

Material Safety Data Sheet Liquid Heat

Section 1. Chemical Product and Company Identification

Product Name	Liquid Heat	
Product Number	NTN LHIM	
Manufacturer/ Supplier	NuTech Specialties, Inc. 9811 So. 6150 W. West Jordan, UT 84088	
Phone Number	(801) 253-1000 (Mon-Fri/ 8am- 5pm MT)	
D.O.T. Emergency Phone:	1-800-633-8253	
Date of Preparation	March 7, 2013	Revision Number 1.0

Section 2. Hazards Identification

Emergency overview	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
DANGER!	
Keep out of reach of children. Keep container closed during storage. For institutional and commercial use	
Potential Acute Health Effects	Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion. Non-corrosive for skin. Non-hazardous in case of inhalation
Routes of Entry	Absorbed through skin. Eye contact. Inhalation. Ingestion.
Eyes	Can cause severe irritation, redness, tearing , and blurred vision
Skin	Prolonged or repeated contact can cause moderate irritation, de-fatting, dermatitis.
Inhalation	Excessive inhalation of vapors can cause nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, and even asphyxiation.
Ingestion	Can cause gastrointestinal irritation, nausea, vomiting, diarrhea, blindness, and death
Medical conditions aggravated by exposure:	Symptoms of poisoning are not immediately evident.
Potential Chronic Health	There is no known effect from chronic exposure to this product.
Carcinogenic Effects	Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.
Target Organs	
Environmental Effects	

Section 3. Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits	LC ₅₀ /LD ₅₀
Methanol	67-56-1	Proprietary		200 PPM

Section 4. First Aid Measures

Eye Contact	Eye contact can result in corneal damage or blindness. IMMEDIATELY flush eyes with running water for at least 15 to 20 minutes, keeping eyelids open. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or SEEK IMMEDIATE MEDICAL ATTENTION.
Skin Contact	Remove contaminated clothing and shoes. Wash gently and thoroughly the contaminated skin with running water and non abrasive soap for 15 to 20 minutes. Call a poison control center or SEEK IMMEDIATE MEDICAL ATTENTION.
Inhalation	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth if possible. If breathing is difficult, give oxygen. Call poison control center or seek medical attention if symptoms persist.
Ingestion	Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person.
General Advice	Symptoms of poisoning may not appear for several hours. Keep under medical supervision for at least 48 hours.
Notes to Physician	

Section 5. Fire Fighting Measures

Flammability	Non flammable
Fire Fighting Media and instructions	Wear self contained breathing apparatus and protective clothing. Use water spray to keep fire exposed containers cool. Water may be ineffective in fighting the fire.
Products of Combustion	Carbon dioxide, Carbon monoxide
Special Remarks on Fire Hazards	Vapors may cause a flash or ignite explosively. Vapors may travel considerable distance to a source of ignition and flash back. Prevent buildup of vapors or gases to explosive concentrations
Special Remarks on Explosion Hazards	Not available
Sensitivity to Mechanical Impact	Not available
Sensitivity to Static Discharge	Material is unlikely to accumulate a static charge which could act as an ignition source.
Protection of Fire Fighters	See special remarks on Fire Hazards

Section 6. Accidental Release Measures

Personal Precautions	Face shield. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
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Methods for Containment Corrosive liquid. Avoid to runoff to sewers and waterways. Water protective clothing. Absorb with inert material. Contact your local Emergency planning commission for further instructions. Absorb with an in inert material and put the spilled material in an appropriate waste disposal.

Environmental Precautions See **Methods for Containment**

Methods for Clean Up Small Spill: Eliminate all sources of ignition such as flares, flames, and electrical sparks. Absorb liquid on paper, vermiculite, floor absorbent or other absorbent material and transfer to hood. Large Spill: Eliminate all sources of ignition such as flares, flames, and electrical sparks. Persons not wearing protective equipment should be excluded from area of spill until clean up has been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may ne taken up in sand, clay earth, or other absorbent material and shoveled into containers. If run off occurs, notify proper authorities as required, that spill has occurred.

Section 7. Handling and Storage

Precautions Keep locked up. Keep container dry. DO NOT INGEST. Do not breath the gas, fumes, vapor or spray. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or label. Avoid contact with skin and eyes. After handling, always wash hands thoroughly with soap and water. Containers my be hazardous when empty, since emptied containers contain residue. Cannot be made non poisonous.

Incompatibility Avoid Contact with strong oxidizing agents

Storage Keep container tightly closed and in a well-ventilated place

Keep out of reach of children.
Keep container closed during storage.

Section 8. Exposure Controls/Personal Protection

Engineering Controls

Personal Protection Good general ventilation should be sufficient to control airborne levels. Wash hands after use. Cannot be made non-poisonous.

