



## Safety Data Sheet

### Trisert®-N+, 30-0-0

SDS Number: 205                      Revision: December 11, 2014

#### Section 1: IDENTIFICATION

**1.1 Product Name:** Trisert®-N+, 30-0-0

**1.2 Other Identification:**

Chemical Family:	Aqueous organic salt solution
Formula:	Not applicable – Proprietary Blend

**1.3 Recommended Use of Chemical:** Agricultural liquid fertilizer

**1.4 Manufacturer:**

Information:	Tessenderlo Kerley, Inc. 2255 N. 44 <sup>th</sup> Street, Suite 300 Phoenix, Arizona 85008-3279 (602) 889-8300
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**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

<b>Section 3: COMPOSITION/INFORMATION on INGREDIENTS</b>
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### 3.1 Chemical Ingredients: (See Section 8 for exposure guidelines)

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

<b>Section 4: FIRST AID MEASURES</b>
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#### 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.

<b>Section 5: FIRE FIGHTING MEASURES</b>
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### 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 gasses.

**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.

<b>Section 6: ACCIDENTAL RELEASE MEASURES</b>
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**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.

#### 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), sewers or storm drains.

#### 6.4 Method for Cleanup:

**Small Release:** Shovel up absorbed material and place in drums for disposal as a chemical waste or use water spray to dilute to a weak fertilizer solution, taking care not to let water runoff out of containment area.

**Large Release:** Recover as much of the spilled product as possible and use as originally intended. If material is unusable then 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 area. 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.

**Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**
**8.1 Exposure Guidelines:**

Chemical	OSHA PELs		ACGIH TLVs	
	TWA	STEL	TLV	STEL
Urea	----	----	10 mg/m <sup>3</sup>	----

- 8.2 Engineering Controls:** Use adequate exhaust ventilation to prevent inhalation of product vapors. Keep eye wash/safety shower in the area 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:** Common good industrial hygiene practices should be followed, such as washing thoroughly after handling and before eating or drinking.

<b>Section 9:      PHYSICAL and CHEMICAL PROPERTIES</b>
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<b>9.1 Appearance:</b>	Clear, light blue liquid.
<b>9.2 Odor:</b>	Possible slight amine-like odor
<b>9.3 Odor Threshold:</b>	Not determined
<b>9.4 pH:</b>	9.0 to 10.5 (Typical)
<b>9.5 Melting Point/Freezing Point:</b>	< 0°F (-17.8°C)
<b>9.6 Boiling Point:</b>	214°F (101.1°C)
<b>9.7 Flash Point:</b>	Not applicable
<b>9.8 Evaporation Rate:</b>	Not determined
<b>9.9 Flammability:</b>	Not applicable
<b>9.10 Upper/Lower Flammability Limits:</b>	Not applicable
<b>9.11 Vapor Pressure:</b>	Not determined
<b>9.12 Vapor Density:</b>	Not determined
<b>9.13 Relative Density:</b>	1.26 (10.5 lbs/gal)
<b>9.14 Solubility:</b>	Complete
<b>9.15 Partition Coefficient:</b>	Not applicable
<b>9.16 Auto-ignition Temperature:</b>	Not applicable
<b>9.17 Decomposition Temperature:</b>	Not determined
<b>9.18 Viscosity:</b>	Not determined

<b>Section 10:      STABILITY and REACTIVITY</b>
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<b>10.1 Reactivity:</b>	See Sections 10.4 and 10.5 below.
<b>10.2 Chemical Stability:</b>	This is a stable material.
<b>10.3 Possibility of Hazardous Reactions:</b>	Hazardous polymerization will not occur.
<b>10.4 Conditions to Avoid:</b>	Heat, strong oxidizers and acids or acidic materials.
<b>10.5 Incompatible:</b>	Strong oxidizers such as nitrates, nitrites or chlorates can cause explosive mixtures if heated to dryness. Avoid contact with acids or acidic materials. The product Trisert®-N+ is not compatible with copper, zinc, or their alloys (i. e., bronze, brass, galvanized metals, etc.). These materials of construction should not be used in piping, handling systems or storage containers for this product.
<b>10.6 Hazardous Decomposition Products:</b>	Heating of this product will evolve ammonia. Heating to dryness will cause the evolution of ammonia and oxides of carbon. Ammonia (16-25%) may form flammable mixtures with air.

