Liquid Fertilizer

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Date of issue: 09/27/2019 Revision date: 04/21/2023 Version: 2.0

SECTION 1: Identification

1.1. Identification

Product form	:	Mixture
Product type	:	Liquid Fertilizer
Product name	:	Ammonium Thiosulfate Solution
Product code	:	12-0-0-26 11-0-0-24

1.2. Recommended use and restrictions on use

Use of the substance/mixture	:	Agricultural Application

1.3. Supplier

Manufacturer
Gavilon Fertilizer LLC
5 Skidaway Village Walk
Savannah, GA 31411 - USA
T 1-912-598-8392
sds@macrosource.com - www.macrosource.com

1.4. Emergency telephone number

Emergency number	:	CHEMTREC 1 (800) 424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labeling

No labeling applicable

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Ammonium thiosulfate	(CAS-No.) 7783-18-8	52-57
Water	(CAS-No.) 7732-18-5	35-43
Ammonium sulfate	(CAS-No.) 7783-20-2	2.5-3
Ammonium sulfite	(CAS-No.) 10196-04-0	2-2.5

Comments : This Safety Data Sheet is not a guarantee of product specification or NPK value(s). NPK content is on specified sales orders, customer invoices, or product specification sheets obtained from the supplier.

All concentrations are in percent weight.

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact : If skin irritation occurs: Wash skin with plenty of water. Obtain medical attention if irritation persists.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : May cause irritation to the respiratory tract.

Symptoms/effects after skin contact : May cause skin irritation. Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

4.3. Immediate medical attention and special treatment, if necessary

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : None known.

5.2. Specific hazards arising from the chemical

Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon. Ammonia. Oxides of sulfur.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment.

Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal. Provide ventilaiton

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Benzene may be present in trace amounts. Benzene is subject to the standard 29 CFR 1910.1028 which may contain specific requirements for handling including protective equipment, regulated areas, monitoring and medical surveillance. The employer should review the standard and assure compliance with applicable requirements.

Hygiene measures : Wash contaminated clothing before reuse. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store in a dry, cool area.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Water (7732-18-5)
Not applicable

Ammonium thiosulfate (7783-18-8)
Not applicable

Ammonium sulfate (7783-20-2)
Not applicable

Ammonium sulfite (10196-04-0)
Not applicable

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Wear suitable gloves

Eye protection:

Safety glasses or goggles are recommended when using product.

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Other information:

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear to pale yellow liquid.
Color	: Clear to pale yellow.
Odor	: Mild ammonia
Odor threshold	: No data available
pH	: 7 - 8
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: Not flammable
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: 10.5 - 11.5 lb/gal
Solubility	: No data available
Partition coefficient n-octanol/water	: No data available
Auto-ignition temperature	: Not flammable
Decomposition temperature	: No data available
Viscosity, kinematic	: Not applicable

Viscosity, dynamic	: Not applicable
Explosion limits	: Not flammable
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat. Incompatible materials.

10.5. Incompatible materials

Oxidizing agents. Acids.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. Ammonia. Oxides of sulfur.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Water (7732-18-5)	
LD50 oral rat	> 90 ml/kg

Ammonium thiosulfate (7783-18-8)	
LD50 oral rat	1950 mg/kg
ATE US (oral)	1950 mg/kg body weight

Ammonium sulfate (7783-20-2)	
LD50 oral rat	2840 mg/kg
LD50 dermal rat	> 2000 mg/kg
ATE US (oral)	2840 mg/kg body weight

Skin corrosion/irritation	: Not classified pH: 7 - 8
Serious eye damage/irritation	: Not classified pH: 7 - 8
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Symptoms/effects after inhalation	: May cause irritation to the respiratory tract.
Symptoms/effects after skin contact	: May cause skin irritation. Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/effects after ingestion	: May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Other information : Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

Ammonium sulfate (7783-20-2)	
LC50 fish 1	250 mg/l (Exposure time: 96 h - Species: Brachydanio rerio)
EC50 Daphnia 1	14 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2	480 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [flow-through])

12.2. Persistence and degradability

Liquid Fertilizer	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Liquid Fertilizer	
Bioaccumulative potential	Not established.

Ammonium sulfate (7783-20-2)	
Partition coefficient n-octanol/water	-5.1 (at 25 °C)

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : No other effects known.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Water (7732-18-5)	
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	

Ammonium sulfate (7783-20-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

Ammonium sulfite (10196-04-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
CERCLA RQ	5000 lb

The mixture is subject to reporting under SARA Section 313:

- For aqueous ammonia compounds due to the presence of ammonium compounds: 1.0 % de minimis concentration (10% of total aqueous ammonia is reportable under this listing)

15.2. International regulations

No additional information available

15.3. US State regulations

⚠ WARNING: This product can expose you to Benzene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

Date of issue	:	09/27/2019
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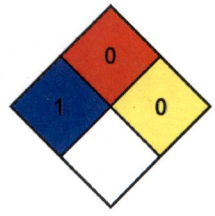
Other information	:	None.
Prepared by	:	Nexreg Compliance Inc. www.Nexreg.com

NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



HMIS Rating

Health : 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

SDS US (GHS HazCom 2012)_NEXREG_NEW_Section15

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