



SAFETY DATA SHEET

SDS Number: 204 · Revision: June 10, 2016

SECTION 1: IDENTIFICATION

1.1 Product Name:	N-Sure	
1.2 Other Identification:	Chemical Family:	Aqueous organic salt solution
	Formula:	Not applicable — blend
1.3 Recommended Use of Chemical:	Agricultural Industry – Fertilizer	
1.4 Manufacturer:	Triangle Chemical Company 117 Preston Court Macon, GA 31210	
Information:	(478) 473-1548	
1.5 Emergency Contact:	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

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 U.S." 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 absorbent.

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

6.4 Methods 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)
9.14 Solubility:	Complete
9.15 Partition Coefficient:	Data not available
9.16 Auto-ignition Temperature:	Not applicable
9.17 Decomposition Temperature:	Not determined

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% NH₃).

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 in NTP, IARC or by 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, LC50: >9,100 mg/l, 96 hr. exp. (Urea) Acute toxicity, Daphnia, EC50: >10,000 mg/l, 24 hr. exp. (Urea)
12.2 Persistence & Degradability:	No data is 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 (Not regulated by DOT)
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
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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
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14.2.5 ERAP - Canada:	Not applicable
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14.2.6 Special Precautions:	Not applicable
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SECTION 15: REGULATORY INFORMATION

15.1 US 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
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15.1.5 RCRA:	Not applicable
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15.1.6 CAA: Hazardous Air Pollutants (HAP)

Not applicable

15.2 International Regulations:

15.2.1 Canada:

WHMIS:

Not determined

DSL/NDSL:

Not listed

15.3 State Regulations:

15.3.1 CA Proposition 65:

Not applicable

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 Triangle Chemical Company 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.

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