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SECTION 1: IDENTIFICATION

1.1. Product Identifier:

Product Name: HGX Pro PreBiotic 30-0-0

Trade Name and Synonymous: Fertilizer Supplement **Product Type:** a slow release, liquid nitrogen fertilizer

Common Name: 30-0-0

1.2. Relevant uses of the substance and uses advised against

Identified uses: Fertilizer and in blending applications

Uses advised against: No available data

1.3. Company Name:

Holganix LLC 3033 Market Street Aston, PA 19014-3436 866.563.2784 www.holganix.com

1.4. In an emergency contact:

Poison Emergency: American Association of Poison Control Centers at 1.800.222.1222.

Environmental Spill: National Response Center at 1.800.424.8802.

SECTION 2: HAZARD(S) IDENTIFICATION

2.1. Signal Word (GHS-US): Not Available

2.2. Hazard Statements (GHS-US): H320 Causes mild eye irritation.

May cause skin irritation

2.3. Precautionary Statements (GHS-US):P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 Wash hands thoroughly after handling with plenty of

soap and water.

P271 Use only outdoors or in a well-ventilated area.

P308-1 Exposed or concerned, seek medical advice or

attention.

P312 Call a poison center (American Association of Poison

Control Centers at 800.222.1222) or physician if you

feel unwell.

P337 If eye irritation persists, seek medical advice or

attention.

P351 If skin irritation occurs, rinse cautiously with water for

several minutes.

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P501 Dispose of container in accordance with federal, state

and local regulations.

2.4. Physical Hazard(s): Not classified.

2.5. Health Hazard(s): Not classified.

2.6. OSHA Defined Hazards: Not classified.

2.7. Product Label Warnings: Hazard Symbol - None required.

2.8. Hazard(s) Not Otherwise

Classified (HNOC): Classified as nonhazardous in accordance with current laws.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Substance – HGX Pro PreBiotic 30-0-0 is an aqueous solution of urea (CAS # 57-13-6), Triazone (CAS # 7098-14-8), methylene urea (CAS # 598-50-5) and water (7732-18-5). The guaranteed analysis is total nitrogen (N) 30%... (12% urea nitrogen and 18% other water-soluble nitrogen), available phosphate (P_2O_5) 0% and soluble potash (K_2O) 0%.

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures:

First Aid Measures After Inhalation: Relocate to fresh air. If nasal cavity is irritated, flush with water. Seek medical attention if symptoms develop.

First Aid Measures After Skin Contact: Wash skin thoroughly with mild soap and water. Seek medical attention if irritation develops or persists. Wash contaminated clothing before reuse.

First Aid Measures After Eye Contact: Immediately flush with water for a period of 15 minutes while holding eyelids open. Seek medical attention if irritation develops or persists.

First Aid Measures After Ingestion: Rinse mouth and drink 8 to 16 fluid ounces of water. Do not induce vomiting. Get immediate medical attention if irritation occurs and persists. Call the Poison Control Center (1.800.222.1222) if ingested in large amounts. If vomiting occurs, lower the head to keep vomit from being swallowed.

4.2. Most Important Symptoms and Effects, Both Acute and Delayed:

Symptoms/Injuries After Inhalation: Overexposure may be irritating to the respiratory system.

Symptoms/Injuries After Skin Contact: May cause skin irritation.

Symptoms/Injuries After Eye Contact: May cause mild eye irritation.

Symptoms/Injuries After Ingestion: If a large quantity has been ingested, a person may experience abdominal pain, diarrhea, nausea and/or vomiting.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed:

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If medical advice or care is needed, have a product container of copy of label at hand. Call the **Poison Control Center (800.222.1222)** if ingested in large amounts. If vomiting occurs, lower the head to keep vomit form being swallowed.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing Media:

Suitable Extinguishing Media: Extinguish with water, fog, foam, and/or carbon dioxide (CO₂). Product is not considered flammable, but will burn at high temperatures. Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Avoid direct stream of water to extinguish.

5.2. Special Hazards Arising From the Substance or Mixture:

Fire Hazard: Thermal decomposition can lead to a release of irritating and toxic gases and vapors. In event of a fire, do not breathe fumes. Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full-face piece operating in positive pressure mode.

