

1. Identification

Product name Product code

Other Identification:

Recommended use

Distributor information

Manufacturer &

Contact person

EMERALD 5-16-10 BLOOM

Common Name: Micronutrient Fertilizer Chemical Family: Inorganic Salt Solution

Chemical Description: Fertilizer solution derived from Ammonium polyphosphate, Tech Grade Phosphoric Acid, Urea, Potassium hydroxide, Potassium Thiosulfate, Potassium Carbonate, Calcium EDTA, Magnesium

EDTA, Boric Acid, Copper EDTA, Iron EDTA, Manganese EDTA, Zinc EDTA.

Turf & Horticulture-Inorganic Salt Solution

Plant Life Company, LLC

335 E. Linton Blvd., Suite #2227, Delray Beach, FL 33483

1-800-502-5752 Telephone www.plantlifeco.com Website info@plantlifeco.com E-mail

SDS-Regulatory Department

1-800-424-9300 **Emergency phone number**

2. Hazard(s) identification

Physical hazards Not classified. Health hazards

Acute toxicity, oral Category 4 Serious eye damage/eye irritation Category 2A

Specific target organ toxicity, single exposure Category 3 respiratory tract irritation

Environmental hazards **OSHA** defined hazards

Label elements

Hazardous to the aquatic environment, acute hazard

Not classified.



Signal word Warning Harmful if swallowed. Causes serious eye irritation. May cause respiratory irritation.

Hazard statement Precautionary statement

Prevention

Do not eat, drink or smoke when using this product. Wear eye/face protection. Response

If swallowed: Call a poison center/doctor if you feel unwell. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. Rinse mouth. If eye

Use only outdoors or in a well-ventilated area. Avoid breathing mist or vapor. Wash thoroughly after handling.

irritation persists: Get medical advice/attention.

Hazard(s) not otherwise classified (HNOC) None known.

3. Composition/information on ingredients

Chemical Name

Ammonium Polyphosphate Solution Phosphonic acid

Potassium Hydroxide Potassium Thiosulfate Dipotassium salt of carbonic acid Potassium Hydroxide Potassium thiosulfate Potassium Carbonate

Phosphorous Acid

Synonym Common Name

Ammonium Polyphosphate

CAS Number 68333-79-9 13598-36-2 1310-58-3 10294-66-3 584-08-7

EINECS No. 268-789-9 237-066-7 215-181-3 233-666-8 209-529-3

Category 2



4. First-aid measures

Eye contact

Ingestion

Inhalation Remove victim from contaminated atmosphere. If breathing is labored, administer oxygen. If breathing has

ceased, clear airway and start CPR. Obtain medical attention.

Immediately flush with large quantities of water. Remove contaminated clothing under a safety shower. Skin contact

Continue rinsing. Obtain medical attention if irritation occurs.

Immediately flush eyes with plenty of water for at least 15 minutes. Continue rinsing. Remove contact lenses, if

present and easy to do. If eye irritation persists: Get medical advice/attention.

Rinse mouth. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. If victim is conscious, give two to four glasses of water and induce vomting by touching finger to back of throat. Obtain

medical attention Irritation of eyes and mucous membranes.

Most important symptoms/effects, acute and delayed Indication of immediate medical attention and special

treatment needed General information Provide general supportive measures and treat symptomatically. Keep victim warm. In case of shortness of breath, give oxygen. Keep victim under observation. Symptoms may be delayed.

Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. In the case of accident or if you feel unwell, seek medical advice immediately (show the label

where possible).

5. Fire-fighting measures

Flammable Properties: Suitable extinguishing media

Unsuitable extinguishing media

Specific hazards arising from the chemical

NFPA: Health - 1 Flammability - 0 Reactivity - 0

Not flammable, use media sutiable for combustibles involved in fire.

Not applicable.

During fire, gases hazardous to health may be formed. Heating (flames) of closed or sealed containers may cause violent rupture of container due to thermal expansion of compressed gases. Heating causes release of ammonia vapors. Vapors are irritating to eyes, skin and respiratory tract. Heating to dryness may cause the release of ammonia, ammonium sulfate, sulfur and oxides of sulfur (respiratory hazard).

Special protective equipment and precautions for firefighters

Fire-fighting equipment/instructions

Specific methods General fire hazards Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Move containers from fire area if you can do so without risk. Keep containers/storage vessels in fire area cooled with water

Move container from fire area if it can be done without risk.

Heating this product will evolve ammonia

6. Accidental release measures

Personal precautions, protective equipment and

emergency procedures

Keep people away from any upwind of spill/leak. Keep out of low areas. Keep unnecessary personnel away. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For

personal protection, see section 8 of the SDS.

Environmental precautions

Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

Methods and materials for containment and cleaning up

Stop the flow of material, if this is without risk.

