



# Safety Data Sheet

Last Revision Date 27-Nov-2024

Version: 2

## 1. IDENTIFICATION

### Product identifier

**Product Name:** Peters Professional® S.T.E.M.™ Soluble Trace Element Mix No Dye, 0-0-0  
**Product Number(s):** G99900  
**Formula No.:** S12904

**Description:** Water Soluble Fertilizer

### Recommended use of the chemical and restrictions on use

Water soluble fertilizer

### Company:

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

## 2. HAZARD(S) IDENTIFICATION

Acute toxicity - Oral	Category 4
Skin Corrosion or Irritation	Category 2
Serious eye damage/eye irritation	Category 1
Reproductive Toxicity	Category 1B
Specific Target Organ Toxicity (Repeated Exposure)	Category 2

### Label Elements:

#### **Danger**

#### **Hazard Statements:**

Harmful if swallowed  
Causes skin irritation  
Causes serious eye damage  
May damage fertility or the unborn child  
May cause damage to organs through prolonged or repeated exposure



**Appearance:** Prills, powder

**Physical state** Solid

**Odor:** Fertilizer

### **Precautionary Statements - Prevention**

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required  
Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product

Do not breathe dust/fume/gas/mist/vapors/spray

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
Immediately call a POISON CENTER or doctor/physician  
IF ON SKIN: Wash with plenty of soap and water  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash before reuse  
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
Rinse mouth

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards Not Otherwise Classified (HNOC):**

Not applied

**Other Information**

Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical name	CAS No.	Weight-%	Trade Secret
Iron sulphate; FeSO <sub>4</sub> +7H <sub>2</sub> O	7782-63-0	30 - 40%	*
Manganese sulphate; MnSO <sub>4</sub>	7785-87-7	20 - 30%	*
Zinc sulphate+1H <sub>2</sub> O; ZnSO <sub>4</sub> +1H <sub>2</sub> O	7446-19-7	10 - 15%	*
Copper sulphate+5H <sub>2</sub> O; CuSO <sub>4</sub> +5H <sub>2</sub> O	7758-99-8	5 - 10%	*
Boric acid; H <sub>3</sub> BO <sub>3</sub>	10043-35-3	5 - 10%	*
Sodium-EDTA; Na-EDTA	139-33-3	1 - 5%	*
Citric acid; C <sub>6</sub> H <sub>8</sub> O <sub>7</sub>	77-92-9	1 - 5%	*

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

**4. FIRST-AID MEASURES**

**Description of first aid measures**

**Eye Contact:** If in eyes, 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. Call a poison control center or doctor for treatment advice.

**Skin Contact:** Call a poison control center or doctor for treatment advice. Take off contaminated clothing. Immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

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

**Ingestion:** Call a physician or Poison Control Centre immediately. Have person sip a glass of water if able to swallow. Do not induce vomiting without medical advice. Never 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:** Carbon dioxide (CO2). Dry chemical. Water spray. Chemical foam.

**Unsuitable Extinguishing Media:** High volume water jet.

**Specific hazards:** Dust may form explosive mixture in air.

**Hazardous Combustion Products** Thermal decomposition can lead to release of toxic/corrosive gases and vapors.

**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:** Avoid contact with skin, eyes and clothing.

**Environmental precautions:** Prevent product from entering drains.

**Methods and material for containment and cleaning up**

**Methods for containment:** Vacuum or sweep up material and place in a disposal container.

**Methods for Cleanup:** If material is uncontaminated, collect and reuse as recommended for product. If material is contaminated, put in appropriate container and dispose. Flush with water.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Handling:** Avoid container breakage. Avoid inhalation or contact with skin, eyes, or clothing. Do not contaminate water sources when disposing of equipment wash waters. Keep out of lakes, streams or ponds.

