NutriStart BOOST (14-12-4-6S)

Safety Data Sheet

Revision Date: 9/4/2020 Version 1.3

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Name: NutriStart BOOST (14-12-4-6S)

Product Form: Mixture

Synonyms: NutriStart BOOST, NPKS, NPK Fertilizer with Sulfur, 14-12-4-6S

1.2. Intended Use of the Product

Agricultural Industry: Fertilizer

1.3. Name, Address, and Telephone of the Responsible Party

Marco NPK
201 East Benton Street
Clinton, IL 61727
(217) 935-2178
www.marconpk.com

1.4. Emergency Telephone Number

For Transportation Emergencies call Hazmat Response at (800) 229-5252
For Other Emergencies call 911 and/or Appropriate Regulatory Agencies

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US Classification

Not Classified

2.2. Label Elements

GHS-US Labeling: Not hazardous according to the established criteria.

Hazard Pictograms (GHS-US): None.

Signal Word (GHS-US): None.

Hazard Statements (GHS-US): This mixture does not meet the criteria for classification.

Precautionary Statements (GHS-US): P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P280 - Wear protective gloves, protective clothing, and eye protection.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.

2.3. Other Hazards

Hazardous to the aquatic environment.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixture

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Ammonium polyphosphate	(CAS No) 68333-79-9	52-60	Not classified
Potassium chloride	(CAS No) 7447-40-7	3-11	Eye Irrit. 2B, H320
Ammonium Thiosulfate	(CAS No) 7783-18-8	22-26	Mild Skin Irrit. 3, H316
Water	(CAS No) 7732-18-5	10-17	Not classified

Full text of H-Phrases: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: Remove person to fresh air. No known significant effects. Seek medical attention for any signs of wheezing and/or breathing difficulties. For additional advice call the medical emergency number on this SDS or your poison center or medical provider.

Skin Contact: No known significant effects. Rinse the affected areas with water. Remove contaminated clothing, jewelry, and shoes. Wash/clean items before reuse. Seek medical attention for persistent skin pain or irritation. For additional advice call the medical emergency number on this SDS or your poison center or medical provider.

Eye Contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Ingestion: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: Irritation to eyes, skin and respiratory tract.

Inhalation: None expected under normal conditions of use. Overexposure may be irritating to the respiratory system.

Skin Contact: May cause mild skin irritation.

Eye Contact: May cause eye irritation.

Ingestion: If a large quantity has been ingested: Abdominal pain. Diarrhea. Nausea. Vomiting.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Non-flammable. Material will not burn. Use an extinguishing agent suitable for the surrounding fire.

Unsuitable Extinguishing Media: None known.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: If involved in a fire the following toxic and/or corrosive fumes may be produced by the thermal decomposition: Ammonia. Hydrogen chloride. Chlorine gas. Ammonium sulfate. Sulfur. Oxides of sulfur.

Explosion Hazard: Product is not explosive.

Reactivity: Stable at ambient temperture and under normal conditions of use.

5.3. Advice for Firefighters

Firefighting Instructions: Keep upwind. Under conditions of fire this material may produce: Ammonia. Sulfur. Hydrogen chloride. Chlorine gas. Ammonium sulfate. Oxides of sulfur.

Protection During Firefighting: Wear full fire-fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

Other information: Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

6.1.1. For Non-Emergency Personnel

Protective Equipment: Wear suitable protective clothing, gloves and eye/face protection.

Emergency Procedures: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Ventilate area.

6.1.2. For Emergency Personnel

Protective Equipment: Wear suitable protective clothing, gloves and eye/face protection.

Emergency Procedures: If possible, stop flow of product. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Contact competent authorities after a spill.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material, then place in suitable container. Do not take up in combustible material such as: saw dust or cellulosic material. Contact competent authorities after a spill.

6.4. Reference to Other Sections

No additional information available.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: When heated, material emits irritating fumes.

Precautions for Safe Handling: Handle in accordance with good industrial hygiene and safety procedures. Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product.

Hygiene Measures: Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions: Store tighly closed in a dry, cool and well-ventilated place.

Incompatible Materials: Copper bearing alloys and aluminum.

7.3. Specific End Use(s)

Agricultural Industry: Fertilizer

SECTION 8: EXPORURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

There are no established Exposure limits.

8.2. Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment: Gloves. Safety glasses. Protective clothing.

Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: Handle in accordance with good industrial hygiene and safety practice. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

Respiratory Protection: Not required for normal conditions of use.

