

OptiStart/Five

SAFETY DATA SHEET (SDS)


OSHA Haz Com Standard 29 CFR 1910.1200. Prepared to GHS Rev03.



SECTION 1: Identification

- 1.1. Product identifier
Product Form : Liquid
Product Name : OptiStart/Five
- 1.2. Recommended use / restrictions of use
: Agricultural fertilizer. No restrictions.
- 1.3. Details of the supplier of the data sheet
: United Suppliers Inc.
Ames, IA 50010
T 1-515-509-2400
- 1.4. Emergency telephone number
Emergency number : CHEMTREC 1-800-424-9300

SECTION 2: Hazards Identification

- 2.1. Classification of the substance or mixture
: Skin irritant (H315), eye irritant (H320)
- 2.2. Label elements
Hazard pictograms  GHS07
- Signal word : Warning
- Hazard statements : H315 – Causes skin irritation
H320 – Causes eye irritation
- Precautionary statements : P280 – Wear protective gloves/eye protection
P305+P351 – If in eyes: Rinse cautiously with water for several minutes
P337+P313 – If eye irritation persists: Get medical advice/attention
- 2.3. Other hazards
: No additional hazards
- 2.4. Unknown acute toxicity
: No data available

SECTION 3: Composition/information on ingredients

- 3.1. Substance
: Not applicable

3.2. Mixture

Ingredient name	Product identifier (CAS No.)	%
Ammonium Polyphosphate	68333-79-9	30 - 35
Ammonium Thiosulfate	7783-18-8	15 - 20
Potassium Chloride (Muriate of Potash)	7447-40-7	8 - 10
Various micronutrients*	-	5 - 6
Water	7732-18-5	30 - 40

*The specific chemical identity and concentrations have been withheld as a trade secret.

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SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Not considered to be an inhalation hazard.
- First-aid measures after skin contact : Wash with water and soap. If irritation persists, seek medical attention.
- First-aid measures after eye contact : Flush eyes with running water for at least 15 minutes. If irritation persists, seek medical attention.
- First-aid measures after ingestion : Give large amounts of water and induce vomiting. Call Poison Control Center or seek medical attention immediately.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : None.
- Symptoms/injuries after skin contact : May cause slight skin irritation.
- Symptoms/injuries after eye contact : May cause eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

: No additional information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam, dry chemical, carbon dioxide, water fog.
- Unsuitable extinguishing media : Water spray.

5.2. Special hazards arising from the substance or mixture

: Product is classified as non-flammable. However, ammonia fumes may form from burning.

5.3. Advice for firefighters

- Firefighting instructions : None.
- Protection during firefighting : Wear positive pressure, self-contained breathing apparatus. Avoid fume inhalation.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment, and emergency procedures

- Protective equipment : Wear gloves and cover skin. Use eye protection.
- Emergency procedures : None required.

6.2. Environmental precautions

: Prevent entry to sewers and public surface waters.

6.3. Methods and material for containment and cleaning up

- Clean-up methods : Contain spill and pump into containers. Collect residue with absorbent material. Store all spill materials in suitable containers for recycle/disposal.

6.4. Reference to other sections

: See Section 7 for safe handling information.
See Section 8 for PPE information.
See Section 13 for disposal information.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Safe handling precautions : Avoid contact with skin and eyes. After handling product, remove clothing and launder, and wash hands/exposed skin thoroughly with soap and water. Avoid breathing vapors. Avoid contamination of feed or foodstuffs.

Fire/explosion precautions : No special measures required.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Storage is suitable in vessels of following materials: high density polyethylene (HDPE), fiberglass, fiberglass reinforced plastic (FRP), stainless steel. Storage vessel must be able to accommodate the product density.

Incompatible materials : Slightly reactive with oxidizing agents, non-stainless steel metals, and alkalis.

7.3. Specific end use(s)

: No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ACGIH Threshold Limit Value : Not established.

OSHA Permissible Exposure Limit : Not established.

8.2. Exposure controls

Appropriate engineering controls : No special requirements.

Personal protective equipment : Hand, skin, eye.

Hand protection : Wear protective gloves. Glove material: Any.

Eye protection : Safety goggles or face shield.

Skin and body protection : Wear long sleeved clothing and other suitable clothing to prevent skin exposure.

