

SAFETY DATA SHEET SSN200 Chiral Nematic Liquid Crystal Screen Ink

Page 1 of 3

MSDS054 Revision 3
Revision Date 6/22/2015

1. PRODUCT AND COMPANY IDENTIFICATION

Product name SSN200 Chiral Liquid Crystal Screen Ink
Additional Names None
Description Aqueous based ink containing encapsulated cholesteric liquid crystal.
Intended Use Temperature measurement and thermal mapping

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 Skin Irritation
Eye contact Eye Irritation
Inhalation Irritation to the mucous membrane.
Ingestion Irritation to the mucous membrane.

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 containers tightly closed. Store in correctly labeled containers. Store in a cool area but do not freeze.

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 Liquid.
Colors Tan.
Odor Mild.
Odor threshold N/A
pH 4-6
Melting Point/Freezing Point No testing available.
Initial Boiling Point and Boiling Range 100°C
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 miscible in water.
Viscosity 1200 CPS

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.
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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 3: 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 1, FLAMMABILITY 0, PHYSICAL HAZARD 0. PERSONAL PROTECTION: C.