

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY**Product Name: **Emerald Isle Solutions Nutri-Rational TrueFoliar Si 3-0-10**Recommended use

This product is a concentrated aqueous liquid fertilizer for landscape use.

**Supplier/Manufacturer**Lebanon Seaboard Corporation  
1600 East Cumberland Street  
Lebanon PA 17042  
Tel: 800-233-0628  
(717-273-0685)Supplier Email: customerservice@lebsea.comEmergency telephone numbers

Chemtrec (Spill) 1-800-424-9300

Prosar (Health) 888-208-1368

**2. HAZARDS IDENTIFICATION**Signal Word: **Warning****Hazard Statements:**

H315: Causes skin irritation. (Category 2)

H320: Causes eye irritation on contact. (Category 2B)

**Precautionary Statements for handling:**

P264: Wash hands thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P302, P332, 352: IF ON SKIN: Gently wash with plenty of soap and water. Seek medical attention if irritation persists.

P305, P351, P337: In case of eye contact, rinse cautiously with water for several minutes. Remove contact lenses if easy to do and continue rinsing. If eye irritation persists: seek medical attention.

P260: Do not breathe mist/vapors/spray.

P362: Take off contaminated clothing and wash before reuse.

Keep out of reach of children.

Precautionary Statements for disposal - Dispose in accordance with all federal, state and local regulations.

**Hazards not otherwise classified (HNOC):** None known.

Unknown acute toxicity

&lt;1% of the mixture consists of ingredients of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No.	Weight %
EDTA tripotassium salt	17572-97-3	5 - 10
Urea	57-13-6	5 - 10
Sodium meta silicate	6834-92-0	1 - 5
Citric acid	77-92-9	0.5 - 0.9
Water	7732-18-5	Balance

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#### 4. FIRST AID MEASURES

The following measures refer to the undiluted product:

Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Contact a poison control center or a physician if irritation persists.
Skin Contact	Wash skin with soap and water. If injury, discomfort or irritation occurs seek medical attention.
Inhalation	If mist is inhaled and discomfort occurs, move person to fresh air, and keep person at rest in a position comfortable for breathing. Contact a physician or poison control center. If difficulty in breathing occurs and/or persists, administer oxygen and get medical attention. If medical advice is needed, have product container or label on hand.
Ingestion	If swallowed, rinse mouth. Drink plenty of water or milk. Do NOT induce vomiting. If discomfort occurs, seek medical attention.

Self-protection of the first aider: Take precautions as needed to avoid prolonged contact with concentrated product.

Most important symptoms and effects, both acute and delayed:

Symptoms: Skin or eye contact with undiluted product can produce irritation.

Indication of any immediate medical attention and special treatment needed: Seek immediate medical attention in cases of eye contact or ingestion of concentrated product.

#### 5. FIRE FIGHTING MEASURES

##### Suitable extinguishing media

Liquid product is not a fire hazard, and will not burn. Use extinguishing media suitable to local circumstances and the surrounding environment.

##### Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire, do not breathe fumes.

##### Explosion data

Sensitivity to mechanical impact: None  
 Sensitivity to static discharge: None  
 Closed containers may rupture in fire due to pressure buildup.

##### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and standard protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment, and emergency procedures

Personal Precautions	Use reasonable personal protective equipment as required to prevent contact with eyes or skin, and to avoid breathing mist.
Environmental precautions	Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system.
Methods for containment	Prevent further leakage or spillage, if safe to do so.
Methods for clean-up	Absorb spillage. Use reasonable personal protective equipment as required. Soak up excess with inert absorbent material, or take up mechanically, placing in appropriate containers for disposal. Avoid creating mist. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

Safe Handling	Use only outdoors or in a well-ventilated area. Do not breath mist of concentrated product. Use personal protective equipment during use as required to prevent contact with eyes or skin, and to avoid breathing mist. Wash hands and any contacted skin thoroughly after handling concentrated product. Absorb spillage.
Storage Conditions	Keep containers tightly closed in a cool, well- ventilated place. Keep out of the reach of children.
Incompatible materials	Avoid strong acids or other reactive substances.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	Industry Recommended Limit
Sodium meta silicate	None established	None established	2 mg/m <sup>3</sup> (ceiling)
Citric acid	None established	None established	-

Engineering controls: Avoid creating fine, inhalable mists during use.

### Individual protection measures

Wear protective gloves/protective clothing/eye protection/face protection.

