Safety Data Sheet

Section 1 Identification

(a) GHS product identifier; **Tara-AmS (12-0-0)**
(b) Other means of identification; **Inorganic Salt Solution**
(c) Recommended use of the chemical and restrictions on use; **Fertility**
(d) Supplier's details (including name, address, phone number etc.); **Tara Solutions, LLC P.O. Box 13452, Tampa, FL 33681. Office: 813-563-1463.**
(e) Emergency phone number. **CHEMTREC 1-800-424-9300**

Section 2 Hazard Identification

(a) GHS classification of the substance/mixture and any national or regional information; **liquid proprietary fertility blend**
(b) GHS label elements, including precautionary statements; **Warning: Causes skin irritation, Causes eye irritation, Harmful if swallowed, May cause respiratory irritation.**
(c) Other hazards which do not result in classification (e.g. "dust explosion hazard") or are not covered by the GHS. **Aquatic toxocity**

Section 3 Product Composition

Substance
(a) Chemical identity; **Thiosulfuric acid ($H_2S_2O_3$), diammonium salt**
(b) Common name, synonyms, etc.; **Ammonium Thiosulfate Solution**
(c) CAS number and other unique identifiers; **7783-18-8**
(d) Impurities and stabilizing additives which are themselves classified and which contribute to the classification of the substance. **NA**
Mixture The chemical identity and concentration or concentration ranges of all ingredients which are hazardous within the meaning of the GHS and are present above their cut-off levels.

Section 4 First-Aid Measures

(a) Description of necessary measures, subdivided according to the different routes of exposure, i.e. inhalation, skin and eye contact and ingestion; **Eyes**: Immediately flush with large quantities of water for 15 minutes. Hold eyelids apart during irrigation to ensure thorough flushing of the entire area of the eye and lids. Obtain medical attention if irritation occurs. **Skin**: Immediately flush with large quantities of water. Remove contaminated clothing under a safety shower. Continue rinsing. Obtain medical attention if irritation occurs. Wash clothing before reuse. **Ingestion**: If victim is conscious, give 2 to 4 glasses of water and induce vomiting by touching finger to back of throat. Obtain medical attention. **Inhalation**: Remove victim from contaminated atmosphere. If breathing is labored, administer Oxygen. If breathing has ceased, clear airway and start CPR. Obtain medical attention.
(b) Most important symptoms/effects, acute and delayed: Eye contact may cause eye irritation. Repeated or prolonged skin contact may cause skin irritation. Ingestion may irritate the gastrointestinal tract.
(c) Indication of immediate medical attention and special treatment needed, if necessary. **n/a**

Section 5 Fire-fighting Measures

(a) Suitable (and unsuitable) extinguishing media. **Not flammable, use media suitable for combustibles**
(b) Specific hazards arising from the chemical (e.g. nature of any hazardous combustion products): Heating (flames) of closed or sealed containers may cause violent rupture of container due to thermal expansion of compressed gases. Heating causes release of ammonia vapors. Vapors are irritating to eyes, skin and respiratory tract. Heating to dryness may cause the release of Ammonia, Ammonium sulfate, Sulfur and Oxides of Sulfur (respiratory hazard).
(c) Special protective equipment and precautions for fire-fighters. Firefighters should wear self-contained breathing apparatus (SCBA) and full fire-fighting turnout gear. Keep containers/storage vessels in fire area cooled with water spray.

Section 6 Accidental Release Measures

(a) Personal precautions, protective equipment and emergency procedures. Use personal protective equipment specified in Section 8. Isolate the release area and deny entry to unnecessary, unprotected and untrained personnel.
(b) Environmental precautions. **Avoid contaminating bodies of water because of potential aquatic toxicity.**
(c) Methods and materials for containment and cleaning up. Stop the flow of material, if this is without risk. Collect and dispose of spillage as indicated in Section 13. Prevent entry into waterways, sewers, basements or confined areas. Pick up spills with absorbent material and place in suitable properly labeled containers.

Section 7 Handling & Storage

(a) Precautions for safe handling. Avoid contact with eyes. Use only in a well-ventilated area. Wash thoroughly after handling. Avoid prolonged or repeated breathing of vapors. Avoid prolonged or repeated contact with the skin.
(b) Conditions for safe storage, including any incompatibilities. Store in well-ventilated areas. Do not store combustibles in the area of storage vessels. Keep away from any sources of heat or flame. Store totes and smaller containers out of direct sunlight at moderate temperatures.

