

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: **CoolTherm UR-388 FHV RESIN**
Product Use/Class: **Encapsulant, Part 1 of 2**
Reference: Our thermal management products are now named CoolTherm (Registered Trademark). Some of our Gelease, Circalok and Thermoset products are included under this new brand.

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: 08/06/2019

2. HAZARDS IDENTIFICATION**GHS CLASSIFICATION:**

Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2A
Reproductive toxicity Category 2

GHS LABEL ELEMENTS:**Symbol(s)****Signal Word**

WARNING

Hazard Statements

Causes skin irritation.
Causes serious eye irritation.
Suspected of damaging fertility or the unborn child.

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.
Wash thoroughly after handling.

Response

IF exposed or concerned: Get medical advice/attention.
Specific treatment (see supplemental first aid instructions on this label).
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation 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.
Take off contaminated clothing and wash before reuse.

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 swallowed. Ingestion is not an expected route of entry in industrial or commercial uses.

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.

3. COMPOSITION/INFORMATION ON INGREDIENTS
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Chemical Name	CAS Number	Range
Polyol	PROPRIETARY	35 - 40 %
Carbon black	1333-86-4	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: Use self-contained breathing equipment. 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. 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. Do not weld or flame-cut an empty drum. 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
Polyol	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.

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: Respiratory protection is not required under normal working conditions where adequate ventilation is present.

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:	Slight	VAPOR PRESSURE:	N.D.
APPEARANCE:	Black	VAPOR DENSITY:	Heavier than Air
PHYSICAL STATE:	Liquid	LOWER EXPLOSIVE LIMIT:	Not Applicable
FLASH POINT:	≥ 201 °F, 93 °C	UPPER EXPLOSIVE LIMIT:	Not Applicable
	Setaflash Closed Cup		
BOILING RANGE:	N.A.	EVAPORATION RATE:	Slower than n-butyl-acetate
AUTOIGNITION TEMPERATURE:	N.D.	DENSITY:	1.53 g/cm3 - 12.77 lb/gal
DECOMPOSITION TEMPERATURE:	N.D.	VISCOSITY, DYNAMIC:	≥18,000 mPa.s @ 25 °C
ODOR THRESHOLD:	N.D.	VISCOSITY, KINEMATIC:	≥11,765 mm2/s @ 25 °C
SOLUBILITY IN H2O:	Insoluble	VOLATILE BY WEIGHT:	0.00 %
pH:	N.A.	VOLATILE BY VOLUME:	0.00 %
FREEZE POINT:	N.D.	VOC CALCULATED:	0 lb/gal, 0 g/l
COEFFICIENT OF WATER/OIL	N.D.		

DISTRIBUTION:

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

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
Polyol	N.D.
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

Germ cell mutagenicity: No classification proposed

Carcinogenicity: No classification proposed

Reproductive toxicity: Category 2 - Suspected of damaging fertility or the unborn child.
Components contributing to classification: Polyol. Amine catalyst.

12. ECOLOGICAL INFORMATION

ECOTOXICITY:

Chemical Name	Ecotoxicity
Polyol	N.D.
Carbon black	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

This product is NOT REGULATED for non-bulk shipments. For the most accurate shipping information, refer to your transportation/compliance department regarding changes in package size, mode of shipment or other regulatory descriptors.

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.:

None

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: 1* **FLAMMABILITY:** 1 **PHYSICAL HAZARD:** 0

* - Indicates a chronic hazard; see Section 2

Revision: Section 2, Section 3, Section 8, Section 11, Section 12

Effective Date: 08/06/2019

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.