Large Spills: Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use. For waste disposal, see section 13 of the SDS.

7. Handling and storage

Precautions for safe handling

Do not taste or swallow. Avoid breathing mist or vapor. Avoid contact with eyes. Provide adequate ventilation. Wear appropriate personal protective equipment. When using, do not eat, drink or smoke. Observe good industrial hygiene practices. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container. Store in a cool, dry place out of direct sunlight. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

Biological limit values Appropriate engineering controls

Individual protection measures, such as personal

protective equipment

Eve/face protection

Skin protection Hand protection

Other

Respiratory protection Thermal hazards

General hygiene considerations

No exposure limits noted for ingredient(s).

No biological exposure limits noted for ingredient(s).

Provide eyewash station.

Wear eye/face protection. Wear safety glasses with side shields (or goggles).

For prolonged or repeated skin contact use suitable protective gloves.

Wear suitable protective clothing. Wash contaminated clothing prior to reuse.

In case of insufficient ventilation, wear suitable respiratory equipment. Wear appropriate thermal protective clothing, when necessary.

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and

protective equipment to remove contaminants.



9. Physical and chemical properties

Appearance (physical state, color, etc) Clear green Mild ammonia odor Odor

5.5 Odor threshold

7-Jan

рΗ Melting point/freezing point

32 °F (0° C) (Typical)) 222°F (106°C) Initial boiling point and boiling range Flash point Not available. Evaporation rate Not determined

Flammability (solid, gas) Not applicable Upper/lower flammability or explosive limits Not applicable Not available. Vapor pressure

Vapor density Not available. Relative density 10.8 lb/gal (4.9 kg)

Complete Solubility Solubility (water) 100%

Partition coefficient (n-octanol/water) Not available. Auto-ignition temperature Not available. Decomposition temperature Data not available 1-10 CPS @ 21°C Viscosity

Other information > 2 years

Shelf life

10. Stability and reactivity

Reactivity Avoid interaction with heat (flames), oxidizers, acids or alkalis (see details below in this section).

Chemical stability Material is stable under normal conditions.

Strong oxidizers such as nitrates, nitrites or chlorates can cause explosive mixtures if heated to dryness Temperatures above 120°F (49°C) and below 32°F (0°C). Possibility of hazardous reactions

Conditions to avoid

Hazardous decomposition products Heating this product will evolve ammonia. Heating to dryness will produce ammonia, ammonium sulfate, sulfur

and oxides of sulfur.

11. Toxicological information

Information on likely routes of exposure

Oral Not determined Not determined Inhalation Skin contact Not determined Eye contact Not determined

Chronic/Carcinogenicity: Not listed in NTP, IARC or by OSHA.

Data not available. Teratology: Reproduction: Data not available. Mutagenicity: Data not available.



12. Ecological information

Ecotoxicity Not determined

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential This product is not bioaccumulative. Mobility in soil Not determined

Other adverse effects Not determined

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be

disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with

local/regional/national/international regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material Waste from residues / unused products

and its container must be disposed of in a safe manner (see: Disposal instructions).

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may Contaminated packaging

retain product residue, follow label warnings even after container is emptied.

14. Transport information

Not regulated as dangerous goods. IATA Not regulated as dangerous goods. IMDG Not regulated as dangerous goods.

15. Regulatory information

US federal regulations This product meets the criteria of the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification Not regulated. (40 CFR 707, Subpt. D)

CERCLA Hazardous Substance List (40 CFR 302.4) Not listed

Not regulated. SARA 304 Emergency release notification

Hazard categories Immediate Hazard - Yes

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Other federal regulations

OSHA Specifically Regulated Substances

(29 CFR 1910.1001-1050)

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants Not regulated.

(HAPs) List

Clean Air Act (CAA) Section 112(r) Accidental Release

Prevention (40 CFR 68.130)

Safe Drinking Water Act (SDWA)

Not listed.

Not listed

Not regulated.

Not regulated.

16. Other information, including date of preparation or last revision

Issue date 11/6/2017

Revision date Version #

Revision Information

Disclaimer

While the information contained herein is presented in good faith and believed to be accurate, it is provided for your guidance only. Because many factors may affect processing or application, we recommend that you make tests to determine the suitability of a product for your particular purpose prior to use. No warranties of any kind, either expressed or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding products described or information set forth, or that the products, or information may be used without infringing the intellectual property rights of others. In no case shall the information provided be considered a part of our terms and conditions of sale. Further, you expressly understand and agree that the information furnished by our company hereunder is given gratis and we assume no obligation or liability for the

information given or results obtained, all such being given and accepted at your risk. Composition / Information on Ingredients: Ingredients

Physical & Chemical Properties: Multiple Properties

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