MATERIAL SAFETY DATA SHEET **Green-T® N-28 SRN, 28-0-0**

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Name:	**Green-T® N-28 SRN, 28-0-0**		
Chemical Family:	**Aqueous, organic salt solution**		
Synonyms:	**SRN fertilizer**		
1.2 Manufactured For:	Plant Food Company, Inc. 38 Hightstown-Cranbury Station Road Cranbury, NJ 08512	***Emergency Telephone Number*** ***Telephone Number for Information*** **Date Prepared** 6/1/2005	609-448-0935 609-448-0935

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components (Specific Chemical)

Identity: Common Name	(CAS #)	OSHA PEL	ACGIH TLV	Other Limits Recommended
Urea	57-13-6	N/A	N/A	N/A
Triazone	7098-14-8	N/A	N/A	N/A
Water	7732-18-5	N/A	N/A	N/A

SECTION 3: HAZARDS IDENTIFICATION

Clear, blue-green liquid with a slight amine odor May cause eye and skin irritation. May be harmful if ingested. Carbon monoxide fumes may form from burning. Not D.O.T. regulated

NEPA: Health:1 Reactivity:0 Flammability:0 Environment:0 (0=Insignificant=1 Slight 2=Moderate 3=High 4=Extreme)

EMERGENCY OVERVIEW

Contact may cause eye irritation. Repeated/prolonged skin contact may cause irritation. Ingestion may irritate gastrointestinal tract. Heating may cause ammonia gas to evolve.

3.1 POTENTIAL HEALTH EFFECTS

EYE: Contact with the eyes by product mist or solution may cause irritation or a burning sensation.

SKIN CONTACT: Prolonged or repeated contact with product mist or solution may cause skin irritation.

SKIN ABSORPTION: Absorption is unlikely to occur.

INGESTION: Ingestion of product solution may cause irritation of the gastrointestinal tract to include nausea, vomiting and diarrhea. Potassium thiosulfate is considered to have a low toxicity to humans.

INHALATION: Inhalation of product miss may cause irritation of the nose, throat and respiratory tract.

CHRONIC EFFECTS/CARCINOGENICITY: Not listed as a carcinogen by NTP, IARC or OSHA.

SECTION 4: FIRST AID MEASURES

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

4.2 SKIN: Immediately flush with large quantities of water. Remove contaminated clothing under a safety shower. Obtain medical attention if irritation occurs.

4.3 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.

4.4 INHALATION: Remove victim from contaminated atmosphere. If breathing is labored, administer oxygen. If breathing has ceased, clear airway and start mouth to mouth resuscitation. If heart has stopped beating, external heart massage should be applied

SECTION 5: FIREFIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES
FLASHPOINT: Not flammable METHOD USED: NA
5.2 FLAMMABLE LIMITS: LFL: NA UFL: NA
5.3 EXTINGUISHING MEDIA: As appropriate for combustibles involved in fire.

5.4 FIRE & EXPLOSIVE HAZARDS: Heating to dryness may cause the release of ammonia and carbon dioxide. Ammonia, NH_3, (16-25%) may form flammable mixtures with air. Keep containers/storage vessels in fire area cooled with water spray. Heating may cause the release of ammonia vapors.
5.5 FIRE FIGHTING EQUIPMENT: As in any fire, wear self-contained breathing apparatus, pressure demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Avoid smoke inhalation. Contain any liquid runoff.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 SMALL RELEASES: Confine and absorb small releases on sand earth or other inert absorbent. Use water spray to dilute to weaken fertilizer solution.

6.2 LARGE RELEASES: Confine area to qualified personnel. Shut off release if safe to do so. Dike spill area to prevent runoff into sewers, drains or surface waterways (potential aquatic toxicity). Recover as much of the solution as possible. 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 tote and smaller containers out of direct sunlight at moderate temperatures. (See Section 10.4 for materials of construction)
7.3 Transfer Equipment: Transfer product using chemical-resistant plastic or stainless steel tanks, pumps, valves, etc.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

8.1 RESPIRATORY PROTECTION: None generally required. If conditions exist where mist may be generated, a NIOSH/MSHA approved mist respirator should be worn.