Section 8 Exposure Controls & Personal Protection

(a) Control parameters e.g. occupational exposure limit values or biological limit values. NA
(b) Appropriate engineering controls. Use adequate exhaust ventilation to prevent inhalation of product vapors. Maintain eye wash/safety shower in areas where product is handled.
(c) Individual protection measures, such as personal protective equipment. Eyes - Use chemical goggles. Skin - Neoprene rubber gloves and apron should be worn to prevent repeated or prolonged contact with the liquid. Wash contaminated clothing prior to reuse. Respiratory - None generally required. If conditions exist where mist may be generated, a NIOSH/MSHA approved mist respirator should be worn. Hygiene Considerations. There are no known hazards associated with this product when used as recommended, however common good industrial hygiene practices should be followed, such as washing thoroughly after handling and before eating or drinking.

Section 9 Physical & Chemical Properties

(a) Appearance (physical state, colour etc); **Colorless to yellow liquid.**
(b) Odor; **May have slight ammonia or organic odor**
(c) Odor threshold; **Ammonia – 0.037 ppm (0.026 mg/m3)**
(d) pH; **7-8**
(e) Melting point/freezing point; **30°F – 60°F (-1.1°C – 15.6°C)**
(f) Initial boiling point and boiling range; **210°F - 220°F (98.9°C - 104.4°)**
(g) Flash point; **NA**
(h) Evaporation rate; **Not determined**
(i) Flammability (solid, gas); **NA**
(j) Upper/lower flammability or explosive limits; (k) Vapour pressure; (l) Vapour density; (m) Relative density; **NA**
(n) Solubility(ies); **800 gm/L @ 20°C (water) 100% ammonium thiosulfate**
(o) Partition coefficient: n-octanol/water; (p) Auto-ignition temperature; **NA**
(q) Decomposition temperature; 302°F (150°C) 100% ammonium thiosulfate
(r) Viscosity. 4.7 Cp (0.0047 Pa s) at 25°C (77°F)

Section 10 Stability & Reactivity

(a) Reactivity **Avoid interaction with heat (flame), oxidizers, alkalis, or acids.**
(b) Chemical stability; **Product is stable under normal conditions**
(c) Possibility of hazardous reactions; **Strong oxidizers such as nitrates, nitrites or chlorates can cause explosive mixtures if heated to dryness.**
(d) Conditions to avoid (e.g. static discharge, shock or vibration); **High temperatures and fire conditions.**
(e) Incompatible materials; **Acids will cause a release of Sulfur dioxide, a severe respiratory hazard. Alkalis will accelerate the evolution of Ammonia. This product is not compatible with Copper, Zinc or their alloys (i.e. bronze, brass, galvanized metals, etc.). These materials of construction should not be used in handling systems or storage containers for this product.**
(f) Hazardous decomposition products. **Heating this product will evolve Ammonia. Heating to dryness will produce Ammonia, Ammonium sulfate, Sulfur and Oxides of Sulfur.**

Section 11 Toxicological Information

Concise but complete and comprehensible description of the various toxicological (health) effects and the available data used to identify those effects, including:
(a) information on the likely routes of exposure (inhalation, ingestion, skin and eye contact); **Ingestion, skin, inhalation, eye contact**
(b) Symptoms related to the physical, chemical and toxicological characteristics; **Discomfort, irritation, burning, wheezing, vision change**
(c) Delayed and immediate effects and also chronic effects from short and long term exposure; **No delayed or chronic effects anticipated**
(d) Numerical measures of toxicity (such as acute toxicity estimates). **NA**

Section 12 Ecological Information

(a) Ecotoxicity; Static acute 96 hour-LC50 for bluegills is 1,000 mg/L. Static acute 96 hour-LC50 for rainbow trout is 770 mg/L. Static acute 96 hour-LC50 for sheepshead minnow is > 1,000 mg/L. Static acute 96 hour-LC50 for mysid shrimp is 77 mg/L.

Section 13 Disposal Considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging. **Non-toxic. Perform in compliance with all federal, state and local regulations.**

Section 14 Transport Information

This material is not hazardous as defined by 49 CFR 172.101 by the US Department of Transportation

Section 15 Regulatory Information

This product has been reviewed according to the EPA Hazard Categories promulgated under Sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act (SARA) and is considered, under applicable definitions, to meet the following categories: Fire - No, Pressure - No, Acute - No, Chronic - No, Reactive - No

This product contains no substances subject to the reporting requirements of Title III (EPCRA) of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372

This product is not considered hazardous under the criteria of the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200)

Product is contained in USEPA Toxic Substance Control Act Inventory.

Section 16 Other Information

The above furnished information is believed to be correct on the date it was published. This SDS is provided without any warranty expressed or implied. Users should consider this data as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers and the protection of the environment.