USA SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: **CHEMLOK 8800**
Product Use/Class: **Aqueous Adhesive**

LORD Corporation
111 LORD Drive
Cary, NC 27511-7923 USA

Telephone: 814 868-3180
Non-Transportation Emergency: 814 763-2345
Chemtrec 24 Hr Transportation Emergency No.
800 424-9300 (Outside Continental U.S. 703 527-3887)

EFFECTIVE DATE: 11/05/2019

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

Serious eye damage/eye irritation Category 2A
Skin sensitization Category 1
Respiratory sensitization Category 1
Germ cell mutagenicity Category 1B
Carcinogenicity Category 1A
Reproductive toxicity Category 2
Specific target organ systemic toxicity (single exposure) Category 1 Hematopoietic System, Kidney, Liver, Respiratory system, Systemic toxicity
Specific target organ systemic toxicity (repeated exposure) Category 1 Hematopoietic System
Hazardous to the aquatic environment - acute hazard Category 2
Hazardous to the aquatic environment - chronic hazard Category 2

GHS LABEL ELEMENTS:

Symbol(s)

Signal Word

DANGER

Hazard Statements

Causes serious eye irritation.
May cause an allergic skin reaction.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause genetic defects.
May cause cancer.
Suspected of damaging fertility or the unborn child.
Causes damage to organs.(Hematopoietic System, Kidney, Liver, Respiratory system, Systemic toxicity)
Causes damage to organs through prolonged or repeated exposure.(Hematopoietic System)
Toxic to aquatic life.
Toxic to aquatic life with long lasting effects.

Precautionary Statements

Prevention

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/eye protection/face protection.

Use personal protective equipment as required.
In case of inadequate ventilation wear respiratory protection.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Contaminated work clothing should not be allowed out of the workplace.
Avoid release to the environment.

Response

Get medical advice/attention if you feel unwell.
IF exposed: Call a POISON CENTER or doctor/physician.
Specific treatment (see supplemental first aid instructions on this label).
IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice/attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
Wash contaminated clothing before reuse.
Collect spillage.

Storage

Store locked up.

Disposal:

Dispose of contents/container in accordance with waste/disposal laws and regulations of your country or particular locality.

Other Hazards:

This product contains component(s) which have the following warnings; however based on the GHS classification criteria of your country or locale, the product mixture may be outside the respective category(s).

Acute: May be harmful if absorbed through skin. Exposure to formaldehyde may cause dry, sore throat; itching and burning of the nose; nasal congestion; cough; chest tightness; and wheezing. May be harmful if swallowed. Ingestion is not an expected route of entry in industrial or commercial uses.May cause skin irritation.

Chronic: Prolonged or repeated contact may result in dermatitis. Formaldehyde entrapped in this product may be released during heating and mixing. Formaldehyde has been identified by NTP and IARC as a known human carcinogen (IARC 1), and by OSHA as a potential human carcinogen. Workplace exposure to formaldehyde is regulated by OSHA Standard 29 CFR 1910.1048. IARC has designated titanium dioxide (TiO2) as Group 2B possibly carcinogenic to humans in dust form. However, a number of long term animal studies and human epidemiology studies evaluating TiO2 and workplace exposure show insufficient evidence for carcinogenic effects. EPA, NTP and OSHA do not designate TiO2 as a carcinogen and ACGIH designates TiO2 as A4 - not classifiable as a human carcinogen. Mortaility from other chronic diseases, including other respiratory diseases, was not associated with exposure to TiO2 dust. TiO2 is not present in this product as a dust and no airborne exposure is expected during application.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Range
Zinc compound	PROPRIETARY	5 - 10 %
Polyimide	PROPRIETARY	5 - 10 %
Titanium dioxide	13463-67-7	1 - 5 %
2-Butoxyethanol	111-76-2	1 - 5 %
Bisphenol A	80-05-7	0.1 - 0.9 %
Formaldehyde	50-00-0	0.1 - 0.9 %

Any "PROPRIETARY" component(s) in the above table is considered trade secret, thus the specific chemical and its exact concentration is being withheld.

