



Safety Data Sheet N-SURE®

SDS Number: 204

Revision: September 16, 2024

Section 1: IDENTIFICATION

1.1 Product Name: N-Sure®

1.2 Other Identification:

Chemical Family: Aqueous organic solution.
Formula: Not applicable - blend

1.3 Recommended Use of Chemical: Agricultural Industry – Fertilizer

1.4 Manufacturer:

Tessenderlo Kerley Inc.
2910 N. 44th Street, Suite 100
Phoenix, Arizona 85018
Information: (602) 889-8300

1.5 Emergency Contact:

Tessenderlo Kerley, Inc. (800) 877-1737
CHEMTREC (800) 424-9300 Domestic
(703) 527-3887 International

Section 2: HAZARD(S) IDENTIFICATION

2.1 Hazard Classification: Health None
Physical None

2.2 Signal Word: Not applicable

2.3 Hazard Statement(s): Not applicable

2.4 Symbol(s): Not applicable

2.5 Precautionary Statement(s): Not applicable

2.6 Unclassified Hazard(s): None

2.7 Unknown Toxicity Ingredient: None

Section 3: COMPOSITION/INFORMATION on INGREDIENTS

3.1 Chemical Ingredients: (See Section 8 for exposure guidelines)

Proprietary ingredients

Chemical	Synonym Common Name	CAS No.	EINECS No.
Urea	Urea	57-13-6	200-315-5
Tetrahydro-1,3,5-triazin-2(1H)-one	Triazone	7098-14-8	230-406-5
Water	Water	7732-18-5	231-791-2

Section 4: FIRST AID MEASURES

4.1 Symptoms/Effects:

Acute: Eye contact may cause eye irritation. Repeated or prolonged skin contact may cause skin irritation. Ingestion may irritate the gastrointestinal tract.

Chronic: No known chronic effects.

4.2 Eyes: Immediately flush with large quantities of water for 15 minutes. Hold eyelids apart during irrigation to ensure thorough flushing of the entire area of the eye and lids. Obtain medical attention if irritation occurs.

4.3 Skin: Immediately flush with large quantities of water. Remove contaminated clothing under a safety shower. Continue rinsing. Obtain medical attention if irritation occurs.

4.4 Ingestion: If victim is conscious, give 2 to 4 glasses of water and induce vomiting by touching finger to back of throat. Obtain medical attention.

4.5 Inhalation: Remove victim from contaminated atmosphere. If breathing is labored, administer Oxygen. If breathing has ceased, clear airway and start CPR. Obtain medical attention.

Section 5: FIRE FIGHTING MEASURES

5.1 Flammable Properties: (See Section 9 for additional flammable properties)

NFPA: Health - 1 Flammability - 0 Reactivity - 0

5.2 Extinguishing Media:

5.2.1 Suitable Extinguishing Media: Not flammable, use media suitable for combustibles involved in fire.

5.2.2 Unsuitable Extinguishing Media: Not applicable

5.3 Protection of Firefighters:

5.3.1 Specific Hazards Arising from the Chemical:

Physical Hazards: Heating (flames) of closed or sealed containers may cause violent rupture of container due to thermal expansion of compressed gases.

Chemical Hazards: Heating causes release of vapors. Vapors are irritating to eyes, skin and respiratory tract. Heating to dryness may cause the release of Ammonia, and Oxides of Carbon.

5.3.2 Protective Equipment and Precautions for Firefighters:

Firefighters should wear self-contained breathing apparatus (SCBA) and full fire-fighting turnout gear. Keep containers/storage vessels in fire area cooled with water spray.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions: Use personal protective equipment specified in Section 8. Isolate the release area and deny entry to unnecessary, unprotected and untrained personnel.

6.2 Environmental Precautions: Keep out of "waters of the United States" because of potential aquatic Toxicity (See Section 12).

6.3 Methods of Containment:

Small Release: Confine and absorb small releases with sand, earth or other inert absorbents.

Large Release: Shut off release if safe to do so. Dike spill area with earth, sand or other inert absorbents to prevent runoff into surface waterways (potential aquatic toxicity), storm drains and sewers.