Explosive Hazard: Product itself is not explosive.

Reactivity: This product is non-reactive.

5.3. General Fire Hazards:

This product is not flammable.

SECTION 6: ADDIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures and General Measures:

Handle in accordance with good industrial hygiene and safety practices.

For Non-emergency Personnel:

Protective Equipment: Wear suitable protective clothing, gloves, and eye/face protection as directed in Section 8 of this Safety Data Sheet (SDS).

Emergency Procedures: Contain the spillage preventing and leakage to sewers, drainage systems and/or waterways.

For Emergency Responders:

Protective Equipment: Wear suitable protective clothing, gloves, and eye/face protection as directed in Section 8 of this SDS.

Emergency Procedures: If possible, stop the flow of product. Contain the spillage preventing and leakage to sewers, drainage systems and/or waterways.

6.2. Environmental Precautions: Prevent further release of material if safe to do so. Prevent spillage into waterways. If spillage reaches waterways, notify municipal and state environmental agencies.

6.3. Method of Containment: Stop the flow of material if this is possible without risk. Dike the spilled material where it is. Prevent further leakage or spillage if safe to do so. Do not allow spillage to reach drains, sewers or waterways. If this is not possible, contact local authorities.

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6.4. Method of Cleaning Up:

For Containment: Contain and collect fluids with absorbent materials such as clay granules or vermiculite. Do not allow product to spill over into drains or water ways or dispose of product where ground or surface waters may be affected.

Methods for Cleaning Up: Recover the product by vacuuming, shoveling and/or sweeping. Avoid generation of dust during clean-up of spills

6.5. Disposal of Contaminated Product: Contaminated material should be disposed of as recommended in Section 13 of this SDS.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling:

Additional Hazards When Processed: This product is a nitrogen containing fertilizer. Runoff to water may promote undesired plant growth in waterways.

Precautions for Safe Handling: Handle in accordance with good industrial hygiene and safety procedures. Wear recommended personal protective equipment as described in Section 8 of this SDS.

7.2. Conditions for Safe Storage, Including Any Incompatibilities:

Storage Conditions: Store in a cool, dry place. Prevent from freezing. Keep container closed when not in use.

Prohibitions on Mixed Storage: See Section 10 of this SDS.

Special Rules on Packaging: None specified.

7.3. Specific End Use: This product is intended for use as a starter fertilizer.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters:

Not known.

8.2. Occupational Exposure limits:

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

COMPONENT	TYPE	VALUE
Ammonia (CAS 7664-41-7)	PEL	35 mg/m³ 50 ppm
US. ACGIH Threshold Limit Values COMPONENT	TYPE	VALUE
Ammonia (CAS 7664-41-7)	STEL	35 ppm 25 ppm

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US. NIOSH: Pocket Guide to Chemical Hazards

COMPONENT	TYPE	VALUE
Ammonia (CAS 7664-41-7)	STEL	27 mg/m ³
		35 ppm
		18 mg/m³
		25 ppm

US. Workplace Environmental Exposure Level (WEEL) Guides

COMPONENT	TYPE	VALUE	FORM
Urea (CAS 57-13-6)	TWA	10 mg/m ³	Total Particulate

8.3. Exposure Controls:

Appropriate Engineering Controls: Ensure all federal, state and local regulations are observed.

8.4. Personal Protective Equipment: Wear cloves and appropriate protective clothing to avoid contact with product or spray solution on skin. If ventilation is insufficient, wear respiratory protection. To protect eyes from particulates and/or spray mist, wear safety glasses or goggles.

Hand Protection: Protective gloves.

Eye Protection: Wear safety glasses with side-shields or goggles and a face shield.

Skin and Body Protection: Wear rubber or neoprene gloves. Wear clothing that will provide protection from repeated or prolonged contact with chemical splashes or spills

protection from repeated or prolonged contact with chemical splashes or spills. **Respiratory Protection:** Where engineering controls do not maintain airborne concentrations of

chemicals below recommended exposure limits, an approved respirator must be worn. Use suitable respiratory equipment with a particle filter. In the USA, if respirators are used, institute a program to assure compliance with OSHA 29 CFR 1910.134 and ANSI Z88.2.

