USA SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: **CHEMLOK 855**
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: 03/07/2022

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

Serious eye damage/eye irritation Category 2A
Skin sensitization Category 1
Carcinogenicity Category 2
Specific target organ systemic toxicity (single exposure) Category 2 blood system
Specific target organ systemic toxicity (repeated exposure) Category 2 blood 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

WARNING

Hazard Statements

Causes serious eye irritation.
May cause an allergic skin reaction.
Suspected of causing cancer.
May cause damage to organs.(blood system)
May cause damage to organs through prolonged or repeated exposure.(blood 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.
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.
Call a POISON CENTER or doctor/physician if exposed or you feel unwell.
Specific treatment (see supplemental first aid instructions on this label).
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: In elevated-temperature applications, product may release vapors that may produce cyanosis in the absence of sufficient ventilation or adequate respiratory protection. May be harmful if swallowed. Ingestion is not an expected route of entry in industrial or commercial uses.Causes mild skin irritation.

Chronic: Prolonged or repeated contact may result in dermatitis. IARC has designated carbon black as Group 2B - inadequate evidence for carcinogenicity in humans, but sufficient evidence in experimental animals. In 2006 IARC reaffirmed its 1995 finding that there is "inadequate evidence" from human health studies to assess whether carbon black causes cancer in humans. Further, epidemiological evidence from well-conducted investigations has shown no causative link between carbon black exposure and the risk of malignant or non-malignant respiratory disease in humans. IARC has identified the proprietary curative in this product as an "animal suspected" carcinogen, Group 3, which downgrades a previous NCI report of it as an "animal positive" carcinogen. The nitrogen substituted aromatic in this product gave positive results for mutagenicity in an Ames Assay study while two other mutagenicity studies proved negative.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Range
Nitrogen substituted aromatic	PROPRIETARY	10 - 15 %
Carbon black	1333-86-4	5 - 10 %
Zinc compound	PROPRIETARY	5 - 10 %
Polyimide	PROPRIETARY	1 - 5 %
Nonylphenol ethoxylate compound	PROPRIETARY	0.1 - 0.9 %
Curative	PROPRIETARY	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.

The above Nonylphenol ethoxylate compound is listed by ECHA as an SVHC.

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. Dry residues of this component are sensitive to impact and friction. This can result in deflagration. A regular wet clean up of affected surfaces is necessary. Danger of deflagration increases if regular clean up measures are omitted. Please also refer to information given in chapter 7 of this Safety Data Sheet. WARNING: Due to the combustible nature of the dried film of this product and the potential for smoldering or fire, the accumulation and buildup of the dried film on spray booth walls and floors, spindles, fixtures and other surfaces should be avoided, and any buildup should be removed. Keep the dried film accumulations away from sparks, friction, impact, high heat (>235 F/>112 C) or other sources of ignition. These conditions could cause the dried film to ignite very readily and quickly, and the resulting smoldering or fire may be difficult to extinguish. During removal of accumulation/buildup of this product, take precautions to avoid heat, friction and impact during the cleaning process. Use paint stripper, brass brush, or plastic scraper for cleaning. In the event of smoldering or a fire involving the dried product, Cold Fire®** fire suppressing agent is preferred as the extinguishing medium. If Cold Fire® is not available, use water spray as the extinguishing medium. Take efforts to ensure that these agents reach the base of the smoldering or fire. Parker-LORD Corporation will not be responsible for personal injuries, property damage or any other damages arising from the accumulation (buildup, cleaning/removal or any related smoldering or fire) resulting from the use of this product. Refer to the Chemlok® Safe Handling Guide for additional information. **NOTE: Parker-LORD Corporation has determined Cold Fire® fire suppressing agent to be effective in extinguishing fires involving dried Chemlok® adhesives. Parker-LORD does not recommend any particular equipment or system for use in delivering or applying Cold Fire® products. Customer is responsible for determining that Cold Fire® products and any delivery equipment or system is appropriate and effective for customer's specific needs. 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. This product contains a polymeric cross linking agent that depolymerizises at 130°C. In particular at low pressure during vulcanization processes this component can re-deposit as a solid residue on cold surfaces (i. e. equipment parts). Dry residues of this component are sensitive to impact and friction. This can result in deflagration. A regular wet clean up of affected surfaces is necessary. Danger of deflagration increases if regular clean up measures are omitted. Please also refer to information given in chapter 7 of this Safety Data Sheet.