Eyes Safety goggles

Body Splash apron and protective boots. Eye bath and safety shower.

Respiratory Not applicable

Hands Rubber or neoprene

Protective Clothing (Pictograms)



Exposure Limits See Section 2 For Applicable Exposure Limits.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Red liquid
Molecular Weight	N/A
Ph	6
Boiling/Condensation Point	147 F
Melting/Freezing Point	-98 C
Critical Temperature	N/A
Instability Temperature	N/A
Specific Gravity	(H20 = 1): .78
Vapor Pressure	(Non-Aerosols)(mm Hg and Temperature): N/A
Vapor Density	(Air = 1): N/A
Volatility	N/A
VOC	N/A
Evaporation Rate	(H20 = 1): 2.6
Dispersion Properties	N/A
Solubility	Complete
The Product is:	Flammable
Auto-ignition Temperature	446 C
Flash Points	10 C (tag closed cup)
Flammable Limits	6.61 to 36.5
Fire Hazards in Presence Of Various Substances	N/A
Explosion Hazards in Presence of Various Substances	N/A
Odor	Alcohol
Color	Red

Section 10. Stability and Reactivity Data

Stability	The product is stable.
Incompatibility with Various Substance	Avoid contact with strong oxidizing agents
Hazardous Polymerization	Will not occur

Section 11. Toxicological Information

Routes of Entry	Absorbed through skin. Eye contact. Inhalation. Ingestion.
Toxicity to Animals	
Acute Effects on Humans	
Eyes	Can cause severe irritation, redness, tearing , and blurred vision
Skin	Prolonged or repeated contact can cause moderate irritation, de-fatting, dermatitis.
Inhalation	Excessive inhalation of vapors can cause nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, and even asphyxiation.
Ingestion	Can cause gastrointestinal irritation, nausea, vomiting, diarrhea, blindness, and death
Chronic Effects on Humans	There is no known effect from chronic exposure to this product.
Special Remarks on Toxicity to Animals	Not available
Special Remarks on Chronic Effects on Humans	Not available

Section 12. Ecological Information

Ecotoxicity	Not available
BOD5 and COD	0.76-1.12 g/g
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	Readily Biodegradable
Special Remarks on the Products of Biodegradation	Readily Biodegradable

Section 13. Disposal Considerations

Waste Information	Small Spill: Allow volatile portion to evaporate in hood. Allow sufficient time for vapors to completely clear hood duct work. Dispose of remaining material in accordance with applicable regulations. Large Spill: Destroy by liquid incineration. Contaminated absorbent may be disposed in a landfill in accordance with local, state and federal regulations.
Waste Stream	Not available

Section 14. Transport Information

DOT (U.S.A.)
(Pictograms)



TDG Classification	Not controlled under TDG (Canada)
PIN UN, Proper Shipping	UN 1993, Flammable Liquids, NOS (Methanol) 3, PGII

Name, PG

Maritime Transportation N/A

Special Provisions for Transport Not available

Section 15. Regulatory Information and Pictograms

Regulatory Lists No products were found.

Other Regulations Not available, or of its ingredients

Other Classifications HCS (U.S.A.) Not controlled under HCS (United States)

USA Regulatory Lists This product does NOT contain components that are known to the state of California to Cause Cancer or Reproductive Harm at or above California Prop 65 No Observable Effect Level (NOEL)
SARA 302 Extremely Hazardous Substances - Not listed
SARA 311 - 1. Immediate (acute) health hazard
2. Delayed (chronic) health hazard
3. Fire hazard
SARA 313 Toxic Chemical List – Not listed

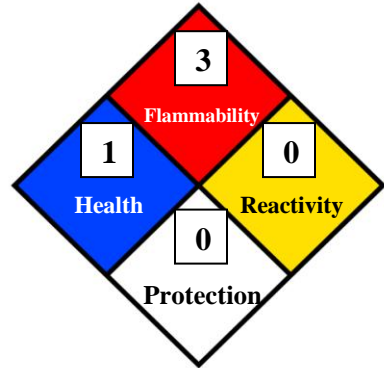
DSD (EEC) This product is not classified according to the EU regulations.

International Regulations Lists No Products were found.

Hazardous Material Information System (U.S.A.)



National Fire Protection Association (U.S.A.)



WHMIS (Classification) Yes D2, D1B

The Hazard Ranking systems presented on this MSDS sheet provide only a quick reference for hazard information. The ENTIRE MSDS must be consulted to determine any specific hazards, First Aid measures, and PPE associated with this product.

Section 16. Other Information

Expiry Date 3 (Three Years) from the date of preparation indicated in Section 1.

Validated by Verified by

Printed

Information Contact

Notice to Reader:

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Validated on

NuTech Specialties, Inc.