**Conditions for safe storage, including any incompatibilities**

**Storage:** Keep containers tightly closed in a dry, cool and well-ventilated place. Do not contaminate water, food, or feed by storage or disposal.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure Limits** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical name	ACGIH TLV	OSHA:	ACGIH:	IDLH:
Iron sulphate; FeSO <sub>4</sub> +7H <sub>2</sub> O 7782-63-0	TWA: 1 mg/m <sup>3</sup> Fe	-	1 mg/m <sup>3</sup> TWA	-
Manganese sulphate; MnSO <sub>4</sub> 7785-87-7	TWA: 0.02 mg/m <sup>3</sup> Mn respirable particulate matter TWA: 0.1 mg/m <sup>3</sup> Mn inhalable particulate matter	-	0.02 mg/m <sup>3</sup> TWA 0.1 mg/m <sup>3</sup> TWA	500 mg/m <sup>3</sup> IDLH Mn
Copper sulphate+5H <sub>2</sub> O; CuSO <sub>4</sub> +5H <sub>2</sub> O 7758-99-8	TWA: 1 mg/m <sup>3</sup> Cu dust and mist	-	1 mg/m <sup>3</sup> TWA	100 mg/m <sup>3</sup> IDLH Cu
Boric acid; H <sub>3</sub> BO <sub>3</sub> 10043-35-3	TWA: 2 mg/m <sup>3</sup> inhalable particulate matter STEL: 6 mg/m <sup>3</sup> inhalable particulate matter	-	2 mg/m <sup>3</sup> TWA	-

**Appropriate engineering controls**

**Engineering Controls** Ensure adequate ventilation, especially in confined areas. Eyewash. Showers.

**Individual protection measures, such as personal protective equipment**

**Eye/face Protection** Wear safety glasses with side shields (or goggles).

**Hand Protection** Neoprene gloves.

**Skin and body protection** Lightweight protective clothing.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

**Physical state** Solid  
**Color:** white  
**Appearance:** Prills, Powder(s)  
**Odor:** Fertilizer

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH:</b>	No data available	
<b>Melting Point/Freezing Point:</b>	Not applicable	
<b>Boiling Point/Range:</b>	No data available	
<b>Flash Point:</b>		
<b>Evaporation Rate:</b>	no data available	
<b>Flammability (solid, gas):</b>	No data available	
<b>Flammability Limits in Air:</b>		
<b>Upper Flammability Limit:</b>	No data available	
<b>Lower Flammability Limit:</b>	No data available	

Vapor Pressure:	No data available
Vapour density	No data available
Specific gravity	no data available
Solubility:	Highly soluble (>80%)
Solubility in other Solvents:	no data available
Partition Coefficient:	no data available
Autoignition Temperature:	No data available
Hyphen	no data available
Kinematic Viscosity:	No data available
Dynamic Viscosity:	no data available
Explosive Properties:	no data available
Oxidizing Properties:	Not considered an oxidizer

**Other information**

Softening Point:	no data available
Molecular Weight:	no data available
VOC content	No data available
Density:	no data available
Bulk density:	60-70 lbs./cu.ft.

**10. STABILITY AND REACTIVITY**

**Reactivity:**

Stable under recommended storage conditions

**Chemically Stable:** Yes.

**Conditions to Avoid:** Protect from extremes of temperature.

**Materials to avoid** Strong acids, bases, oxidizers, and reducing agents. Avoid contact with other chemicals. Fuels. Heavy metal salts.

**Hazardous Decomposition Products:** Combustion may produce irritating gases and vapors. Toxic metal oxides may be produced.

**Possibility of Hazardous Reactions:** Poses little or no immediate hazard.

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

**Product Information**

Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.
Skin Contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** no data available.

**Numerical measures of toxicity**

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

Oral LD50 647.00 mg/kg  
 Dermal LD50 10,695.00 mg/kg

Unknown Acute Toxicity: no data available

LD50/oral: no data available

LD50/dermal: no data available

LC50/inhalation: no data available

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Iron sulphate; FeSO <sub>4</sub> +7H <sub>2</sub> O 7782-63-0	= 1520 mg/kg	-	-
Manganese sulphate; MnSO <sub>4</sub> 7785-87-7	= 782 mg/kg ( Rat )	-	> 4.45 mg/L ( Rat ) 4 h
Copper sulphate+5H <sub>2</sub> O; CuSO <sub>4</sub> +5H <sub>2</sub> O 7758-99-8	= 960 mg/kg ( Rat )	> 8 g/kg ( Rabbit )	-
Boric acid; H <sub>3</sub> BO <sub>3</sub> 10043-35-3	= 2660 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 2.12 mg/L ( Rat ) 4 h
Sodium-EDTA; Na-EDTA 139-33-3	= 2 g/kg ( Rat )	-	-
Citric acid; C <sub>6</sub> H <sub>8</sub> O <sub>7</sub> 77-92-9	= 3 g/kg ( Rat )	> 2000 mg/kg ( Rat )	-

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

Skin corrosion/irritation no data available.