Eye protection	Safety glasses, or goggles if eye contact with concentrated product or mist is likely.
Skin and Body Protection	Wear gloves and protective clothing, such as normal work coveralls.
Respiratory Protection	Dust/mist mask recommended for misty conditions during use. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.
General Hygiene	When using product, do not eat, drink or smoke. Wash hands thoroughly after handling. Wash contaminated clothing before reuse.

Note: The safety issues noted in this document refer to the undiluted product. When diluted for normal application, the hazards are dramatically reduced.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid
Appearance	Solution
Color	Mixed, various
Odor	Slight
Odor Threshold	No information available
pH (undiluted product)	9 - 9.5
Melting point/freezing point	No information available
Boiling point / boiling range	No information available
Flash point	Not applicable
Evaporation rate	No information available
Flammability (solid, gas)	Aqueous solution. Will not burn
Flammability Limit in Air	Aqueous solution. Will not burn
Upper flammability limit:	Will not burn

Lower flammability limit:	Will not burn
Vapor pressure	Similar to water
Vapor density	No information available
Specific Gravity	1.168 g/cc
Water solubility	Fully soluble in water
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	Aqueous solution. Will not burn
Decomposition temperature	No information available
Oxidizing properties	Not an oxidizer

## 10. STABILITY AND REACTIVITY

### **Reactivity**

Not particularly reactive

### **Chemical stability**

Stable.

### **Possibility of Hazardous Reactions**

May release heat and fumes when mixed in solution with incompatible reactive materials, like acids.

### **Hazardous polymerization**

Will not occur.

### **Conditions to avoid**

None known

### **Incompatible materials**

Strong acids or other reactive substances.

### **Hazardous Decomposition Products**

May emit toxic fumes under fire conditions, such as Nitrogen oxides (NO<sub>x</sub>), Ammonia, Oxides of sulfur, Hydrogen chloride and Carbon monoxide.

## 11. TOXICOLOGICAL INFORMATION

Routes of exposure: Ingestion, eyes (contact), skin (contact), mist inhalation

Symptoms	Can irritate skin with prolonged contact. Can irritate eyes if contacted. Can irritate the digestive tract, causing nausea, vomiting and diarrhea.
Sensitization	Citric acid has been known to cause allergic sensitization in susceptible individuals. (Note that citric acid is often used as an approved food additive and flavoring.)
Mutagenicity	None Known
Carcinogenicity	Not classified as carcinogenic. Contains EDTA. EDTA is not carcinogenic, but substances similar to EDTA (Nitrilotriacetic acid [NTA] and its salts) were determined to be "possibly carcinogenic to humans" (Group 2B) by IARC, a compound which "may reasonably be anticipated to be a carcinogen" by NTP and a "select carcinogen" by OSHA. EDTA may contain trace amounts of NTA.
Reproductive toxicity	No specific information available.
STOT - single exposure	No information available
STOT - repeated exposure	No information available
Chronic toxicity	No information available

Target Organ Effects	None known
Aspiration hazard	No information available

## 12. ECOLOGICAL INFORMATION

Fertilizers may be harmful to aquatic life with short term effects, causing algal bloom and increased BOD, depending on the amount released.

Persistence and degradability	Most of the minerals are biologically metabolized.
Bioaccumulation	Not expected based on composition.
Other adverse effects	None known.

## 13. DISPOSAL CONSIDERATIONS

**Disposal of wastes:** Dispose of in accordance with Local, State, and Federal regulations.

### **Contaminated packaging**

No US Federal special packaging considerations at the date of this document. Follow local regulations.

## 14. TRANSPORT INFORMATION

DOT Description: Liquid Fertilizer N.O.S.

**IMDG:** Not a dangerous good.

**ICAO/IATA:** Not a dangerous good.

## 15. REGULATORY INFORMATION

**General Product Information:** This product is not federally regulated as a hazardous material.

### **SARA 311/312 Hazard Categories**

Acute:	Yes
Chronic:	No
Fire:	No
Sudden release of pressure:	No
Reactive:	No

**CERCLA:** EDTA: RQ = 5000 Lbs

**Clean Air Act:** No information is available.

**Clean Water Act:** No information is available.

### **State Regulations – General:**

**Component Analysis – State California Prop. 65:** None of this product's components are on the state lists from CA, FL, MA, MN, NJ, or PA. This product may contain detectable quantities of chemical(s) known to the State of California to cause cancer.

## 16. OTHER INFORMATION

The information provided in this material 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 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.