Environmental Exposure Controls: Ensure adequate ventilation, especially in confined areas.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State: Liquid

Appearance: Green clear Liquid

Odor:	Ammonia
Odor Threshold:	Not available
pH:	6.1-7.7
Evaporation Rate:	Not available
Melting Point:	Not available
Freezing Point:	Not available
Boiling Point:	Not available
Flash Point:	Not available
Auto-ignition Temperature:	Not available
Decomposition Temperature:	Not available
Flammability (solid, gas):	Not available
Lower Flammable Limit:	Not available
Upper Flammable Limit:	Not available
Vapor Pressure:	Not available
Relative Vapor Density at 20C:	Not available
Relative Density	10.6 - 10.9 lbs/gal
Solubility:	Miscible
Partition Coefficient: N-Octanol/Water:	Urea: -1.59, Ammonium Nitrate: -3.1
Viscosity:	97 cP
Explosion Properties:	None known

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Stable at ambient temperature and under normal conditions of use.

10.2. Chemical Stability: Stable at standard temperature and pressure.

10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

10.4. Conditions to Avoid: High temperature.

10.5. Incompatible Materials: Copper bearing alloys and aluminum.

10.6. Hazardous Decomposition Products: Ammonia. Hydrogen clorine gas. Carbon oxide. Nitrogen oxide. Sulfur oxides. Sulfur. Ammonium sulfate. Ammonium Sulfate.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

Acute Toxicity:	Not classified
LD50 and LC50 Data:	Not available
Skin Corrosion/Irritation:	Not classified
ph:	6.1-7.7
Serious Eye Damage/Irritation:	Causes eye irritation.
ph:	6.1-7.7
Respiratory or Skin Sensitization:	Not classified
Germ Cell Mutagenicity:	Not classified
Teratogencity:	Not classified
Carcinogenicity:	Not classified
Specific Target Organ Toxicity (Repeated Exposure):	Not classified
Reproductive Toxicity:	Not classified
Specific Target Organ Toxicity (Single Exposure):	Not classified
Aspiration Hazard:	Not classified

11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Water (7732-18-5)	
LD50 Oral Rate	>90000 mg/kg
Ammonium polyphospate (68333-79-9)	
LD50 Oral Rate	4740 mg/kg
Potassium chloride (7447-40-7)	

LD50 Oral Rate	2600 mg/kg
Ammonium thiosulfate (7783-18-8)	
LD50 Oral Rate	1950 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity:

Ecotoxicity	EPA Ecological Toxicity Rating:	Slightly toxic to practically non-toxic to aquatic organisms based on the Federal Insecticide Fungicide and Rodenticide Act (FIFRA) acute toxicity ratings.
	Acute Toxicity to Fish:	(Oncorhynchus mykiss) 96-hr: LC50 => 101 mg/L
	Chronic Toxicity to Fish:	No data available.
	Acute Toxicity to Aquatic Invertebrates:	No data available.
	Chronic Toxicity to Aquatic Invertebrates:	No data available.
	Toxicity to Aquatic Plants:	No data available.
	Toxicity to Soil Dwelling Organisms:	No data available.
	Toxicity to Terrestrial Plants:	No data available.
Environmental Fate:	Stability in Water:	Stable.
	Stability in Soil:	Behaves as salts.
	Transport and Distribution:	No data available.
Toxicity:	Inorganic phosphates have the potential to increase the growth of freshwater algae, whose eventual death will reduce the available oxygen for aquatic life.	
Degradation Products:	Biodegradation:	The Phosphorus cycle is well understood.
	Photodegradation:	No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Sewage Disposal Recommendations: This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

Waste Disposal Recommendations: Place in an appropriate container and dispose of the contaminated material at a licensed site.

SECTION 14: TRANSPORT INFORMATION

14.1. In Accordance with DOT Not regulated for transport

14.2. In Accordance with IMDG Not regulated for transport

14.3. In Accordance with IATA Not regulated for transport

14.4. In Accordance with TDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

Water (7732-18-5)
Listed on the United States TSCA (Toxic Substances Control Act) Inventory
Ammonium polyphospate (68333-79-9)
Listed on the United States TSCA (Toxic Substances Control Act) Inventory
Potassium chloride (7447-40-7)
Listed on the United States TSCA (Toxic Substances Control Act) Inventory
Ammonium thiosulfate (7783-18-8)
Listed on the United States TSCA (Toxic Substances Control Act) Inventory

15.2. US State Regulations

If you are located in a state that has an OSH program approved by OSHA, you may be under state jurisdiction rather than federal jurisdiction and your state may have more stringent requirements than OSHA. You should consult your state regulations to ensure compliance.

15.3. Canadian Regulations

This product is not offered for sale in Canada.

SECTION 16: OTHER INFORMATION

GHS Full Text Phrases:

Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Mild Skin Irrit. 3	Mild skin irritation Category 3
H316	Causes mild skin irritation
H320	Causes eye irritation.

NFPA Health Hazard: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA Fire Hazard: 0 - Materials that will not burn.

NFPA Reactivity: 0- Normally stable, even under fire exposure conditions, and area not reactive with water.

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