

1. IDENTIFICATION

Product identifier 4-18-38 Hydroponic Tomato Special
Synonyms None
Recommended use Water Soluble Fertilizer
Uses advised against None. Non-hazardous
Company Southern Agricultural Insecticides, Inc.
P.O. Box 218
Palmetto, FL 34220
Company Telephone/Fax (941) 722-3285/(941) 723-2974
Emergency Telephone Number For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident,
Call CHEMTREC Day or Night: 1-800-424-9300

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: Crystals **Physical State:** Solid **Odor:** Fertilizer

Hazards Not Otherwise Classified (HNOC):**Other Information:****3. COMPOSITION/INFORMATION ON INGREDIENTS**

Ingredients	CAS-No	%
Potassium Nitrate	7757-79-1	26.5
Potassium Sulfate	7778-80-5	31.6
Iron DTPA 11%	12389-75-2	3.64
Monoammonium Phosphate	7722-76-1	4.40
Monopotassium Phosphate	7778-77-0	31.3
Boric Acid	10043-35-3	1.10
Copper Sulfate	7758-99-8	0.20
Sodium molybdate	10102-40-6	0.03
Zinc EDTA 15%	14025-21-9	0.34

* 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

Ingestion: center or doctor for further treatment advice.
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: Dust at sufficient concentrations may form explosive mixtures with air.
Hazardous Combustion Products: Thermal decomposition can lead to release of irritating 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 dust formation. Avoid contact with skin, eyes and clothing. Wear personal protective equipment.
Environmental Precautions: Prevent product from entering drains.

Methods and Material for Containment and Cleanup:

Methods for containment: Vacuum or sweep up material and place in a disposal container.
Methods for Cleanup: Take up mechanically and collect in suitable container for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling:
Handling: Avoid container breakage. Avoid inhalation or contact with skin, eyes, or clothing.
Conditions for Safe Storage, Including any Incompatibilities:
Storage: Store in a cool, dry area away from incompatible materials and heat sources.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters:

Exposure Guidelines:

Ingredients	CAS-No	ACGIH:	OSHA:	IDLH:
Potassium Nitrate	7757-79-1	Not Listed	Not Listed	Not Listed
Boric Acid	12280-03-4	6 mg/m3	Not established	Not established
Copper Sulfate	7758-99-8	1 mg/m3	1 mg/m3	N/A
Monoammonium Phosphate	7722-76-1	5 mg/m3 TWA (respirable)	Not available	Not available

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:	Eye/face protection is not required, but is recommended in manufacturing situations where contact may occur. Safety glasses with side shields or goggles.
Skin and Body Protection:	No special protective clothing is required under normal workplace conditions. 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:	Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties:

Physical State:	Solid	Appearance:	Crystals
Color:	Very pale blue	Odor	No information available
Odor:	Fertilizer	Threshold:	

Property

pH:	No information available :
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:	No information available
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:	Highly soluble (>80%)
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:	55-75 lbs/cu.ft.

10. STABILITY AND REACTIVITY

Reactivity:	Stable under normal conditions
Chemically Stable:	yes.
Conditions to Avoid:	Extreme heat. Damp or wet conditions. Dust may form explosive mixture in air.
Materials to avoid	Strong oxidizing agents.

Hazardous Decomposition

Combustion may produce irritating gases and vapors.

Products:**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):**

General information: Chronic exposure to nitrates may cause weakness, depression, headache, blood changes (anemia and methemoglobinemia), and kidney injury (nephritis)

Eye effects: May cause eye irritation with susceptible persons

Skin effects: May cause skin irritation in susceptible persons

Ingestion: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Inhalation: May cause irritation of respiratory tract.

Component Information:

Ingredients	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium Nitrate 7757-79-1	= 3015 mg/kg (Rat)	> 2000 mg/kg	> 527 mg/m3
Boric Acid 12280-03-4	= 3765 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	>2.03mg/L (Rat)
Copper Sulfate 7758-99-8	352 mg/kg (Rat)	> 5050 mg/kg (Rabbit)	N/A

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

Sensitization: May cause sensitization of susceptible persons

Mutagenic effects No information available.

Carcinogenicity:

Ingredients	ACGIH - Carcinogens	IARC:	NTP Report on Carcinogens List	OSHA
Boric Acid 12280-03-4	N/A	-	-	-

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Reproductive Toxicity

STOT - Single Exposure

STOT - Repeated Exposure

Aspiration Hazard

No Information available.

No Information available.

No Information available.

No Information available.

12. ECOLOGICAL INFORMATION**Ecotoxicity:****Unknown Aquatic Toxicity:**

0.32 of the mixture consists of components(s) of unknown hazards to the aquatic environment

Ecotoxicity effects:

May be toxic to aquatic organisms.

Persistence and degradability:

degrades slowly.

Ingredients

Boric Acid)
12280-03-4

LOG POW

-0.757 (based on

Mobility:

Water contaminating.

Additional ecological information:

Do not contaminate water by cleaning of equipment or disposal of wastes. Do not apply directly to lakes, streams, or ponds.

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: 1

HMIS: Health: 1 Flammability: 0 Reactivity: 1

Disclaimer

This information contained herein is, to the best of Southern Agricultural Insecticides' knowledge and belief, accurate and reliable as of the date of preparation of this document. However, no warranty or guarantee, express or implied, is made as to the accuracy or reliability, and Southern Agricultural Insecticides shall not be liable for any loss or damage arising out of the use thereof. No authorization is given or implied to use any patented invention without a license. In addition, Southern Agricultural Insecticides resulting from abnormal use, from any failure to adhere to recommended practices or from any hazards inherent in the nature of the product.

End of Safety Data Sheet
6/1/2018