** No information available  
**Lower explosive Limit** No information available % (in air)  
**Upper explosive limit** No information available % (in air)  
**Vapor Density** Not known  
**Vapor Pressure** Not known  
**Specific Gravity** 0.8 – 1.1 g/cm<sup>3</sup>  
**Partition coefficient: n-Octanol/Water** Not known  
**Auto-ignition Point** Not applicable  
**Viscosity** Not known  
**Explosive Properties** Non-explosive  
**Water Solubility** Miscible  
**Other Information** Volatile organic compound content 0.4%

**10. STABILITY AND REACTIVITY**

**Reactivity** No information available  
**Chemical Stability** Stable  
**Possibility of hazardous reactions** Considered stable under normal conditions  
**Conditions to avoid** No special precautions are required for this product  
**Incompatible materials** Incompatible with alkalis (strong bases)  
**Hazardous Decomposition Products** Formaldehyde may be generated and other harmful fumes.

**11. TOXICOLOGICAL INFORMATION**

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

**4,4'-Isopropylidenediphenol** Oral Rat LD50: 3300 mg/kg  
 Dermal Rabbit LD50: 6400 mg/kg  
 Inhalation Rat LC50: 17 mg/l 6 hr

**Acute Toxicity-Inhalation** Not classified

<b>Acute Toxicity-Ingestion</b>	Harmful if swallowed
<b>Acute Toxicity-Skin contact</b>	Not classified
<b>Skin corrosion/irritation</b>	Not classified
<b>Serious eye damage/irritation</b>	Causes serious eye damage
<b>Skin sensitization data</b>	May cause allergic skin reaction
<b>Respiratory sensitization data</b>	Not classified
<b>Germ cell mutagenicity</b>	Not classified
<b>Carcinogenicity</b>	May cause cancer
<b>Reproductive Toxicity</b>	May damage fertility
<b>Lactation</b>	Not classified
<b>STOT-single exposure</b>	Not classified
<b>STOT-repeated exposure</b>	Not classified
<b>Aspiration Hazard</b>	Not classified

**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 with water
<b>Results of PBT and vPvB assessment</b>	No information available
<b>Other adverse effects</b>	No information available

**13. DISPOSAL CONSIDERATIONS**

<b>General information</b>	Dispose of content/container to hazardous waste
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**14. TRANSPORT INFORMATION**

<b>UN Number</b>	Not applicable
<b>UN Proper Shipping Name</b>	Not applicable
<b>Transport Hazard class(es)</b>	Not applicable
<b>Packing Group (if applicable)</b>	Not applicable
<b>Environmental Hazards</b>	Not classified
<b>Special Precautions for the User</b>	Not classified
<b>Transport in bulk according to Annex II of Marpol and the IBC</b>	Not classified

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

**15. REGULATORY INFORMATION**

<b>Ingredient</b>	<b>TSCA</b>	<b>SARA313</b>	<b>CALPROP65</b>	<b>CERCLA</b>	<b>CAA112</b>
Formaldehyde	Compliant	Yes	Yes	Yes	Yes
4,4'-Isopropylidenediphenol (Bisphenol-A)	Compliant	Not Listed	Yes	Not Listed	Not Listed

**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. H317: May cause an allergic skin reaction. H318: Causes serious eye damage. H331: Toxic if inhaled. H335: May cause respiratory irritation. H341: Suspected of causing genetic defects. H350: May cause cancer. H360F: May damage fertility.

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.