



SAFETY DATA SHEET

SDS REVISIONS: Sections 9 and 14
DATE OF ISSUE: 08/14/2019

N-pHURIC 15/49
SUPERSEDES: 05/16/2019

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product Name N-pHURIC 15/49

Other means of identification

Product Code FRT-00293
UN/ID no UN1760
Document 1000355883
Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Crop Nutrient.
Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Address
LOVELAND PRODUCTS, INC.
P.O. Box 1286
Greeley, CO 80632-1286

Emergency telephone number

Company Phone Number 1-888-LPI-CUST (574-2878)
Emergency Telephone Chemtrec 1-800-424-9300
Medical Emergencies: 1-866-944-8565
US regulations require reporting spills of this material that could reach any surface waters.
The toll-free phone number for the US Coast Guard National Response Center is 1-800-424-8802

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

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

Acute toxicity - Oral	Category 4 - (H302)
Acute toxicity - Dermal	Category 4 - (H314)
Serious eye damage/eye irritation	Category 1 - (H318)

Label elements



Signal word

DANGER

Hazard statements

H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage



SAFETY DATA SHEET

N-pHURIC 15/49

SDS REVISIONS: Sections 9 and 14 DATE OF ISSUE: 08/14/2019

SUPERSEDES: 05/16/2019

Precautionary Statements - Prevention

- P264 - Wash face, hands and any exposed skin thoroughly after handling
- P270 - Do not eat, drink or smoke when using this product
- P280 - Wear protective gloves/protective clothing/eye protection/face protection
- P260 - Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

- P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- P310 - Immediately call a POISON CENTER or doctor/physician
- P312 - Call a POISON CENTER or doctor/physician if you feel unwell
- P330 - Rinse mouth
- P331 - Do NOT induce vomiting
- P363 - Wash contaminated clothing before reuse

Precautionary Statements - Storage

- P405 - Store locked up

Precautionary Statements - Disposal

- P501 - Dispose of contents/ container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical Name	CAS No	Weight-%	GHS Classification	Trade Secret
Monocarbamide dihydrogensulfate	21351-39-3	60 - 100		*

*The exact percentage (concentration) of composition has been withheld as a trade secret.
OSHA Hazard Communication 29 CFR 1910.1200



SAFETY DATA SHEET

SDS REVISIONS: Sections 9 and 14
DATE OF ISSUE: 08/14/2019

N-pHURIC 15/49
SUPERSEDES: 05/16/2019

4. FIRST AID MEASURES

Description of first aid measures

General advice	Get medical attention if symptoms occur.
Eye contact	Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
Skin contact	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Inhalation	Remove to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.
Ingestion	Call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Most important symptoms and effects, both acute and delayed

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

Treatment:	Treat symptomatically. Symptoms may be delayed. Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also call 1-866-944-8565 for emergency medical treatment information.
Note to physicians	No specific antidote. Treat symptomatically.
Antidotes	No data available

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Dry chemical, CO2 or water spray, Dry chemical, CO2, alcohol-resistant foam or water spray, Move containers from fire area if you can do it without risk, Dike fire control water for later disposal; do not scatter the material

Specific hazards arising from the chemical

Some are oxidizers and may ignite combustibles (wood, paper, oil, clothing, etc.).

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

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.



SAFETY DATA SHEET

SDS REVISIONS: Sections 9 and 14
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N-pHURIC 15/49
SUPERSEDES: 05/16/2019

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Stop leak if you can do it without risk.

Other Information Do not get water inside containers or in contact with substance.

Environmental precautions

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

Methods for cleaning up Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Prevent product from entering drains. Dam up. After cleaning, flush away traces with water. Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems. Use with local exhaust ventilation. Do not breathe dust/fume/gas/mist/vapors/spray.

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. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. Keep containers tightly closed in a cool, well-ventilated place.

Packaging materials DO NOT STORE IN ALUMINUM TANKS.

Incompatible materials Incompatible with strong acids and bases. Incompatible with oxidizing agents.



SAFETY DATA SHEET

SDS REVISIONS: Sections 9 and 14
DATE OF ISSUE: 08/14/2019

N-pHURIC 15/49
SUPERSEDES: 05/16/2019

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering Controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles. Face protection shield.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection Dependent on job function. If vapors or dusts exceed acceptable levels, wear a MSHA/NIOSH approved air-purifying respirator with any cartridges/filters approved for pesticides. If respirators are used, a program should be in place to assure compliance with 29 CFR 1910.134, the OSHA Respiratory Protection Standard. Wear a supplied air respirator if exposure concentrations are unknown.

General Hygiene Considerations When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Take off all contaminated clothing and wash it before reuse. Wear suitable gloves and eye/face protection.



SAFETY DATA SHEET

SDS REVISIONS: Sections 9 and DATE OF ISSUE: 08/14/2019
14

N-pHURIC 15/49
SUPERSEDES: 05/16/2019

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Viscous liquid
Color	Clear Dark pink
Odor	Odorless
Odor threshold	No data available

<u>Property</u>	<u>Values (Remarks - Method)</u>
pH	1.0 (10% solution)
Melting point / freezing point	No data available
Boiling point	100 °C / 212 °F
Flash point	No data available Does not flash
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Flammability Limit in Air	
Upper flammability limit:	No data available
Lower flammability limit:	No data available
Vapor pressure	No data available
Vapor density	No data available
Specific Gravity	1.51 g/ml
Water solubility	Soluble
Solubility in other solvents	No data available
Partition coefficient	No data available
Autoignition temperature	No data available
Decomposition temperature	230
Kinematic viscosity	No data available
Dynamic viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

Other Information

VOC Content (%)	No data available
Density	12.60lbs/gal

Note: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.