8.2 SKIN PROTECTION: Neoprene rubber groves and apron should be worn to prevent repeated or prolonged contact with the liquid. Wash contaminated clothing prior to reuse.

8.3 EYE PROTECTION: Chemical goggles and a full face shield. DO NOT WEAR CONTACT LENSES.

8.4 EXPOSURE GUIDELINES:	**TWA**	**STEL**
OSHA	N/A	N/A
ACGIH	N/A	N/A

8.5 ENGINEERING CONTROLS: Use adequate exhaust ventilation to prevent inhalation of product vapors.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 APPEARANCE	**Clear, blue-green liquid**
9.2 ODOR:	**May have a slight amine odor**
9.3 VAPOR PRESSURE:	**Not determined**
9.4 VAPOR DENSITY:	**Not determined**
9.5 SOLUBILITY IN WATER:	**Complete**
9.6 SPECIFIC GRAVITY (H_20 = 1):	**1.29 (10.7 lbs/gal)**
9.7 MELTING POINT:	**Salt out temperature less than 0ºF (-18ºC)**
9.8 pH:	**9.0 - 10.5**
9.9 VOLATILE:	**Not available**
9.10 COLOR:	**Clear, blue-green**
9.11 WEIGHT PER GALLON:	**10.7 lbs/Gal**
9.12 STORAGE LIFE AT 70° F:	**> 1 Year**
9.13 PH-21C:	
9.15 VISCOSITY:	
9.16 FREEZING POINT:	**Not determined**
9.17 EVAPORATION RATE:	
9.18 BOILING POINT:	**219ºF (104 ºC)**

SECTION 10: STABILITY AND REACTIVITY

10.1 STABILITY: This is a stable material

10.2 HAZARDOUS POLYMERIZATION: Will not occur.

10.3 HAZARDOUS DECOMPOSITION PRODUCTS: Heating this product will evolve ammonia. Heating to dryness will cause the production of ammonia, and oxides of carbon. Ammonia (16-25%) may form flammable mixtures with air.

10.4 INCOMPATIBILITY: Strong oxidizers such as nitrates, nitrites or chlorates can cause explosive mixtures if heated to dryness. Avoid contact with Acids or acid materials. This product 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. (See Section 7.2, Storge)

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 ORAL: Oral-Rat LD_{50}: > 2,500 mg/Kg

11.2 DERMAL: Is not a skin sensitizer in guinea pigs by closed patch technique

11.3 INHALATION: Data not available

11.4 CHORNIC/CARCINOGENICTY:No evidence available

11.5 TERATOLOGY: Data not available

11.6 REPRODUCTION: Data not available

11.7 MUTAGENICITY: Not mutagenic in an Ames Assay using Salmonella typhimurium.

11.8 EYES: May cause temporary eye irritation.

SECTION 12: ECOLOGICAL INFORMATION

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

N-28 is not considered a hazardous waste under Federal Hazardous Waste Regulations, 40 CFR 261. Consult state and local regulations for different or more restrictive disposal regulations.

SECTION 14: TRANSPORTATION INFORMATION

14.1 DOT Shipping Name: Urea, Triazone fertilizer solution

14.9 RR STCC Number: 28-713-15

SECTION 15: REGULATORY INFORMATION

15.1 OSHA: This product is listed as a hazardous material under criteria of the Federal OSHA Hazard Communication Standard, 29 CFR 1910.1200.

15.2 SARA TITLE III: a. EHS (Extremely Hazardous Substance) List: NO

b. Section 311/312, (Tier 1,II) Categories: Immediate (acute): Yes, Fire: NO; Sudden release: NO; Reactivity: NO; Delayed (chronic): NO

15.3 CERCLA/SUPERFUND: RQ(Reportable Quantity) : NO

15.4 TSCA (Toxic Substance Control Act) Inventory List: YES

15.5 RECR (Resource Conservation and Recovery Act) Status: NA

15.6 WHMIS (Canada) Hazard Classification: NA

15.7 DOT Hazardous Material: See Section 14): NO

15.8 CAA Hazardous Air Pollutant (HAP): NO

SECTION 16: OTHER INFORMATION

Revisions: The entire MSDS was reformatted to comply to ANSI Standard Z400.1-1993, by Technical Services-Tessenderlo Kerley, Inc.

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