USA Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: **CoolTherm® SC-1600 HARDENER**
Product Use/Class: **Encapsulant, Part 2 of 2**

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)

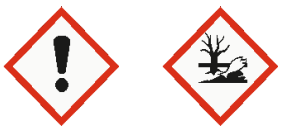
EFFECTIVE DATE: 04/14/2023

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

Serious eye damage/eye irritation Category 2A
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.
Toxic to aquatic life.
Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

Wear protective gloves, protective clothing, eye protection, face protection.
Wash thoroughly after handling.
Avoid release to the environment.

Response

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.
Collect spillage.

Storage

Refer to Section 7 of this SDS.

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 swallowed. Ingestion is not an expected route of entry in industrial or commercial uses. Do not breathe sanding dust.May cause mild skin irritation.

Chronic: This product contains methylpolysiloxanes which can generate formaldehyde at approximately 300 degrees F (150 C) and above, in atmospheres which contain oxygen. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant, and known cancer hazard. Workplace exposure to formaldehyde is regulated by OSHA Standard 29 CFR 1910.1048.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredients above the threshold concentration

Chemical Name	CAS Number	Range
Zinc oxide (ZnO)	1314-13-2	20 - 25 %
Siloxane	PROPRIETARY	1 - 5 %

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: This material is not likely to be hazardous by inhalation. However, if exposed to excessive levels of vapor or mist, remove to fresh air, give oxygen if breathing is difficult, and 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: Do not use water jet as this may spread the fire.

SPECIFIC HAZARDS POSSIBLY ARISING FROM THE CHEMICAL: Keep container 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. If water is used, fog nozzles are preferable.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Avoid breathing vapors. 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 and non-sparking tools. 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. CAUTION! Releases hydrogen (flammable gas) on contact with strong acid or strong base. Avoid breathing sanding dust from this product.

STORAGE: Store only in well-ventilated areas. Keep container closed when not in use. Avoid excessive heat. Avoid moisture contamination.

INCOMPATIBILITY: Strong acids, bases, and strong oxidizers.; Reacts with water or alcohol in the presence of acids or bases to release hydrogen (a flammable gas).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENT EXPOSURE LIMIT

Chemical Name	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING	Skin
Zinc oxide (ZnO)	2 mg/m3	10 mg/m3	5 mg/m3	N.E.	Not applicable
Siloxane	N.E.	N.E.	N.E.	N.E.	Not applicable

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

ENGINEERING CONTROLS: Provide adequate general ventilation where this product is used.

PERSONAL PROTECTION MEASURES/EQUIPMENT:

Respiratory protection: Respiratory protection is not required under normal working conditions where adequate ventilation is present. 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. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.

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:	Negligible	**Vapor Pressure:**	N.D.
Appearance:	White	**Vapor density:**	Heavier than Air
Physical state:	Viscous liquid	**Lower explosion limit:**	N.A.
Flash point:	≥ 201 °F, 93 °C Setaflash Closed Cup	**Upper explosive limit:**	N.A.
Boiling range:	N.A.	**Evaporation rate:**	Slower than n-butyl-acetate
Autoignition temperature:	N.D.	**Density:**	3.34 g/cm3 (27.79 lb/gal)
Decomposition temperature:	N.D.	**Viscosity, dynamic:**	≥150,000 mPa.s @ 25 °C
Odor threshold:	N.D.	**Viscosity, kinematic:**	≥44,910 mm2/s @ 25 °C
Solubility in H2O:	Insoluble	**Volatile by weight:**	0.02 %
pH:	N.A.	**Volatile by volume:**	0.09 %
Freeze point:	N.D.	**VOC Calculated:**	0.01 lb/gal, 1 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 polymerisation will not occur under normal conditions.

STABILITY: Product is stable under normal storage conditions.

CONDITIONS TO AVOID: Moisture; High temperatures.; Contact with acids, bases, and many metals and metallic oxides will liberate hydrogen which is a flammable gas.

INCOMPATIBILITY: Strong acids, bases, and strong oxidizers.; Reacts with water or alcohol in the presence of acids or bases to release hydrogen (a flammable gas).

HAZARDOUS DECOMPOSITION PRODUCTS: Does not decompose when used and stored as recommended., Carbon monoxide, carbon dioxide., Oxides of silicon, Metal oxides, Formaldehyde.

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 oxide (ZnO)	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
Siloxane	N.D.

Germ cell mutagenicity: No classification proposed

Carcinogenicity: No classification proposed

Reproductive toxicity: No classification proposed

12. ECOLOGICAL INFORMATION

ECOTOXICITY:

Chemical Name	Ecotoxicity
Zinc oxide (ZnO)	N.D.
Siloxane	N.D.

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 substance, solid, n.o.s.

Hazard Class:	9
Secondary hazard:	None
UN/NA Number:	3077
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, solid, n.o.s.
Hazard Class:	9
Hazard class:	None
UN number:	3077
Packing group:	III
EmS:	9L

IMDG

Proper shipping name:	Environmentally hazardous substance, solid, n.o.s.
Hazard Class:	9
Hazard class:	None
UN number:	3077
Packing group:	III
EmS:	F-A; S-F

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 percent less than
Zinc oxide (ZnO)	1314-13-2	25.0 %

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: 1* FLAMMABILITY: 1 PHYSICAL HAZARD: 0

* - Indicates a chronic hazard; see Section 2

Revision: Section 1, Section 3, Section 8, Section 11, Section 12

Effective Date: 04/14/2023

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.