Environmental Exposure Controls: Ensure adequate ventilation is provided, especially in confined areas.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic and Chemical Properties:

Physical State: Clear, colorless liquid.

Appearance:Fluid liquid.Color:Clear, colorless.Odor:Strong amide/amine.

Odor Threshold: N/A.

pH: Approximately 10.1.

Relative Evaporation Rate (butyl acetate = 1): N/A.

Melting Point: N/A. Freezing Point: N/A.

Boiling Point: Approximately 212°F (100°C).

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Flash Point: None when heated to the boiling point (212°F - 100°C).

Auto-ignition Temperature: No data available.

Decomposition Temperature: No data available.

Flammability (solid, gas): No data available.

Vapor pressure: N/A.

Relative Vapor Density at 20° C: No data available.

Weight per gallon: 10.09 lb/gal.

Solubility – Water: 100% soluble.

Partition Coefficient: n-octanol/water: No data available.

Viscosity: N/A.

9.2. Storage Information: Covered storage of portable containers is recommended. Store the product in original, tightly closed container. Do not store above 25°C (77°F) for maximum storage life. Protect from freezing. Store the product away from incompatible materials (See Section 10 of this SDS). Store the product in closed, sealed containers in a cool, dry place.

SECTION 10: STABILITY AND REACTIVITY

- **10.1. Reactivity:** This product is stable and non-reactive under conditions of usage, storage and transportation.
- **10.2.** Chemical Stability: Stable at standard temperature and pressure.
- **10.3. Possibility of Hazardous Reactions:** There are no dangerous reactions known under normal conditions of use.
- **10.4 Conditions to Avoid:** Avoid storage in unagitated bulk tanks above the recommended storage temperature (25°C (77°F)) and (see Section 7 of this SDS). Avoid incompatible materials (see below in this Section 10 of the SDS) and intense heat.
- **10.5.** Incompatible Materials: This product is incompatible with strong oxidizing agents and strong acids.
- **10.6. Hazardous Decomposition Products:** Ammonia fumes may be released upon heating. When heated to decomposition, acrid smoke and irritating fumes are emitted.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on the Likely Routes of Exposure:

Skin Contact: Prolonged skin contact may cause minor skin irritation.

Eye Contact: Exposure to spray mist or cleanup dust (during spill cleanup) may cause slight eye irritation.

Inhalation: Inhalation to spray mist or cleanup dust (during spill cleanup) may cause respiratory irritation

Ingestion: May be harmful if swallowed.

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11.2. Description of Delayed, Immediate or Chronic Effects from Short and Long Term Exposure: Symptoms Related to the Physical, Chemical and Toxicological Characteristics

Germ Cell Mutagenicity: Not classified

Carcinogenicity: This product is not considered to be a carcinogen by IARC, ACGIH, NTP or OSHA.

Reproductive Toxicity: Not classified.

Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.

Specific Target Organ Toxicity (Repeated Exposure): Not classified.

Aspiration Hazard: Not classified.

11.3. Numerical Measure of Toxicity:

CC	OMPONENT	SPECIES	TEST	
RESULTS Ammonia (CAS 7664-41-7)				
	Acute			
	Inhalation			
	LC50	Rat	5.1 mg/l, 1 Hour	
	Oral			
	LD50	Rat	350 mg/kg, as Ammonium Hydroxide	
Urea (CAS 57-13-6)				
	Acute			
	Oral			
	LD50	Rat	14,300 mg/kg	
			,	

11.4. Description of Symptoms:

Symptoms/Injuries After Inhalation: Over exposure may be irritation to the respiratory system.

Symptoms/Injuries After Skin Contact: May cause skin irritation.

Symptoms/Injuries After Eye Contact: May cause eye irritation.

Symptoms/Injuries After Ingestion: Ingestion of a large quantity may cause abdominal pain,

diarrhea, nausea and/or vomiting.

11.5. Carcinogenicity:

National Toxicology Program (NTP) Report on Carcinogens: Not listed.

Agency for Research on Cancer (IARC) Monographs: Not found to be a potential carcinogen.