<b>Section 11: TOXICOLOGICAL INFORMATION</b>
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<b>11.1 Oral:</b>	Oral Rat LD <sub>50</sub> : >2,500 mg/kg (N-Sure®)
<b>11.2 Dermal:</b>	Trisert®-N+ is not a skin sensitizer in guinea pigs by closed patch technique. (N-Sure®)
<b>11.3 Inhalation:</b>	Data not available
<b>11.4 Eyes:</b>	Data not available
<b>11.5 Chronic/Carcinogenicity:</b>	Not listed in NTP, IARC or by OSHA
<b>11.6 Teratology:</b>	Data not available
<b>11.7 Reproduction:</b>	Data not available
<b>11.8 Mutagenicity:</b>	Trisert®-N+ is not mutagenic in an Ames Assay using Salmonella typhimurium. (N-Sure®)

<b>Section 12: ECOLOGICAL INFORMATION</b>
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<b>12.1 Ecotoxicity:</b>	Acute toxicity, fish, LC <sub>50</sub> : >9,100 mg/l, 96 hr. exp. (urea) Acute toxicity, Daphnia, EC <sub>50</sub> : >10,000 mg/l, 24 hr. exp. (urea) Toxicity, aquatic plants, TT: >20,000 mg/l, 192 hr. exp. (urea)
<b>12.2 Persistence &amp; Degradability:</b>	Data not available
<b>12.3 Bioaccumulative Potential:</b>	This product is not bioaccumulative.
<b>12.4 Mobility in Soil:</b>	Data not available
<b>12.5 Other Adverse Effects:</b>	None

<b>Section 13: DISPOSAL CONSIDERATIONS</b>
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Consult federal, state and local regulations for disposal regulations.

<b>Section 14: TRANSPORT INFORMATION</b>
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**14.1 Basic Shipping Description:**

<b>14.1.1 Proper Shipping Name:</b>	Trisert-N+, 30-0-0 (not regulated by DOT)
<b>14.1.2 Hazard Classes:</b>	Not applicable
<b>14.1.3 Identification Number:</b>	Not applicable
<b>14.1.4 Packing Group:</b>	Not applicable
<b>14.1.5 Hazardous Substance:</b>	No
<b>14.1.6 Marine Pollutant:</b>	No

**14.2 Additional Information:****14.2.1 Other DOT Requirements:**

<b>14.2.1.1 Reportable Quantity:</b>	No
<b>14.2.1.2 Placard(s):</b>	Not applicable
<b>14.2.1.3 Label(s):</b>	Not applicable

**14.2.2 USCG Classification:** Not determined

**14.2.3 International Transportation:**

<b>14.2.3.1 IMO:</b>	Non-hazardous under IMO regulation
<b>14.2.3.2 IATA:</b>	Non-hazardous under IATA regulations
<b>14.2.3.3 TDG (Canada):</b>	Not regulated – See US DOT Section 14.1.1
<b>14.2.3.4 ADR (Europe):</b>	Not regulated
<b>14.2.3.5 ADG (Australia):</b>	Not regulated

**14.2.4 Emergency Response Guide:** Not applicable

**14.2.5 ERAP - Canada:** Not applicable

**14.2.6 Special Precautions:** Not applicable

<b>Section 15: REGULATORY INFORMATION</b>
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**15.1 U.S. Federal Regulations:**

<b>15.1.1 OSHA:</b>	This product meets the criteria of the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200).
<b>15.1.2 TSCA:</b>	Product is contained in USEPA Toxic Substance Control Act Inventory.
<b>15.1.3 CERCLA:</b>	Reportable Quantity – Not applicable

**15.1.4 SARA Title III:**

<b>15.1.4.1 Extremely Hazardous Substance (EHS):</b>	No
<b>15.1.4.2 Section 312 (Tier II) Ratings:</b>	Immediate (acute) Yes
	Fire No
	Sudden Release No
	Reactivity No
	Delayed (chronic) No
<b>15.1.4.3 Section 313 (FORM R):</b>	Not applicable
<b>15.1.5 RCRA:</b>	Not applicable
<b>15.1.6 CAA (Hazardous Air Pollutant/(HAP):</b>	Not applicable

**15.2 International Regulations:****15.2.1 Canada:**

<b>15.2.1.1 WHMIS:</b>	Not determined
<b>15.2.1.2 DSL/NDL:</b>	Not listed

**15.3 State Regulations:**

<b>15.3.1 CA Proposition 65:</b>	Not applicable
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**Section 16: OTHER INFORMATION**

**REVISIONS:** The entire SDS was reformatted to comply with the new Hazard Communication Standard dated March 26, 2012, by Regulatory Affairs of Tessenderlo Kerley, Inc. 12/11/2014

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