

1. IDENTIFICATION

Date of issue: April 2015
Product Name: 10-30-20 Bloom Booster
Recommended Use: Water Soluble Fertilizer
Restrictions on Use: None
Company: Southern Agricultural Insecticides, Inc
 P.O. Box 218
 Palmetto, FL 34220
 (941) 722-3285 Chemtrec (800) 424-9300 (24 hour transportation spill response)

2. HAZARD(S) IDENTIFICATION

Classification of the mixture: Classification by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)
 Hazard class and category: Not a hazardous substance or mixture



Signal word: Warning

Hazard Statements

May cause eye irritation May be harmful if swallowed
 May cause mild skin irritation May cause irritation if inhaled.

Precautionary Statements: Keep away from flammable / combustible / reducing materials.

Wear protective gloves / protective clothing.. Wash hands and face thoroughly after handling.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

In case of fire: use any suitable mean for extinguishing surrounding fire. Spray water for small fires. For large fires flood with abundant water

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS-No	Weight %
Monoammonium Phosphate	7722-76-1	47%
Potassium Nitrate; KNO ₃	7757-79-1	41%
Sodium borate	12280-03-4	<1%

4. FIRST AID MEASURES

General information

In case of persisting adverse effects consult a physician. Never give anything by mouth to an unconscious person or a person with cramps.

In case of inhalation

Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention for any breathing difficulty.

In case of skin contact

Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

In case of ingestion

Rinse mouth and drink plenty of water. Do not induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

Important symptoms and effects, both acute and delayed

The following symptoms may occur:

In case of inhalation: Irritation to respiratory tract. Delayed lung effects after short term exposure to thermal degradation products.
 In case of skin contact: May cause redness or irritation
 In case of eye contact: May cause redness or irritation
 In case of ingestion: Ingestion of large amounts may cause gastrointestinal disturbances.

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 vapours.
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. Keep upwind of fire

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Personal Precautions: Wear suitable protective clothing.
 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: 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. Do not contaminate water sources when disposing of equipment wash waters. Keep out of lakes, streams or ponds. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

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 Guidelines:

Ingredients	CAS-No	ACGIH:	OSHA:	IDLH:
Monoammonium phosphate	7722-76-1	Not Listed	Not Listed	Not Listed
Potassium Nitrate; KNO ₃	7757-79-1	Not Listed	Not Listed	Not Listed

Sodium Botate	2280-03-4	TWA 2 mg/m (inhal. fraction) STEL/ceiling 6 mg/m (inhal. fraction)	5 mg/m ³	Not available
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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: If airborne levels are high or product does not remain intact, use a combination of engineering controls (e.g. ventilation) and personal protection, e.g., NIOSH/MSHA approved respirator for dusts, mists, and fumes.

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 Crystals
Color: Light Blue
Odor: Fertilizer

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
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: Approx. 50lb/cu ft..

10. STABILITY AND REACTIVITY

Reactivity: Stable under normal conditions
Chemically Stable: yes.
Conditions to Avoid: Extreme heat. Contact with fuels and other organic or combustible materials. Active metals such as aluminum, magnesium, and chlorine compounds. Contact with strong alkalis, oxidizers, and reducing agents.

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

Hazardous Decomposition: Contact with acids liberates very toxic gas. Toxic metal oxides may be produced.

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):

Eye effects: Contact with eyes may cause irritation
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:

There is no information for the mixture in itself.

Ingredients	LD50 Oral	LD50 Dermal	LC50 Inhalation
Monoammonium phosphate (US)	- 5750 mg/kg (Rat)	> 7940 mg/kg (Rabbit)	-
Potassium Nitrate; KN03	= 3015 mg/kg (Rat)	> 2000 mg/kg	>527 mg/m ³
Sodium Borate	STEL/ceiling	6 mg/rn' (inhal. fraction)	

Information on Toxicological Effects:

Irritant and corrosive effects

Irritation to the skin	Result	Method
Potassium nitrate	non-irritant.	Equivalent/similar to OECD guideline 404
Sodium Borate	non-irritant.	Equivalent/similar to OECD guideline 404

Assessment / classification: Based on available data, the classification criteria are not met.

Genetic effects

The product does not contain ingredients classified as germ cell mutagens.

	Bacterial (Ames Test)	Chromosomal aberrations	Mutation in mammalian cell:
Potassium nitrate	negative	negative	negative
Sodium Borate	negative	negative	negative

Assessment / classification: Based on available data, the classification criteria are not met.

Reproductive toxicity

Adverse effects on sexual function and fertility/developmental toxicity

OECD guideline 422.

Potassium nitrate No adverse effects on fertility/development (NOAEL >1500 mg/kg bw).

Sodium Borate NOAEL (male rats): 17.5 mg B/kg bw/day (Multigeneration study)

fertility Has been shown to adversely affect male reproduction in laboratory animals, however, male reproductive effects attributable to boron have not been demonstrated in studies of highly exposed workers.

Developmental toxicity Benchmark dose (BMDLOS): 10.3 mg B/kg bw/day

Developmental effects have been observed in laboratory animals. The critical effect is considered to be decreased fetal body weight in rats. There is no evidence of developmental effects in humans attributable to soluble boron in studies of populations with high exposures to soluble boron.

Assessment / classification: Based on available data for ingredients of the mixture, this product does not contain sufficient amounts to be considered hazardous.

Specific target organ toxicity (single exposure)

The product does not contain relevant ingredients classified as Target Organ Toxicant after single exposure.

Potassium nitrate No relevant effect have been observed after single exposure to potassium nitrate.

Sodium Borate No relevant effect have been observed after single exposure to the substance.
No reliable study supports the designation of boric acid as a respiratory irritant.

Assessment / classification: Based on available data, the classification criteria are not met

Specific target organ toxicity (repeated exposure)

	Organs affected:	Effects	Guideline
Potassium nitrate	None	No effects (NOAEL >1500 mg/kg bw)	OECD 422
Sodium Borate	Testes	NOAEL(chronic rat): 17.5 mg B/kg bw/day	

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Ecotoxicity effects: May be toxic to aquatic organisms.

Persistence and degradability: Not applicable, since inorganic substance.

Mobility: Soluble in water

Other adverse effects: Substances, which contribute to eutrophication: Phosphates.

13. DISPOSAL CONSIDERATIONS

Disposal of Wastes: The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with waterways, drains, and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Contaminated Packaging: Do not reuse container. Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

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.

US State Regulations: Nothing found

California Proposition 65: Nothing found

EPA Pesticide Registration Number: not applicable

16. OTHER INFORMATION

NFPA: Health: 1 Flammability: 0 Reactivity: 1

HMIS: Health: 1 Flammability: 0 Physical Hazard: Not known

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Southern Agricultural Insecticides, Inc. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Southern Agricultural Insecticides, Inc has been advised of the possibility of such damages.

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