Respiratory protection : Not normally needed. Product considered a non-inhalation hazard.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid	Evaporation rate	: Not determined
Color	: Clear green	Flammability	: Non-flammable
Odor	: No apparent odor	Flash point	: Does not flash
Odor threshold	: No data available	Explosive limit (upper)	: No data available
Boiling point	: No data available	Explosive limit (lower)	: No data available
Melting point	: Not applicable	Auto ignition temp.	: No data available
Freezing point	: < 0° F	Decomposition temp.	: No data available
Vapor pressure	: No data available	Partition coefficient	: No data available
Vapor density	: No data available	Viscosity, kinematic	: No data available
pH	: 5.3 – 5.5	Viscosity, dynamic	: No data available
Specific gravity	: 1.32	Octanol/Water Part. Coeff.	: No data available
Density	: 11.03 lbs/gal		
Solubility	: Soluble in water		

9.2. Other information

: No further information available.

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SECTION 10: Stability and reactivity

- 10.1. Reactivity : No further relevant information available.
- 10.2. Chemical stability : The product is stable under normal ambient conditions.
- 10.3. Possibility of hazardous reactions : No further relevant information available.
- 10.4. Conditions to avoid : No further relevant information available.
- 10.5. Incompatible materials : Slightly reactive with oxidizing agents, non-stainless steel metals, and alkalis.
- 10.6. Hazardous decomposition products : Burning may result in formation of ammonia fumes.

SECTION 11: Toxicological information

- 11.1. Information on toxicological effects
- Routes of exposure : Skin contact, eye contact, ingestion.
- Skin corrosion/irritation : Causes slight skin irritation.
- Eye damage/irritation : Causes eye irritation.
- Acute toxicity : Not classified.
- Carcinogenicity : Not classified.
- Reproductive toxicity : Not classified.
- LD50 : Not established.
- Symptoms/injuries after skin contact : Causes slight skin irritation.
- Symptoms/injuries after eye contact : Causes eye irritation.
- Symptoms/injuries after inhalation : None. Not considered an inhalation hazard.
- Symptoms/injuries after ingestion : May cause stomach cramps and/or nausea.
- NTP (*National Toxicology Program*) : Substance is not listed.
- IARC (*International Agency for Research on Cancer*) : Substance is not listed.

SECTION 12: Ecological information

- 12.1. Toxicity : No testing data available.
- 12.2. Persistence and degradability : Aquatic toxicity: will release ammonium ions in water by hydrolysis. Ammonia is toxic to aquatic organisms. Avoid spills/releases to surface waters.
- 12.3. Bioaccumulative potential : No data available.
- 12.4. Mobility in soil : Non-persistent when applied using normal agricultural practices.
- 12.5. Other adverse effects : No further relevant information available.

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Recycle excess product if at all possible. Avoid sewage and landfill disposal.
Do not discharge waste effluents to surface waters.

Waste containers : Do not use metal waste containers.

13.2. Reference to other sections

: See Section 8 for exposure control information.

SECTION 14: Transport information

14.1. Transport information

UN-Number : None

DOT, ADR, ADN, IATA, IMDG : Non-regulated material

UN proper shipping name : Not regulated for transportation

Transport hazard class : Not regulated

Class – DOT, ADR, ADN, IATA, IMDG : Non-regulated material

Packing group – DOT, ADR, IMDG, IATA : Non-regulated material

Environmental hazards: Marine pollutant IMDG : Not classified as a marine pollutant

Transport in bulk according to Annex II of MARPOL 73/78 and IBC code : Not applicable

Special precautions for user : None

SECTION 15: Regulatory information

15.1. US Federal regulations

SARA 302 (EHS) : Product is not listed.

SARA 313 (TRI) : Zinc compounds (0.5%), Manganese compounds (> 0.1%).

15.2. International regulations

Canada : Product is listed on Domestic Substances List.

European Union : Product is not listed.

15.3. US State regulations

: None.

SECTION 16: Other information

16.1. Other information

Date of preparation/last revised : 10/21/2016

For further health, safety, or environmental information on this product, contact : United Suppliers Inc.
Loss Control Dept.
T 1-641-858-2341

Disclaimer: The information provided in this Safety Data Sheet is correct to the best of our knowledge and belief at the date of its publication. The information is designed only as guidance for safe handling, use, storage, transportation, and disposal, and is not to be considered a warranty (express, implied, merchantability or fitness for any particular purpose) or quality specification. The information relates only to the specific material designated therein.