Serious eye damage/eye irritation no data available.

Respiratory or skin sensitization no data available.

Germ Cell Mutagenicity no data available.

Carcinogenicity no data available.

Chemical name	ACGIH	IARC	NTP	OSHA
Boric acid; H <sub>3</sub> BO <sub>3</sub> 10043-35-3	-	Group 2A	-	X

Reproductive Toxicity no data available.

STOT - Single Exposure no data available.

STOT - Repeated Exposure no data available.

Aspiration Hazard no data available.

**12. ECOLOGICAL INFORMATION**

Marine pollutant if transported by vessel over water.

The environmental impact of this product has not been fully investigated.

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea

			microorganisms	
Copper sulphate+5H <sub>2</sub> O; CuSO <sub>4</sub> +5H <sub>2</sub> O 7758-99-8	-	LC50: 0.66 - 1.15mg/L (96h, Lepomis macrochirus) LC50: 0.96 - 1.8mg/L (96h, Lepomis macrochirus) LC50: 0.1478 - 0.165mg/L (96h, Oncorhynchus mykiss) LC50: 0.09 - 0.19mg/L (96h, Oncorhynchus mykiss) LC50: =0.6752mg/L (96h, Pimephales promelas)	-	EC50: 0.147 - 0.227mg/L (48h, Daphnia magna)
Boric acid; H <sub>3</sub> BO <sub>3</sub> 10043-35-3	-	-	-	EC50: 115 - 153mg/L (48h, Daphnia magna)
Sodium-EDTA; Na-EDTA 139-33-3	-	LC50: =320mg/L (96h, Poecilia reticulata)	-	-
Citric acid; C <sub>6</sub> H <sub>8</sub> O <sub>7</sub> 77-92-9	-	LC50: =1516mg/L (96h, Lepomis macrochirus)	-	-

**Persistence and Degradability:** Degrades slowly.

**Bioaccumulation** No information available.

Chemical name	Partition coefficient
Boric acid; H <sub>3</sub> BO <sub>3</sub> 10043-35-3	-1.09
Sodium-EDTA; Na-EDTA 139-33-3	-4.3
Citric acid; C <sub>6</sub> H <sub>8</sub> O <sub>7</sub> 77-92-9	-1.72

**Other adverse effects** No information available.

### 13. DISPOSAL CONSIDERATIONS

**Waste Treatment Methods:**

**Disposal of Wastes:** If empty, do not reuse container. Do not place product down any indoor or outdoor drain. Contaminated product should be disposed of in an approved landfill disposal facility in accordance with applicable Federal/ Provincial, and/or local 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.

<b>DOT (Land)</b>	UN3077, Environmentally Hazardous Substance, solid, N.O.S., (copper sulfate pentahydrate), 9, PGIII, Marine Pollutant
<b>DOT (AIR)</b>	UN3077, Environmentally Hazardous Substance, solid, N.O.S., (copper sulfate pentahydrate), 9, PGIII, Marine Pollutant
<b>DOT (Vessel)</b>	UN3077, Environmentally Hazardous Substance, solid, N.O.S., (copper sulfate pentahydrate), 9, PGIII, Marine Pollutant
<b>IATA (Air)</b>	UN3077, Environmentally Hazardous Substance, solid, N.O.S., (copper sulfate pentahydrate), 9, PGIII, Marine Pollutant
<b>IMO/IMDG (Vessel)</b>	UN3077, Environmentally Hazardous Substance, solid, N.O.S., (copper sulfate pentahydrate), 9, PGIII, Marine Pollutant

**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:**

<b>Acute health hazard</b>	No
<b>Chronic Health Hazard</b>	No
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	No

**CWA (Clean Water Act):**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	Clean Water Act - Priority Pollutants	Clean Water Act - Hazardous Substances
Iron sulphate; FeSO <sub>4</sub> +7H <sub>2</sub> O 7782-63-0	-	-	-	Present (listed under Ferrous sulfate)

**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.

Chemical name	CERCLA/SARA 313	CERCLA/SARA RQ
Iron sulphate; FeSO <sub>4</sub> +7H <sub>2</sub> O 7782-63-0	1000 lb final RQ Ferrous sulfate 454 kg final RQ Ferrous sulfate	-

**California Proposition 65:**

This product does not contain any Proposition 65 chemicals

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

**State Regulations (RTK):** no data available

**U.S. EPA Label information:**

**EPA Pesticide Registration Number:** Not applied