6.4 Method for Cleanup:

Small Release: Shovel up absorbed material and place in drums for disposal as a chemical waste.

Large Release: Recover as much of the spilled product as possible using portable pump and hoses. Use recovered material as originally intended or dispose of as a chemical waste. Treat remaining material as a small release (above).

Section 7: HANDLING and STORAGE

- 7.1 Handling:** Avoid contact with eyes. Use only in a well-ventilated area. Wash thoroughly after handling. Avoid prolonged or repeated breathing of vapors. Avoid prolonged or repeated contact with the skin.
- 7.2 Storage:** Store in well-ventilated areas. Do not store combustibles in the area of storage vessels. Keep away from any sources of heat or flame. Store totes and smaller containers out of direct sunlight at moderate temperatures. (See Section 10.5 for materials of construction.)

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure Guidelines:

Chemical	OSHA PELs		ACGIH TLVs	
	TWA	STEL	TWA	STEL
Urea	None	None	None	None
Tetrahydro-1,3,5-triazin-2(1H)-one	None	None	None	None
Water	None	None	None	None

- 8.2 Engineering Controls:** Use adequate exhaust ventilation to prevent inhalation of product vapors. Keep eye wash/safety shower in areas where product is handled.

8.3 Personal Protective Equipment (PPE):

- 8.3.1 Eye/Face Protection:** Chemical goggles and a full face shield.
- 8.3.2 Skin Protection:** Neoprene rubber gloves and apron should be worn to prevent repeated or prolonged contact with the liquid. Wash contaminated clothing prior to reuse.
- 8.3.3 Respiratory Protection:** None generally required. If conditions exist where mist may be generated, a NIOSH/MSHA approved mist respirator should be worn.
- 8.3.4 Hygiene Considerations:** There are no known hazards associated with this product when used as recommended, however common good industrial hygiene practices should be followed, such as washing thoroughly after handling and before eating or drinking.

Section 9: PHYSICAL and CHEMICAL PROPERTIES

- 9.1 Appearance:** Clear, blue or colorless liquid.
- 9.2 Odor:** Slight amine odor.
- 9.3 Odor Threshold:** Not determined
- 9.4 pH:** 9 - 11 (*Typical*)
- 9.5 Melting point/Freezing Point:** < 0°F (< -17.8°C)
- 9.6 Boiling Point:** 219° F (104°C)

9.7 Flash Point:	Not applicable
9.8 Evaporation Rate:	Not determined
9.9 Flammability:	Not applicable
9.10 Upper/Lower Flammability Limits:	Not applicable
9.11 Vapor Pressure:	Not determined
9.12 Vapor Density:	Not determined
9.13 Relative Density:	1.29 (10.7 lbs/gal) (<i>Typical</i>)
9.14 Solubility:	Complete
9.15 Partition Coefficient:	No data available.
9.16 Auto-ignition Temperature:	Not applicable
9.17 Decomposition Temperature:	Not determined
9.18 Viscosity:	67.5 Cp @ 25°C

Section 10: STABILITY and REACTIVITY

10.1 Reactivity:	See Sections 10.4 and 10.5 below.
10.2 Chemical Stability:	This is a stable material under normal (ambient) temperature and pressure.
10.3 Possibility of Hazardous Reactions:	Strong oxidizers such as nitrates or chlorates can cause explosive mixtures if heated to dryness.
10.4 Conditions to Avoid:	Heat or fire conditions, strong oxidizers and acids or acidic materials.
10.5 Incompatible:	Strong oxidizers (See section 10.3) and acids or acidic materials. This product is not compatible with Copper, Zinc or their alloys including brass, bronze or galvanized materials. These materials should not be utilized in handling systems or storage containers for this product.
10.6 Hazardous Decomposition Products:	Heating this product will evolve Ammonia. Heating to dryness will cause the production of Ammonia, and Oxides of Carbon. Ammonia may form flammable mixtures with air (16 to 25% NH ₃).