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

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Avoid breathing vapors. Avoid contact. Use appropriate respiratory protection for large spills or spills in confined area.

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 this Safety Data Sheet.

7. HANDLING AND STORAGE

HANDLING: Keep closure tight and container upright to prevent leakage. Avoid skin and eye contact. Wash thoroughly after handling. Do not handle until all safety precautions have been read and understood. Empty containers should not be re-used. 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
Nitrogen substituted aromatic	N.E.	N.E.	N.E.	N.E.	N.A.
Carbon black	3 mg/m3	N.E.	3.5 mg/m3	N.E.	N.A.
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.
Nonylphenol ethoxylate compound	N.E.	N.E.	N.E.	N.E.	N.A.
Curative	N.E.	N.E.	N.E.	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.

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: 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:	Mild	**VAPOR PRESSURE:**	N.D.
APPEARANCE:	Green/Black	**VAPOR DENSITY:**	Heavier than Air
PHYSICAL STATE:	Liquid	**LOWER EXPLOSIVE LIMIT:**	Not Applicable
FLASH POINT:	≥ 201 °F, 93 °C Setaflash Closed Cup	**UPPER EXPLOSIVE LIMIT:**	Not Applicable
BOILING RANGE:	100 °C	**EVAPORATION RATE:**	Slower than n-butyl-acetate
AUTOIGNITION TEMPERATURE:	N.D.	**DENSITY:**	1.2 g/cm3 (10.00 lb/gal)
DECOMPOSITION TEMPERATURE:	N.D.	**VISCOSITY, DYNAMIC:**	≥70 mPa.s @ 25 °C
ODOR THRESHOLD:	N.D.	**VISCOSITY, KINEMATIC:**	≥58 mm2/s @ 25 °C
SOLUBILITY IN H2O:	Water Dispersible	**VOLATILE BY WEIGHT:**	65.11 %
pH:	7.0	**VOLATILE BY VOLUME:**	74.36 %
FREEZE POINT:	N.D.	**VOC CALCULATED:**	0.02 lb/gal, 2 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.; DO NOT ALLOW THIS MATERIAL TO DRY OUT. As a solid, p-benzoquinone dioxime is flammable, and it may explode if exposed to shock, friction or heat.; For dried product issues, refer to Section 5 of the (M)SDS.

INCOMPATIBILITY: Strong acids, bases, and strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Decomposition due to high temperatures or a fire causes the formation of irritating and/or toxic gases, organic vapors or fumes., May contain CO, CO2, oxides of nitrogen, oxides of sulfur, halogenated by-products, 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
Nitrogen substituted aromatic	Oral LD50: rat 1,100 mg/kg
Carbon black	Oral LD50: Rat > 15,400 mg/kg Dermal LD50: Rabbit > 3 g/kg GHS LC50 (vapour): Acute toxicity point estimate 55 mg/l :
Zinc compound	Oral LD50: Rat > 5,000 mg/kg Dermal LD50: Rat > 2,000 mg/kg GHS LC50 (vapour): Acute toxicity point estimate 55 mg/l Inhalation LC50: Rat > 5,700 mg/m3 /4 h
Polyimide	N.D.
Nonylphenol ethoxylate compound	N.D.
Curative	Oral LD50: Rat 464 mg/kg GHS LC50 (vapour): Acute toxicity point estimate 55 mg/l Inhalation LC50: Rat > 5 mg/l /4 h

Germ cell mutagenicity: No classification proposed

Carcinogenicity: Category 2 - Suspected of causing cancer.
Components contributing to classification: Curative.

Reproductive toxicity: No classification proposed

12. ECOLOGICAL INFORMATION

ECOTOXICITY:

Chemical Name	Ecotoxicity
Nitrogen substituted aromatic	N.D.
Carbon black	N.D.
Zinc compound	N.D.
Polyimide	N.D.
Nonylphenol ethoxylate compound	N.D.
Curative	Fish: Danio rerio (zebra fish) 24 mg/l96 h Static Invertebrates: Daphnia magna (Water flea) 3.5 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. Waste streams, including the dried adhesive residue, resulting from the use of this product should be tested for RCRA characteristics, including ignitability, to determine any applicable waste classifications.

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 %

TOXIC SUBSTANCES CONTROL ACT:

INVENTORY STATUS

The chemical substances in this product are on the active TSCA Section 8 Inventory or exempt.

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, Section 3, Section 9

Effective Date: 03/07/2022

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.