OSHA: Not found to be a potential carcinogen.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity: The product is not classified as environmentally hazardous. However, this does not

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exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

COMPONENTS	ACCUTE	SPECIES	TEST RESULTS
Ammonia (CAS 7664-41-7) Aquatic Fish	LC50	Chinook Salmon (<i>Oncorhynchus</i> tshawyscha)	0.43 – 047 mg/l, 96 Hours
Urea (CAS 57-13-6) Aquatic Fish	LC 50	Ide (<i>Leuciscus idus</i>)	> 6,810 mg/l, 96 Hours

- **12.2. Persistence and Degradability:** This product is biodegradable under aerobic and anaerobic conditions.
- **12.3.** Bio-accumulative Potential: No data is available for this product.
- **12.4. Mobility in Soil:** This product is water soluble and may disperse in soil water.
- 12.5. Other Adverse Effects: No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

- **13.1. Disposal Instructions:** Dispose in accordance with local, state and federal laws and regulations at the time of disposal. Do not allow contents of the package to drain into sewers or water sheds.
- **13.2. Hazardous Waste Code:** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
- **13.3.** Waste from Residue/Unused Products: Disposal recommendations are based upon the material as supplied. Disposal must be in accordance with all local, state, and federal laws and regulations at the time of the disposal.
- **13.4. Contaminated Packaging:** An empty container may still retain a product residue. Therefore, it is mandatory to follow label warnings even if you believe the container to be empty.

SECTION 14: TRANSPORT INFORMATION

- 14.1. In Accordance with Department of Transportation (DOT): Not regulated for transport.
- **14.2.** In Accordance with International Maritime Dangerous Goods Code (IMDG): Not regulated for transport.

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14.1. In Accordance with International Air Transport Association (IATA): Not regulated for transport.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not established.

SECTION 15: REGULATORY INFORMATION

- **15.1. US Federal Regulations:** This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
- 15.2. TSCA Section 12(b) Export Notification (40 CFR 707. Subpt. D): This product is not regulated.
- 15.3. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): This product is not listed.
- **15.4. CERCLA Hazardous Substance List (40 CFR 302.4):** Ammonia (CAS 7664-41-7) This product is listed.
- 15.5. Superfund Amendments and Reauthorization Act of 1986 (SARA):

Hazard Categories: Immediate Hazard – No

Delayed Hazard – No

Fire Hazard – No

Pressure Hazard - No

Reactivity Hazard - No

SARA 302 Extremely Hazardous Substance

Threshold	Planning			
Planning Reportable				
Planning	Quantity			
Quantity				
Quantity	Lower Value	Upper		

Chemical Name	CAS#	Quantity	Quantity	Lo
Value Ammonia	7664-41-7	100	500 lbs	

SARA 311/312 Hazardous Chemical: No

SARA 313 (TRI Reporting): Not Regulated.

15.6. Other Federal Regulations:

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List: Not Required.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

Ammonia (CAS 7664-41-7).

Safe Drinking Water Act (SDWA): Not required.

15.7. US State Regulations:

California: This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

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California Proposition 65 – Carcinogens & Reproductive Toxicity (CRT): Listed Substances: Not listed.

Massachusetts RTK – Substance List:

Ammonia (CAS)7664-41-7

New Jersey Worker and Community Right-to-Know Act:

Ammonia (CAS)7664-41-7

Pennsylvania Worker and Community Right-to-Know Law:

Ammonia (CAS)7664-41-7

Rhode Island RTK:

Ammonia (CAS)7664-41-7

15.8. International Inventories:

Country(s) or Region	Inventory Name	On Invetory (yes/no)*	
United States & Puerto Rico	Toxic Substances Control Act (TSCA):	Yes	
	Listed Substance		
*A "Yes" indicates this product complies with the inventory requirements administered by			
the governing country(s). A "N	lo" indicates that one or more compone	nts of the product are	
not listed or exempt from listing	ng on the inventory administered by the	governing country(s).	

SECTION 16: OTHER INFORMATION

Issue Date: October 5, 2023 **Revision Date**: October 5, 2023

Version #: 01

List of Abbreviations:

LD50: Lethal Dose to kill 50% of the population of animals. **LC50:** Lethal Concentration to kill 50% of the population.

16.1. Other Information: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200. It is correct to the best of our knowledge, information and belief at the date of publication. The information is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or product specification.

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