

SAFETY DATA SHEET Thermochromic Dispersion

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SDS005 Revision 7
Revision Date 08/12/2020

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)

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/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 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

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

15. REGULATORY INFORMATION

Ingredient	TSCA	SARA313	CALPROP65	CERCLA	CAA112
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.