



Safety Data Sheet

Issue Date: no data available

Revision Date: 26-Aug-2014

Version: 1

1. IDENTIFICATION

Product Identifier:

Product Name: Peters Professional® Liquid S.T.E.M
Product Number(s): G99068
Formula No.: S15845

Recommended Use of the Chemical and Restrictions on Use:

Description: Liquid Fertilizer

Company:

Everris NA Inc.
P.O. Box 3310
Dublin, OH 43016

24-HOUR EMERGENCY TELEPHONE NUMBERS:

CHEMTREC (U.S.): 1-800-424-9300
CHEMTREC (International): 1-703-527-3887
Non-Emergency Calls: 1-800-492-8255

2. HAZARD(S) IDENTIFICATION

OSHA Regulatory Status:

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

Not Hazardous:

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label Elements:

Emergency Overview

The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance: liquid

Physical State: liquid

Odor:

Ammonia

Hazards Not Otherwise Classified (HNOC):

Other Information:

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS-No	Weight %	Trade Secret
Iron EDTA; Fe-EDTA	15708-41-5	40-60	*
Manganese-EDTA, Mn-EDTA	15375-84-5	10-20	*
Zinc-EDTA; Zn-EDTA	14025-21-9	5-10	*
Copper-EDTA; Cu-EDTA	14025-15-1	1-3	*
Boric Acid; H3BO3	10043-35-3	1-3	*

* The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST-AID MEASURES

First Aid Measures:

- Eye Contact:** Hold eye open and rinse slowly and gently with water for 15-20 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.
- Skin Contact:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
- Inhalation:** 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.
- Ingestion:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Indication of Any Immediate Medical Attention and Special Treatment Needed:

Notes to Physician: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water spray, carbon dioxide, dry chemical, chemical foam.

Specific hazards: No information available.

Explosion Data:

Sensitivity to Mechanical Impact:

no data available.

Sensitivity to Static Discharge:

no data available.

Special Protective Equipment for Firefighters: In the event of fire, wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Personal Precautions: Wear personal protective equipment. Do not inhale dust/mist.

Environmental Precautions: Prevent product from entering drains.

Methods and Material for Containment and Cleanup:

Methods for containment: Absorb with inert non-combustible material and remove for disposal.

Methods for Cleanup: Take up mechanically and collect in suitable container for disposal. Thoroughly ventilate and clean affected area.

7. HANDLING AND STORAGE

Precautions for Safe Handling:

Handling: Open container should be sealed. Keep away from heat, sources of ignition, and combustible materials. Keep away from incompatible materials and organic materials.

Conditions for Safe Storage, Including any Incompatibilities:

Storage: Keep containers tightly closed in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters:

Exposure Guidelines:

Ingredients	CAS-No	ACGIH:	OSHA:	IDLH:
Iron EDTA; Fe-EDTA	15708-41-5	1 mg/m ³ TWA	Not Listed	Not Listed
Manganese-EDTA, Mn-EDTA	15375-84-5	Not Listed	Not Listed	500 mg/m ³ IDLH Mn
Zinc-EDTA; Zn-EDTA	14025-21-9	Not Listed	Not Listed	Not Listed
Copper-EDTA; Cu-EDTA	14025-15-1	1 mg/m ³ TWA	Not Listed	100 mg/m ³ IDLH Cu
Boric Acid; H3BO3	10043-35-3	2 mg/m ³ TWA	Not Listed	Not Listed

Appropriate Engineering Controls:

Engineering Measures to Reduce Exposure: Use adequate ventilation to keep the airborne concentrations of this material below the recommended exposure standard.

Individual Protection Measures, Such as Personal Protective Equipment:

- Eye/Face Protection:** Safety glasses with side shields or goggles.
- Skin and Body Protection:** Wear suitable protective clothing. If skin irritation occurs, use natural rubber gloves, durable cloth or impervious rubber gloves if contact with product is possible.
- Respiratory Protection:** When airborne exposure guidelines and/or comfort levels may be exceeded, use an approved air-purifying respirator.
- General hygiene considerations:** Remove and wash contaminated clothing before re-use. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties:

Physical State:	liquid	Appearance:	liquid
Color:	dark brown	Odor	No information available
Odor:	Ammonia	Threshold:	

