

SAFETY DATA SHEET Unsealed Cholesteric Liquid Crystal Mixtures

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MSDS039 Revision 4
Revision Date 07/6/2015

1. PRODUCT AND COMPANY IDENTIFICATION

Product name Unsealed Cholesteric Liquid Crystal Mixtures
Additional Names None
Description A mixture of unsealed liquid crystal materials.
Intended Use Manufacture of temperature-indicating products and temperature-sensitive decorative effects.
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 No significant hazard

GHS Label Elements

Pictograms No significant hazard
Signal Word No significant hazard
Hazard Statements No significant hazard
Precautionary Statement No significant hazard
Classification 1994/45/EC No significant hazard

3. COMPOSITION / INFORMATION ON INGREDIENTS.

Hazardous ingredients	Classification	Conc.	CAS
None	N/A	N/A	N/A

4. FIRST AID MEASURES

Description of first aid measures

Skin contact May cause irritation to skin. Wash off immediately with plenty of soap and water. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist..

Eye contact May cause irritation to eyes. Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Seek medical attention if irritation or symptoms persist.

Inhalation May cause irritation to mucous membranes. Move the exposed person to fresh air.

Ingestion May cause irritation to mucous membranes. DO NOT INDUCE VOMITING. Seek medical attention if irritation or symptoms persist.

Most important symptoms and effect, both acute or delayed.

Skin contact Irritation: Redness
Eye contact Eye irritation: Redness
Inhalation Mucus membrane irritation.
Ingestion Mucus membrane irritation.

Indication of any immediate medical attention and special treatment needed.

Treat symptomatically.

5. FIRE FIGHTING MEASURES

Extinguishing Media	Use extinguishing media appropriate to the surrounding fire conditions.
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
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, labeled 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 cool, dry, well ventilated area. Keep containers tightly closed. Store in correctly labeled containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures	Engineering measures
Ensure adequate ventilation of the working area.	Ensure adequate ventilation of the working area.
Hand protection	Hand protection
Chemical resistant gloves (PVC)	Chemical resistant gloves (PVC)

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Viscous Liquid.
Colors	Colorless.
Odor	Mild.
Odor threshold	N/A
pH	N/A
Melting Point/Freezing Point	No testing available.
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	Immiscible.

10. STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions.
Chemical Stability	Stable under normal conditions.
Possibility of hazardous reactions	No Significant Hazard.
Conditions to avoid	No Significant Hazard.
Incompatible materials	No Significant Hazard.
Hazardous Decomposition Products	No Significant Hazard.

11. TOXICOLOGICAL INFORMATION

Toxilogical Information	
No Hazardous Components	
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

12. ECOLOGICAL INFORMATION

Persistence and degradability No data available
Bioaccumulative potential No data available
Mobility in soil No data available
Other adverse effects None

13. DISPOSAL CONSIDERATIONS

General information Dispose of in compliance with all local and national regulations.

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.

15. REGULATORY INFORMATION

WEE - (2002/96/EC) and RoHS Directive (2002/95/EC) our products as per attached schedule are fully compliant and do not contain any listed heavy metals, PBB or PBDE at levels exceeding 1000ppm specified in the directive. Typical levels have been measured at 1ppm or less.

16. OTHER INFORMATION

Revision Revision 4: Formatting - Major revision to include the requirements of the HCS/HazCom 2012 Final Rule.

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 0 FLAMMABILITY 0, PHYSICAL HAZARD 0. PERSONAL PROTECTION: A.