4. FIRST AID MEASURES

FIRST AID - EYE CONTACT: Flush eyes immediately with large amount of water for at least 15 minutes holding eyelids open while flushing. Get prompt medical attention.

FIRST AID - SKIN CONTACT: Flush contaminated skin with large amounts of water while removing contaminated clothing. Wash affected skin areas with soap and water. Get medical attention if symptoms occur.

FIRST AID - INHALATION: Move person to fresh air. Restore and support continued breathing. If breathing is difficult, give oxygen. Get immediate medical attention.

FIRST AID - INGESTION: If swallowed, do not induce vomiting. Call a physician or poison control center immediately for further instructions. Never give anything by mouth if victim is rapidly losing consciousness, unconscious or convulsing.

5. FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical, Foam, Water Fog
UNSUITABLE EXTINGUISHING MEDIA: Not determined for this product.

SPECIFIC HAZARDS POSSIBLY ARISING FROM THE CHEMICAL: Keep containers tightly closed. Closed containers may rupture when exposed to extreme heat. Use water spray to keep fire exposed containers cool. During a fire, irritating and/or toxic gases and particulate may be generated by thermal decomposition or combustion.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS: Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA). Water spray may be ineffective. If water is used, fog nozzles are preferable.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Avoid breathing vapors. Use self-contained breathing equipment. Avoid contact.

ENVIRONMENTAL PRECAUTIONS: Do not contaminate bodies of water, waterways, or ditches, with chemical or used container.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP: Notify appropriate authorities if necessary. Contain and remove with inert absorbent material. Avoid contact. Keep non-essential personnel away from spill area. Before attempting cleanup, refer to hazard caution information in other sections of the SDS form.

7. HANDLING AND STORAGE

HANDLING: Keep closure tight and container upright to prevent leakage. Wash thoroughly after handling. Avoid breathing of vapor or spray mists. Do not handle until all safety precautions have been read and understood. Use with adequate ventilation.

STORAGE: Store only in well-ventilated areas. Keep from freezing. Keep container closed when not in use.

INCOMPATIBILITY: Strong acids, bases, and strong oxidizers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENT EXPOSURE LIMIT

Chemical Name	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING	Skin
Zinc compound	2 mg/m3	10 mg/m3	5 mg/m3	N.E.	N.A.
Polyimide	N.E.	N.E.	N.E.	N.E.	N.A.
Titanium dioxide	10 mg/m3	N.E.	15 mg/m3	N.E.	N.A.
2-Butoxyethanol	20 ppm	N.E.	240 mg/m3	N.E.	S

			50 ppm		
Bisphenol A	N.E.	N.E.	N.E.	N.E.	N.A.
Formaldehyde	0.3 ppmCeiling	N.E.	0.75 ppm	N.E.	N.A.

N.A. - Not Applicable, N.E. - Not Established, S - Skin Designation

Engineering controls: Sufficient ventilation in pattern and volume should be provided in order to maintain air contaminant levels below recommended exposure limits.

PERSONAL PROTECTION MEASURES/EQUIPMENT:

RESPIRATORY PROTECTION: Use a NIOSH approved chemical/mechanical filter respirator designed to remove a combination of particulates and organic vapor if occupational limits are exceeded. For emergency situations, confined space use, or other conditions where exposure limits may be greatly exceeded, use an approved air-supplied respirator. For respirator use observe OSHA regulations (29CFR 1910.134) or use in accordance with applicable laws and regulations of your country or particular locality. Note: If the exposure limit for formaldehyde is exceeded, a formaldehyde-specific, formaldehyde/organic vapor combination, or airline respirator may be required.

SKIN PROTECTION: Use neoprene, nitrile, or rubber gloves to prevent skin contact.

