

SAFETY DATA SHEET Thermochromic Dispersion

Page 1 of 5

SDS005 Revision 6
Revision Date 05/14/2020

1. PRODUCT AND COMPANY IDENTIFICATION

Product name	Thermochromic Dispersion	
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	
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 - 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

- Skin contact** 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.
- Eye contact** 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.
- Inhalation** If exposed or concerned: Get medical advice/attention.
- Ingestion** If exposed or concerned: Get medical advice/attention.

Most important symptoms and effect, both acute or delayed.

- Skin contact** See Section 2 and/or in section 11
- Eye contact** See Section 2 and/or in section 11
- Inhalation** See Section 2 and/or in section 11
- Ingestion** 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

Extinguishing Media Not flammable. In case of fire use extinguishing media appropriate to surrounding conditions

Specific hazards arising from the chemical May give off noxious and toxic fumes in a fire

Special protective actions for fire-fighters Wear suitable respiratory protection

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, protective equipment and emergency procedures Wear protective clothing as per section 8
 Ensure adequate ventilation

Environmental Precautions Avoid release to the environment.

Methods and material for containment and cleaning up 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/m³) 2.5
STEL (mg/m³) 2.5

4,4'-Isopropylidenediphenol **LTEL (8hr TWA mg/m³) 2**
 (Bisphenol-A)

Exposure Controls Wear chemical protective gloves/protective clothing/eye protection/face protection.
 Use personal protective equipment as required.

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/cm³
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 This article is 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	
Acute Toxicity-Ingestion	Harmful if swallowed	
Acute Toxicity-Skin contact	Not classified	
Skin corrosion/irritation	Not classified	
Serious eye damage/irritation	Causes serious eye damage	
Skin sensitization data	May cause allergic skin reaction	
Respiratory sensitization data	Not classified	
Germ cell mutagenicity	Not classified	
Carcinogenicity	May cause cancer	
Reproductive Toxicity	May damage fertility	
Lactation	Not classified	
STOT-single exposure	Not classified	
STOT-repeated exposure	Not classified	
Aspiration Hazard	Not classified	

12. ECOLOGICAL INFORMATION

Toxicity	No Information available
Persistence and degradability	No information available
Bioaccumulative potential	No information available
Mobility in soil	Miscible with water
Results of PBT and vPvB assessment	No information available
Other adverse effects	No information available

13. DISPOSAL CONSIDERATIONS

General information	Dispose of content/container to hazardous waste
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14. TRANSPORT INFORMATION

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

15. REGULATORY INFORMATION					
Ingredient	TSCA	SARA313	CALPROP65	CERCLA	CAA112
Formaldehyde	Y	Y	Y	Y	Y
4,4'-Isopropylidenediphenol (Bisphenol-A)	Y	N	Y		

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.