<u>Property</u>	<u>Values</u>	<u>Remarks: • Method</u>
pH:	7.5 +/- 0.5 (1.0 w/v solution)	
Melting Point/Freezing Point:	No information available	
Boiling Point/Range:	No information available	
Flash Point:	No information available	
Evaporation Rate:	No information available	

Flammability (solid, gas): No information available
Flammability Limits in Air:
 Upper Flammability Limit: No information available
 Lower Flammability Limit: No information available
Vapor Pressure: No information available
Vapor Density: No information available
Specific Gravity: No information available
Solubility: No information available
Solubility in other Solvents: No information available
Partition Coefficient: No information available
Autoignition Temperature: No information available
Decomposition Temperature: No information available
Kinematic Viscosity: No information available
Dynamic Viscosity: No information available
Explosive Properties: No information available
Oxidizing Properties: Not considered an oxidizer

Other Information:

Softening Point: No information available
Molecular Weight: No information available
VOC Content (%): No information available
Density: No information available
Bulk density: No information available

10. STABILITY AND REACTIVITY

Reactivity: Stable under normal conditions
Chemically Stable: yes.
Conditions to Avoid: Extreme heat.
Materials to avoid Nitrogen oxides (NOx).
Hazardous Decomposition Products: No information available.
Possibility of Hazardous Reactions: Poses little or no immediate hazard.

11. TOXICOLOGICAL INFORMATION

Information on the Likely Routes of Exposure (inhalation, ingestion, skin and eye contact):

Eye effects: May cause eye irritation with susceptible persons
Skin effects: May cause skin irritation in susceptible persons
Ingestion: Nausea, vomiting.
Inhalation: May cause irritation of respiratory tract.

Component Information:

Ingredients	LD50 Oral	LD50 Dermal	LC50 Inhalation
Zinc-EDTA; Zn-EDTA 14025-21-9	= 1750 mg/kg (Rat)	-	-

Boric Acid; H3BO3 10043-35-3	= 2660 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 0.16 mg/L (Rat) 4 h
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Information on Toxicological Effects:

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure:

Mutagenic effects No information available.
Carcinogenicity: The table below indicates whether each agency has listed any ingredient as a carcinogen.

Ingredients	ACGIH - Carcinogens	IARC:	NTP Report on Carcinogens List -	OSHA
Boric Acid; H3BO3 10043-35-3	A4	-	-	-

Reproductive Toxicity No information available.
STOT - Single Exposure No information available.
STOT - Repeated Exposure No information available.
Aspiration Hazard No information available.

Numerical Measures of Toxicity - Product Information:

The following values are calculated based on chapter 3.1 of the GHS document: .

ATEmix (oral): 36232 mg/kg
LD50/oral: LD50>2000mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Unknown Aquatic Toxicity: 1.38% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Ecotoxicity effects: No data is available on the product itself.

Persistence and degradability: Degrades slowly.

Ingredients	LOGPOW
Boric Acid; H3BO3 10043-35-3	-0.757

Mobility: No information available.

Additional ecological information: Contains Molybdenum (Mo). The application of materials containing Molybdenum (Mo) may result in forage crops containing levels of Molybdenum (Mo) which are toxic to ruminant animals. This product contains boron and should be used according to directions only, especially on crops sensitive to boron uptake.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods:

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

Contaminated Packaging: Do not reuse container.

14. TRANSPORT INFORMATION

The description shown may not apply to all situations. Consult 49 CFR, or appropriate dangerous goods regulations for additional description requirements (e.g. technical name) and mode-specific or quantity-specific shipping requirements.

DOT (Land) Not DOT regulated
IATA (Air) Not regulated
IMO/IMDG (Vessel) Not regulated

15. REGULATORY INFORMATION

Federal Regulations:

SARA 313:

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories:

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act):

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA:

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

State Regulations (RTK):

California Proposition 65:

U.S. State Right-to-Know Regulations:

U.S. EPA Label information:

EPA Pesticide Registration Number:

not applicable

16. OTHER INFORMATION

NFPA: Health: 1 Flammability: 0 Reactivity: 0

HMIS: Health: 1 Flammability: 0 Reactivity: 0

Revision Date: 26-Aug-2014

Revision Note:

Reason for revision: None

Disclaimer

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End of Safety Data Sheet