Section 11: TOXICOLOGICAL INFORMATION

11.1 Oral:	Oral-Rat LD ₅₀ : > 2,500 mg/kg Oral Rat LD ₅₀ : 8,471 mg/kg (urea) Acute toxicity Rat, LD ₅₀ : 14,300 mg/kg (urea)
11.2 Dermal:	N-SURE® is not a skin sensitizer in guinea pigs by closed patch technique.
11.3 Inhalation:	No data available.
11.4 Eyes:	No data available.

11.5 Chronic/Carcinogenicity:	Not listed NTP, IARC or OSHA.
11.6 Teratology:	No data available.
11.7 Reproduction:	Reproductive testing with urea (ingredient) indicated no toxic effects.
11.8 Mutagenicity:	N-SURE® is not mutagenic in an Ames Assay using Salmonella typhimurium.

Section 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity:	Acute toxicity, fish, LC ₅₀ : >9,100 mg/l, 96 hr. exp. (Urea) Acute toxicity, Daphnia, EC ₅₀ : >10,000 mg/l, 24 hr. exp. (Urea)
12.2 Persistence & Degradability:	No data available.
12.3 Bioaccumulative Potential:	No data available.
12.4 Mobility in Soil:	No data available.
12.5 Other Adverse Effects:	None

Section 13: DISPOSAL CONSIDERATIONS

Consult federal, state and local regulations for disposal requirements.

Section 14: TRANSPORT INFORMATION

14.1 Basic Shipping Description:

14.1.1 Proper Shipping Name:	N-Sure, 28-0-0 (<i>Not regulated by DOT</i>)
14.1.2 Hazard Classes:	Not applicable
14.1.3 Identification Number:	Not applicable
14.1.4 Packing Group:	Not applicable
14.1.5 Hazardous Substance:	No
14.1.6 Marine Pollutant:	No

14.2 Additional Information:

14.2.1 Other DOT Requirements:

14.2.1.1 Reportable Quantity:	No
14.2.1.2 Placard(s):	Not applicable
14.2.1.3 Label(s):	Not applicable

14.2.2 USCG Classification: Not determined

14.2.3 International Transportation:

14.2.3.1 IMO:	Not regulated
14.2.3.2 IATA:	Not regulated
14.2.3.3 TDG (Canada):	Not regulated
14.2.3.4 ADR (Europe):	Not regulated
14.2.3.5 ADG (Australia):	Not regulated
14.2.4 Emergency Response Guide:	Not applicable
14.2.5 ERAP - Canada:	Not applicable
14.2.6 Special Precautions:	Not applicable

Section 15: REGULATORY INFORMATION

15.1 U.S. Federal Regulations:

15.1.1 OSHA:	This product is not considered hazardous under the criteria of the Federal OSHA Hazard communication Standard (29 CFR 1910.1200).		
15.1.2 TSCA:	Product is contained in USEPA Toxic Substance Control Act Inventory.		
15.1.3 CERCLA:	Reportable Quantity – No		
15.1.4 SARA Title III:			
15.1.4.1 Extremely Hazardous Substance (EHS):	No		
15.1.4.2 Section 312 (Tier II) Ratings:	Immediate (acute)	No	
	Fire	No	
	Sudden Release	No	
	Reactivity	No	
	Delayed (chronic)	No	
15.1.4.3 Section 313 (FORM R):	Not applicable		
15.1.5 RCRA:	Not applicable		
15.1.6 CAA: (Hazardous Air Pollutant (HAP))	Not applicable		

15.2 International Regulations:**15.2.1 Canada:**

15.2.1.1 WHMIS:	Not determined
15.2.1.2 DSL/NDSL:	Not listed

15.3 State Regulations:

15.3.1 CA Proposition 65:	Not applicable
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Section 16: OTHER INFORMATION

REVISIONS: This SDS was reformatted to comply with the new Hazard Communication Standard dated March 26, 2012, by the Regulatory Affairs Department of Tessengerlo Kerley, Inc. 7/15/2013.
Revised multiple sections to correct wording and formatting. 3/10/2015.
Revised sections 5, 6, 8, 11, 12, 14 and 15. 6/10/2016.
Revised Section 1. 1/3/2020.
Removed outdated logos. 9/16/2024.

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