

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY**Product Name: **Emerald Isle Solutions Nutri-Rational TrueFoliar NK Plus 10-0-16**Recommended use

This product is a concentrated liquid fertilizer for landscape use.

Supplier/ManufacturerLebanon 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)

H319: Causes serious eye irritation. (Category 2A)

H335: May cause respiratory irritation if inhaled. (Category 3)

May irritate the digestive tract if ingested.

**Pictogram:** Exclamation Point**Precautionary Statements for handling:** See also Section 7.

P233, P403, P405: Keep container tightly closed, and store locked up in a well-ventilated place.

P261: Avoid breathing /mist/vapors/spray.

P264: Wash hands thoroughly after handling.

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

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

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P332, P352: If skin irritation occurs: Wash with plenty of soap and water.

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.

P340: If inhaled and discomfort occurs, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P362: Take off contaminated clothing and wash before reuse.

Precautionary Statements for disposal - Dispose in accordance with all federal, state and local regulations.**Hazards not otherwise classified (HNOC):** None

Unknown acute toxicity

0% of the mixture consists of ingredients of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No. | Weight % |
|------------------------------------|------------|----------|
| Potassium Phosphite solution | 13492-26-7 | 35.82 |
| Seaweed extract solution aqueous | 84775-78-0 | 35.1 |
| Urea | 57-13-6 | 21.2 |
| Fulvic acid solution 70% (aqueous) | 479-66-3 | 4.14 |
| Potassium citrate | 6100-05-6 | 3.65 |
| Potassium sorbate | 590-00-1 | 0.09 |

4. FIRST AID MEASURES

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| Eye Contact | 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. |
| Skin Contact | Wash with soap and water. If injury occurs, or if discomfort or irritation persists contact a physician. |
| Inhalation | If inhaled and discomfort occurs, move to fresh air, and keep person at rest in a position comfortable for breathing. 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 | Rinse mouth. Drink Plenty of water. If discomfort occurs, seek medical attention. Do not induce vomiting of an unconscious person. |

Self-protection of the first aider: When spraying, use dust/mist mask or any appropriate personal protective equipment as required.

Most important symptoms and effects, both acute and delayed:

Symptoms: Eye irritation on contact with redness, tearing and burning sensation. Mist inhalation can result in irritation with nasal discomfort; skin irritation possible, but not likely with normal use.

Indication of any immediate medical attention and special treatment needed: Treat Symptoms.

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. Options in this case include water, CO₂, ABC Dry Chemical extinguisher, or foam.

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

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|-----------------------------------|------|
| Sensitivity to mechanical impact: | None |
| Sensitivity to static discharge: | None |

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

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| 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. See Section 12 for additional ecological information. |
| Methods for containment | Prevent further leakage or spillage, if safe to do so. |
| Methods for clean-up | 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

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| Safe Handling | Use personal protective equipment during use as required to prevent contact with eyes or skin, and to avoid breathing mist. Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area. |
| Storage Conditions | Keep containers tightly closed and locked up in a cool, well-ventilated place. Keep out of the reach of children. |
| Incompatible materials | Avoid strong acids or alkali, or other reactive substances. |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH* |
|------------------------|------------------|------------------|-------------|
| Ammonium polyphosphate | None established | None established | - |
| Potassium phosphite | None established | None established | - |

*IDLH refers to amounts that are "Immediately Dangerous to Life or Health"

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

Individual protection measures

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

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| Eye protection | Wear eye and face protection. Safety glasses, or goggles if eye contact with concentrated product or diluted mist is likely. |
| Skin and Body Protection | Gloves and normal work coveralls recommended. |
| Respiratory Protection | Dust/mist mask recommended for misty conditions. 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. Remove and wash contaminated clothing before reuse. |

9. PHYSICAL AND CHEMICAL PROPERTIES

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| Physical state | Liquid |
| Appearance | Solution |
| Color | Mixed, various |
| Odor | Slight kelp odor |
| Odor Threshold | No information available |
| pH | 6.3 |
| 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) | Will not burn |
| Flammability Limit in Air | |
| Upper flammability limit: | Will not burn |
| Lower flammability limit: | Will not burn |
| Vapor pressure | Similar to water |

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| Vapor density | No information available |
| Specific Gravity | 1.368 g/cc |
| Water solubility | Fully soluble in water |
| Solubility in other solvents | No information available |
| Partition coefficient | No information available |
| Autoignition temperature | Will not burn |
| Decomposition temperature | No information available |
| Oxidizing properties | None |

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable.

Possibility of Hazardous Reactions

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

Hazardous polymerization

Will not occur.

Conditions to avoid

None known

Incompatible materials

Strong acids or alkali, or other reactive substances.

Hazardous Decomposition Products

May emit toxic fumes under fire conditions, such as Nitrogen oxides (NOx), Ammonia, Oxides of sulfur, Hydrogen chloride and Carbon monoxide.

11. TOXICOLOGICAL INFORMATION

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

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| Symptoms | Serious eye irritation with redness, and burning sensation. May irritate the digestive tract if ingested in quantity, causing nausea, vomiting and diarrhea. |
| Sensitization | No information available. |
| Mutagenicity | Potassium Sorbate induced chromosome aberrations in cultured Chinese hamster cells. Cytogenetic Analysis (Hamster-Lung) 10 gm/L; Cytogenetic Analysis (Hamster-Fibroblast) 4 gm/L/48 hours; Sister Chromatid Exchange (Hamster Lung) 10 gm/L. (Note that potassium sorbate is often used as an approved food preservative.) |
| Carcinogenicity | Not carcinogenic |
| Reproductive toxicity | No information available |
| STOT - single exposure | No information available |
| STOT - repeated exposure | No information available |
| Chronic toxicity | No information available |
| Target Organ Effects | No information available |
| 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.

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| Persistence and degradability | No information available |
| Bioaccumulation | No information available |
| Other adverse effects | Mobile in soil |

13. DISPOSAL CONSIDERATIONS

This material, as supplied is not a hazardous waste according to federal regulations (40 CFR 261).

Disposal of wastes:

This product is a non-hazardous waste material suitable for approved solid waste landfills.
No EPA Waste Numbers are applicable for this product's components.
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: None

This product is not a hazardous material and is not regulated by the United States Department of Transportation (D.O.T).

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.

Clean Air Act: No information is available.

Clean Water Act: No information is available.

State Regulations – General: This product is not regulated by any State as a hazardous material.

Component Analysis – State None of this product's components are on the state lists from CA, FL, MA, MN, NJ, or PA.

Component Analysis – WHMIS IDL No components are listed in the WHMIS IDL.

16. OTHER INFORMATION

Disclaimer

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.