EYE PROTECTION: Use safety eyewear including safety glasses with side shields and chemical goggles where splashing may occur.

OTHER PROTECTIVE EQUIPMENT: Use disposable or impervious clothing if work clothing contamination is likely. Remove and wash contaminated clothing before reuse.

HYGIENIC PRACTICES: Wash hands before eating, smoking, or using toilet facility. Do not smoke in any chemical handling or storage area. Food or beverages should not be consumed anywhere this product is handled or stored. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Typical values, not to be used for specification purposes.

ODOR:	Phenolic	**VAPOR PRESSURE:**	N.D.
APPEARANCE:	Beige	**VAPOR DENSITY:**	Heavier than Air
PHYSICAL STATE:	Liquid	**LOWER EXPLOSIVE LIMIT:**	1.1 %(V)
FLASH POINT:	≥ 201 °F, 93 °C Setaflash Closed Cup	**UPPER EXPLOSIVE LIMIT:**	10.6 %(V)
BOILING RANGE:	100 - 168 °C	**EVAPORATION RATE:**	Slower than n-butyl-acetate
AUTOIGNITION TEMPERATURE:	N.D.	**DENSITY:**	1.13 g/cm3 - 9.40 lb/gal
DECOMPOSITION TEMPERATURE:	N.D.	**VISCOSITY, DYNAMIC:**	N.D.
ODOR THRESHOLD:	N.D.	**VISCOSITY, KINEMATIC:**	N.D.
SOLUBILITY IN H2O:	Water Dispersible	**VOLATILE BY WEIGHT:**	69.65 %
pH:	6.5	**VOLATILE BY VOLUME:**	79.16 %
FREEZE POINT:	N.D.	**VOC CALCULATED:**	1.39 lb/gal, 166 g/l
COEFFICIENT OF WATER/OIL DISTRIBUTION:	N.D.		

LEGEND: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

10. STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur under normal conditions.

STABILITY: Product is stable under normal storage conditions.

CONDITIONS TO AVOID: High temperatures.

INCOMPATIBILITY: Strong acids, bases, and strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, Oxides of nitrogen, Formaldehyde, Metal oxides

11. TOXICOLOGICAL INFORMATION

EXPOSURE PATH: Refer to section 2 of this SDS.

SYMPTOMS: Refer to section 2 of this SDS.

TOXICITY MEASURES:

Chemical Name	LD50/LC50
Zinc compound	Oral LD50: Rat > 5,000 mg/kg GHS LC50 (vapour): Acute toxicity point estimate 55 mg/l
Polyimide	N.D.
Titanium dioxide	Oral LD50: Rat > 10,000 mg/kg Dermal LD50: rabbit > 5,000 mg/kg GHS LC50 (vapour): Acute toxicity point estimate 55 mg/l
2-Butoxyethanol	Oral LD50: Rat 470 mg/kg Dermal LD50: Rabbit 435 mg/kg GHS LC50 (vapour): Acute toxicity point estimate 11 mg/l GHS LC50 (dust and mist): Acute toxicity point estimate 1.5 mg/l
Bisphenol A	Oral LD50: Rat 3,300 mg/kg Dermal LD50: Rabbit 3 mL/kg Inhalation LC50: Rat > 170 mg/m3 /6 h
Formaldehyde	Oral LD50: Rat 100 mg/kg Dermal LD50: Rabbit 270 mg/kg Inhalation LC50: Rat 0.578 mg/l /4 h

Germ cell mutagenicity: Category 1B - May cause genetic defects.
Components contributing to classification: Formaldehyde.

Carcinogenicity: Category 1A - May cause cancer.
Components contributing to classification: Formaldehyde.

Reproductive toxicity: Category 2 - Suspected of damaging fertility or the unborn child.
Components contributing to classification: 2-Butoxyethanol. Bisphenol A. Methanol.

