



SAFETY DATA SHEET

LIQUID HEAT DEICER

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Version 2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name Liquid Heat Deicer

Other means of identification

Synonyms Liquid Heat

Recommended use of the chemical and restrictions on use

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address

Zircon Industries Incorporated
4920 Commerce Parkway #9
Cleveland, OH 44128
216-595-0200

E-mail address

staff@liquidheat.com

Emergency telephone number

Emergency Telephone InfoTrac 1-800-535-5053

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Irritating to eyes	Category 4
Irritating to skin	Category 4
Irritating to respiratory system	Category 3
May be harmful if swallowed	Category 4

Label elements

Emergency Overview

WARNING



Hazard statements

Irritating to skin, eyes, and respiratory system. Can be harmful if swallowed.

Precautionary Statements - Prevention

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Contaminated work clothing should not be allowed out of the workplace
 Wear protective gloves

Precautionary Statements - Response

IF EXPOSED or concerned: 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
 Immediately 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 SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
 Rinse mouth

Precautionary Statements - Storage

Store in well-ventilated area

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not Applicable

Unknown Acute Toxicity 0% of the substance or mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Diethylene Glycol	111-46-6	20-80	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

General advice Seek medical attention if symptoms occur.
Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes.
Skin Contact Wash off immediately with soap and plenty of water.
Inhalation Move to fresh air. Call a physician if symptoms develop or persist..
Ingestion Rinse mouth. Get medical attention if symptoms occur.
Self-protection of the first aider Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.
Most important symptoms and effects, both acute and delayed

Symptoms No information available.
Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Dry chemical, CO2 or water spray.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required. Keep people away from and upwind of spill/leak.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up Cover liquid spill with sand, earth or other non-combustible absorbent material.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.
Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

Incompatible materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	WEEL (USA)	OSHA PEL	NIOSH IDLH
Diethylene Glycol 111-46-6	10.0 mg/m ³ inhalable fraction and vapor	10.0 mg/m ³ TWA	No data available

Appropriate engineering controls

Engineering Controls Showers
 Eyewash stations
 Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Safety Glasses with Side Shields.

Skin and body protection Wear protective gloves and protective clothing.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Keep away from food, drink and animal feeding stuffs.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid	Odor threshold	No information available
Appearance	clear	Odor	mild
Color	red		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	6-8 @77F	
Melting point/freezing point		No information available
Boiling point / boiling range	143 ° C / 289 ° F	
Flash point		No information available
Evaporation rate		No information available
Flammability (solid, gas)		No information available
Flammability Limit in Air		
Upper flammability limit:		No information available
Lower flammability limit:		No information available
Vapor pressure		No information available
Vapor density		
Water solubility	Miscible in water	
Solubility in other solvents		No information available
Partition coefficient		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
Kinematic viscosity		No information available
Dynamic viscosity		No information available
Explosive properties		No information available
Oxidizing properties		No information available
<u>Other Information</u>		
Explosion severity		
Danger of Explosion, cloud		No information available
Minimum Ignition Energy, Cloud, mJ		No information available
KST, (cloud), bar.m.s-1		No information available
Pmax maximum explosion pressure, Cloud, bar		No information available
VMP, (cloud), bar.s-1		No information available
LOC Limiting Oxygen Concentration, Cloud, %v/v O2		No information available
Softening point		No information available
Molecular weight		No information available
Density		No information available
Bulk density		No information available
Specific Gravity	1.2-1.22@ 25C for 40% Solution	

10. STABILITY AND REACTIVITY

Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical Stability

Material is stable under normal conditions.

Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid

Contact with incompatible materials.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

No hazardous decomposition products are known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	Causes serious eye damage.	
LD 50	Rat (oral) + (dermal)	>2000mg/kg
Inhalation	Not a respiratory sensitizer.	
Eye contact	Causes eye irritation.	
Skin Contact	Mild – 24 Hours (Rabbit).	
Ingestion	Can be harmful if swallowed	

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization

Germ cell mutagenicity

Carcinogenicity

No information or data specific to the product on this toxicological (health) effect is available.

Reproductive toxicity

STOT - single exposure

No information or data specific to the product on this toxicological (health) effect is available.

STOT - repeated exposure

No information or data specific to the product on this toxicological (health) effect is available.

Target Organ Effects

Central nervous system, Eyes.

Aspiration hazard

No information or data specific to the product on this toxicological (health) effect is available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Chemical Name	Fish
Diethylene Glycol 111-46-6	Fathead minnow (Pimephales promelas) >32,000 mg/l, 96 hours

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Do not reuse container.

14. TRANSPORT INFORMATION**DOT**

Not regulated as a dangerous good

IATA

Not regulated as a dangerous good

IMDG

Not regulated as a dangerous good

15. REGULATORY INFORMATION**International Inventories**

AICS	Yes
DSL	Yes
NDSL	No
IECSC	Yes
EINECS	Yes
ELINCS	No
ENCS	Yes
KECL	Yes
PICCS	Yes
TSCA	Yes (Registered Lautenberg 21st act)
NZIoC	Yes

Legend:

AICS - Australian Inventory of Chemical Substances
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
 IECSC - China Inventory of Existing Chemical Substances
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
 ENCS - Japan Existing and New Chemical Substances
 KECL - Korean Existing and Evaluated Chemical Substances
 PICCS - Philippines Inventory of Chemicals and Chemical Substances
 TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
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SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CERCLA

This material, as supplied, contains no substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

**SARA 311/312 Hazardous
Classified hazard categories** No

16. OTHER INFORMATION

NFPA	Health hazards 1	Flammability 0	Instability 0	Physical and Chemical Properties -
HMIS	Health hazards 1*	Flammability 0	Physical hazards 0	Personal protection X

Revision Date 15-Apr-2019

Revision Note

SDS sections updated (***) GHS Revision

Disclaimer

The information provided above is intended as a guide to assist in the safe handling, use, processing, storage, transportation, disposal and release of the material listed. Nothing contained herein is to be considered as an express or implied warranty of performance or quality. The information relates only to the specific material designated and may not be applicable when such material is used in combination with any other materials or as part of any process, except as otherwise expressly described herein. The information is believed to be true and correct as of the date issued. Always make sure you are using the most current information available. The material described herein is produced for commercial and industrial use only and unless otherwise specifically designated by the manufacturer in writing has not received any specific regulatory approval such as approvals for food contact or for use in medical/surgical applications or devices. It is buyer and user's sole and exclusive responsibility to ensure that any handling, use, processing, storage, transportation, disposal and release of the material complies with all applicable laws, rules and regulations.

End of Safety Data Sheet