SAFETY DATA SHEET

SDS REVISIONS: Sections 9 and 14
DATE OF ISSUE: 08/14/2019

N-pHURIC 15/49
SUPERSEDES: 05/16/2019

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

Corrosive to aluminum. May react violently.

Conditions to avoid

Exposure to air or moisture over prolonged periods.

Incompatible materials

Incompatible with strong acids and bases. Incompatible with oxidizing agents.

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

11. TOXICOLOGICAL INFORMATION

Acute toxicity of the formulated product:

Oral LD₅₀ 350 mg/kg
Dermal LD₅₀ > 2000 mg/kg

Skin corrosion/irritation Non-irritating.
Serious eye damage/eye irritation Causes serious eye damage.
Sensitization Not a skin sensitizer.

Chemical Name	Oral LD ₅₀	Dermal LD ₅₀	Inhalation LC ₅₀
Monocarbamide dihydrogensulfate	= 350 mg/kg (Rat)	> 2 g/kg (Rabbit)	

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

Germ cell mutagenicity No information available.
Carcinogenicity No information available.
Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Chronic toxicity Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Avoid repeated exposure.
Possible risk of irreversible effects.
Aspiration hazard No information available.

Information on likely routes of exposure

Product Information No data available
Inhalation No data available.
Eye contact Corrosive.
Skin contact Non-corrosive.
Ingestion May be harmful if swallowed.



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SDS REVISIONS: Sections 9 and 14 DATE OF ISSUE: 08/14/2019

N-pHURIC 15/49
SUPERSEDES: 05/16/2019

12. ECOLOGICAL INFORMATION

Ecotoxicity

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

Wastes may be disposed of on site or at an approved waste disposal facility. Triple rinse (or equivalent), adding rinse water to spray tank. Offer container for recycling or dispose of in a sanitary landfill or by other procedures approved by appropriate authorities. Recycling decontaminated containers is the best option of container disposal. The Agricultural Container Recycling Council (ACRC) operates the national recycling program. To contact your state and local ACRC recycler visit the ACRC web page at <http://www.acrecycle.org/>. Do not contaminate water, food or feed by storage or disposal.

Contaminated packaging

Do not reuse container.

14. TRANSPORT INFORMATION

Note:

THIS MATERIAL IS CORROSIVE TO ALUMINUM ONLY - CFR 173.154(d) - "A MATERIAL CLASSED AS CLASS 8, PACKING GROUP III MATERIAL SOLELY BECAUSE OF ITS CORROSIVE EFFECT - (1) ON ALUMINUM IS NOT SUBJECT TO ANY OTHER REQUIREMENTS OF THIS SUBCHAPTER WHEN TRANSPORTED BY MOTOR VEHICLE OR RAILCAR IN A PACKAGING CONSTRUCTED OF MATERIAL THAT WILL NOT REACT DANGEROUSLY WITH OR BE DEGRADED BY THE CORROSIVE MATERIAL".
STEEL AND NON-ALUMINUM TANKS - NOT REGULATED BY USDOT.

DOT

UN/ID no	UN1760
Proper shipping name	CORROSIVE LIQUIDS, N.O.S. (MONOCARBAMIDE DIHYDROGENSULFATE)
U.S. Surface Freight Classification:	FERTILIZING COMPOUNDS (MANUFACTURED FERTILIZERS), NOI, LIQUID (NMFC 68140, SUB 6; CLASS 70)
Hazard Class	8
Packing Group	III
Special Provisions	IB3, T7, TP1, TP28
Description	UN1760, Corrosive liquids, n.o.s., 8, III
Emergency Response Guide Number	154



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SUPERSEDES: 05/16/2019

15. REGULATORY INFORMATION

<u>NFPA</u>	Health hazards 3	Flammability 0	Instability 0	Physical and Chemical Properties -
<u>HMIS</u>	Health hazards 3	Flammability 0	Physical hazards 0	Personal protection X
	0 - Least	1 - Slight	2 - Moderate	3 - High
				4 - Severe

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

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

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

US EPA Waste Number D002

U.S. EPA Label Information



SAFETY DATA SHEET

SDS REVISIONS: Sections 9 and 14 DATE OF ISSUE: 08/14/2019

N-pHURIC 15/49

SUPERSEDES: 05/16/2019

16. OTHER INFORMATION

Prepared By Product Stewardship and Regulatory Affairs

Reviewed By Safety, Health and Environment

Issue Date 08/14/2019

Revision Date 08/15/2019

Revision Note

2 SDS sections updated

N-pHURIC 15/49 is a registered trademark of Loveland Products, Inc.

Disclaimer

This safety data sheet was developed from information on the constituent materials identified herein and does not relate to the use of such materials in combination with any other material or process. No warranty is expressed or implied with respect to the completeness or ongoing accuracy of the information contained in this data sheet, and LOVELAND PRODUCTS, INC. disclaims all liability for reliance on such information. This data sheet is not a guarantee of safety. Users are responsible for ensuring that they have all current information necessary to safely use the product described by this data sheet for their specific purpose.

End of Safety Data Sheet