12. ECOLOGICAL INFORMATION

ECOTOXICITY:

Chemical Name	Ecotoxicity
Zinc compound	N.D.
Polyimide	N.D.
Titanium dioxide	N.D.
2-Butoxyethanol	Fish: Lepomis macrochirus 1,490 mg/l96 h Static Lepomis macrochirus 2,950 mg/l96 h Invertebrates: Daphnia magna > 1,000 mg/l48 h
Bisphenol A	Fish: Pimephales promelas 3.6 - 5.4 mg/l96 h flow-through Pimephales promelas 4.0 - 5.5 mg/l96 h Static Oncorhynchus mykiss 4 mg/l96 h Brachydanio rerio 9.9 mg/l96 h Static Invertebrates: Daphnia magna 10.2 mg/l48 h Daphnia magna 3.9 mg/l48 h Daphnia magna 9.2 - 11.4 mg/l48 h Static Plants: Pseudokirchneriella subcapitata 2.5 mg/l96 h
Formaldehyde	Fish: Pimephales promelas 22.6 - 25.7 mg/l96 h flow-through Lepomis macrochirus 1,510 µg/l96 h Static Brachydanio rerio 41 mg/l96 h Static Oncorhynchus mykiss 100 - 136 mg/l96 h Static Pimephales promelas 23.2 - 29.7 mg/l96 h Static Invertebrates: Daphnia magna 2 mg/l48 h Daphnia magna 11.3 - 18 mg/l48 h Static

PERSISTENCE AND DEGRADABILITY: Not determined for this product.

BIOACCUMULATIVE: Not determined for this product.

MOBILITY IN SOIL: Not determined for this product.

OTHER ADVERSE EFFECTS: Not determined for this product.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Disposal should be done in accordance with Federal (40CFR Part 261), state and local environmental control regulations. If waste is determined to be hazardous, use licensed hazardous waste transporter and disposal facility.

14. TRANSPORT INFORMATION

US DOT Road

Proper Shipping Name:	Environmentally hazardous substances, liquid, n.o.s.
Hazard Class:	9
SECONDARY HAZARD:	None
UN/NA Number:	3082
Packing Group:	III
Emergency Response Guide Number:	171

For US DOT non-bulk road shipments this material may be classified as NOT REGULATED. For the most accurate shipping information, refer to your transportation/compliance department regarding changes in package size, mode of shipment or other regulatory descriptors.

IATA Cargo

PROPER SHIPPING NAME:	Environmentally hazardous substance, liquid, n.o.s.
Hazard Class:	9
HAZARD CLASS:	None
UN NUMBER:	3082
PACKING GROUP:	III
EMS:	9L

IMDG

PROPER SHIPPING NAME:	Environmentally hazardous substance, liquid, n.o.s.
Hazard Class:	9
HAZARD CLASS:	None
UN NUMBER:	3082
PACKING GROUP:	III
EMS:	F-A

The listed transportation classification applies to non-bulk shipments. It does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors. For the most accurate shipping information, refer to your transportation/compliance department.

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: AS FOLLOWS:

SARA SECTION 313

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372.:

Chemical Name	CAS Number	Weight % Less Than
Zinc compound	PROPRIETARY	10.0 %
2-Butoxyethanol	111-76-2	5.0 %
Bisphenol A	80-05-7	0.9 %
Formaldehyde	50-00-0	0.9 %

TOXIC SUBSTANCES CONTROL ACT:

INVENTORY STATUS
The chemical substances in this product are on the TSCA Section 8 Inventory.

EXPORT NOTIFICATION
This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

None

16. OTHER INFORMATION

Under HazCom 2012 it is optional to continue using the HMIS rating system. It is important to ensure employees have been trained to recognize the different numeric ratings associated with the HazCom 2012 and HMIS schemes.

HMIS RATINGS - HEALTH: 2* FLAMMABILITY: 1 PHYSICAL HAZARD: 0
* - Indicates a chronic hazard; see Section 2

Revision: Section 2

Effective Date: 11/05/2019

DISCLAIMER

The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations.