

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Custom Liquid Nitrogen
Product Number: FFN-01220
Other Information: 28-0-0
Product Use:
Supplier Information: Planet Turf
10315 E. Holman Road
Spokane, WA 99206
1-509-921-5421

Emergency Number:

2. HAZARDS IDENTIFICATION**CLASSIFICATION****HEALTH HAZARDS:**

Serious eye damage/eye irritation

Category 2

SIGNAL WORD:

WARNING

HAZARD STATEMENTS:

Causes serious eye irritation.

**PRECAUTIONARY STATEMENTS**

Wash thoroughly after handling. Wear eye protection/face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENTS	CAS NO.	% BY WEIGHT
Total Nitrogen	Mixture	28.00
Fertilizer salts and inert ingredients	N/A	72.0

If Chemical Name/CAS No is "Proprietary" and/or Weight % is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES**First Aid Measures:**

General Advice: Provide this SDS to medical personnel for treatment.

If in Eyes: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If Swallowed: Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. Call a poison control center or doctor immediately for treatment advice.

If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Most important symptoms and effects: Irritating to eyes..

Recommendations for immediate medical care and special treatment, if needed:

Note to Physician: Treat symptomatically

5. FIRE FIGHTING MEASURES

Extinguishing Media: Use extinguishing media suitable for surrounding materials. Dry chemical, carbon dioxide, foam, water spray or fog.

Specific Hazards Arising from the substance/mixture during a fire: May produce gases such as oxides of carbon, hydrogen chloride, hydrogen fluoride, oxides of nitrogen, ammonia, oxides of phosphorus, oxides of sulfur, and hydrogen sulfide.

Protective equipment and precautions for firefighters: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full fire-fighting turn out gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Environmental Precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain.

Methods for Containment: Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.

Methods for Clean-Up: If wet, pump any free liquid into an appropriate closed container. See Section 13: DISPOSAL CONSIDERATIONS for more information.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling: Irritating to the eyes. Avoid contact with eyes, skin and clothing. Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing/Personal Protective Equipment (PPE) immediately if product gets inside. Then wash thoroughly and put on clean clothing. Remove Personal Protective Equipment (PPE) immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Conditions for safe storage, including any incompatibilities

Storage: Store locked up in original container in a cool, dry secured warehouse or storage building. Containers should be opened in well-ventilated areas. Keep container tightly sealed when not in use. Do not contaminate water, food or feed by storage or disposal.

Incompatible Materials: No data available.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:

No exposure limits noted for ingredient(s). The following information is given as general guidance.

Engineering Controls:

Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

Personal Protective Equipment:

Eye/Face Protection: To avoid contact with eyes, wear chemical goggles or shielded safety glasses. An emergency eyewash or water supply should be readily accessible to the work area.

Skin and Body Protection: To avoid contact with skin, wear long pants, long-sleeved shirt, shoes plus socks, and chemical-resistant impervious gloves. An emergency shower or water supply should be readily accessible to the work area.

Respiratory Protection: Not normally required. If vapors or mists exceed acceptable levels, which cause exposures in excess of the guidelines listed in Section 8, respiratory protection may be needed (e.g., air-purifying respirator with a high efficiency particulate filter) and must comply with the U.S. Federal OSHA Standard (29 CFR 1910.134) and applicable U.S. State regulations.

General Hygiene Considerations: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) Do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored. 2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear liquid
Odor:	Fertilizer-like odor
Odor threshold:	No data available
pH:	7.0 – 8.0
Melting point/freezing point:	No data available
Initial boiling point and boiling range	No data available
Flash point:	No data available
Evaporation rate:	No data available
Flammability (solid, gas):	No data available
Upper/lower flammability or explosive limits:	No data available
Vapor pressure:	No data available
Vapor density:	No data available
Relative density:	1.33 g/mL (11.04 lbs/gallon)
Solubility(ies):	Soluble
Partition coefficient: n-octanol/water:	No data available
Autoignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	No data available

Note: Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

10. STABILITY AND REACTIVITY

Reactivity: No data available. Not expected to be reactive.

Chemical Stability: This material is stable under normal handling and storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: No data available.

Incompatible Materials: No data available.

Hazardous Decomposition Products: May produce gases such as oxides of carbon, hydrogen chloride, hydrogen fluoride, oxides of nitrogen, ammonia, oxides of phosphorus, oxides of sulfur, and hydrogen sulfide.

11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Likely Routes of Exposure: Eye and skin contact, inhalation, ingestion.

Eye Contact: Irritating

Skin Contact: Not expected to cause skin irritation.

Ingestion: Not expected to cause gastric irritation

Inhalation: Not expected to be irritating.

Medical Conditions Aggravated by Exposure: Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

Toxicological Data:

Data from laboratory studies on a component of this product, ammonium nitrate, are summarized below:

Oral, Rat LD₅₀: 2950 mg/kg

Dermal, Rat or Rabbit LD₅₀: >5,000 mg/kg

Inhalation, Rat 4-hr LC₅₀: >No data available

Eye Irritation, Rabbit: Irritating

Skin Irritation, Rabbit: Not an irritant

Skin Sensitization, Guinea Pig: Not considered a sensitizer

Very low toxicity to humans and animals.

Subchronic (Target Organ) Effects: No data available
Carcinogenicity / Chronic Health Effects: No data available
Reproductive Toxicity: No data available
Developmental Toxicity: No data available
Germ Cell Mutagenicity: No data available

Description of Symptoms: Please see Section 4 of this SDS for symptoms.

Assessment Carcinogenicity: None listed with ACGIH, IARC, NTP or OSHA.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Based on a component of this formulation, practically non-toxic to aquatic organisms. Very low acute toxicity to fish.

Component Information:

Data on Ammonium nitrate::

Freshwater Fish 48 hour LC ₅₀ :	447 mg/l
Daphnia 48-hour EC ₅₀ :	490 mg/l

Persistence and Degradability: No data available

Bioaccumulation: No data available

Mobility in Soil: No data available

Other Adverse Effects: No data available

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Container Disposal Method:

Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORTATION INFORMATION

Follow the precautions indicated in Section 7: HANDLING AND STORAGE of this SDS.

DOT:

Non Regulated

IMDG:

Non Regulated

IATA:

Non Regulated

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA Inventory: Listed

SARA Hazard Notification/Reporting:

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370.66):

Immediate

Section 313 Toxic Chemical(s):

This material does not contain any chemical components with known CAS numbers that exceed the threshold (de minimis) reporting levels established by SARA Title III, Section 313.

SAFETY DATA SHEET

Custom Liquid Nitrogen

Reportable Quantity (RQ) under U.S. CERCLA:

None

RCRA Waste Code:

Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

State Information:

Other state regulations may apply. Check individual state requirements.

California Proposition 65: Not Listed.

16. OTHER INFORMATION

National Fire Protection Association (NFPA) Hazard Rating:

Health Hazards: 1 **Flammability:** 0 **Instability:** 0 **Special Hazards:** NDA

HMIS

Health Hazards: 1 **Flammability:** 0 **Physical Hazards:** 0 **Personal Protection:** B
Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Key to abbreviations:

ACGIH = America Conference of Governmental Industrial Hygiene

IARC = International Agency for Research on Cancer

N/A = Not applicable

NDA = No data available

NE = Not Established

NTP = National Toxicology Program

OSHA = Occupational Safety and Health Administration

STEL = Short Term Exposure Limits

TWA = Time Weighted Average

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Date of Issue: February 18, 2016

Supersedes: April 22, 2014