Safety Data Sheet

Section 1 Identification

(a) GHS product identifier; **Tara Fe**
(b) Other means of identification; **SAFEFE+**
(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 serious 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. **NA**

Section 3 Product Composition

Substance
(a) Chemical identity; **Ammonium Iron Citrate**
(b) Common name, synonyms, etc.; **NA**
(c) CAS number and other unique identifiers; **Proprietary Blend**
(d) Impurities and stabilizing additives which are themselves classified and which contribute to the classification of the substance. **NA**

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 eyes with water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Call poision control center or doctor for treatment advice. **Skin**: Immediately flush skin with water while removing contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. **Ingestion**: If ingested consult a physician immediately. Do not induce vomiting. **Inhalation**: Use in well ventilated area, however if symptomatic, remove to fresh air.
(b) Most important symptoms/effects, acute and delayed. **Irritation, discomfort, pain, etc**
(c) Indication of immediate medical attention and special treatment needed, if necessary. **Contact with eyes.**

Section 5 Fire-fighting Measures

(a) Suitable (and unsuitable) extinguishing media. **Non-flammable.** Use extinguishing media appropriate to surrounding fire. Cool containers with water spray from a distance to avoid rupture from thermal expansion.
(b) Specific hazards arising from the chemical **NA** This product is an aqueous mixture which will not burn. In a fire, this material may decompose and produce ammonia, sulfur, sulfur oxides and oxides of nitrogen, carbon and iron.
(c) Special protective equipment and precautions for fire-fighters. Assure self-contained breathing apparatus and full protective gear is worn. Fire run-off should be contained to prevent possible environmental damage.

Section 6 Accidental Release Measures

(a) Personal precautions, protective equipment and emergency procedures. Isolate area. Keep unnecessary personnel away. Avoid splashing or spraying. Impervious gloves (rubber, neoprene or nitrile), long sleeved clothing, chemical splash-proof goggles, face shield, chemical resistant apron and/or rubber boots may be needed. Clothing and equipment can be washed or laundered for reuse.
(b) Environmental precautions. **Avoid contaminating bodies of water and prevent further leakage/spillage if safe to do so.**
(c) Methods and materials for containment and cleaning up. Stop flow of material if safe to do so. Dike area with diatomaceous earth or sand and maximize recovery. Avoid infiltration of large quantities into drains, surface water, groundwater and soil. Keep out of "waters of the U.S." because of potential aquatic toxicity. Pump into a suitable tank or absorb with diatomaceous earth or sand. Sweep up and place into suitable containers for agronomical land application at recommended rates or dispose of in accordance with local/regional/national regulations (See Section 13 of SDS).

Section 7 Handling & Storage

(a) Precautions for safe handling. Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Do not eat, drink or use tobacco products when handling this material. Apply product in open areas. Keep away from children and pets. Do not contaminate feed, seed or any water sources. Launder work clothes frequently and separate from other laundry.
(b) Conditions for safe storage, including any incompatibilities. Store in a well-ventilated, cool, dry place, away where freezing is possible. Keep away from any sources of heat or flame. Store locked up. Store totes and smaller containers out of direct sunlight at moderate temperatures. Keep containers tightly closed when not in use. Do not let product go below 32°F. Inspect all incoming containers before storage, to ensure containers are properly labeled and not damaged. Store in fiberglass, polypropylene, stainless steel (316L) and HD polyethylene.
(c) Incompatibilities. 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 piping, handling systems or storage containers for this product.

Section 8 Exposure Controls & Personal Protection

(a) Control parameters, component exposure limits. Iron Citrate and Ammonium Iron Citrate 1 mg/m3
(b) Appropriate engineering controls. Provide local exhaust ventilation and wash facilities.
(c) Individual protection measures, such as personal protective equipment. Eyes: chemical splash-proof goggles and face shield. Skin: Impervious gloves (rubber, neoprene or nitrile), long sleeved clothing and Chemically resistant apron. Respiratory: None required for ambient air concentrations (i.e. in the open under normal agronomic conditions). Use NIOSH approved respirator when dusts, mists, or vapors are present.

Section 9 Physical & Chemical Properties

(a) Appearance (physical state, colour etc); **Dark, clear, reddish-brown liquid.**
(b) Odor; **Rusty ammonia odor**
(c) Odour threshold; **NA**
(d) pH; **7.0-9.0**
(e) Melting point/freezing point; **NA/32F**
(f) Initial boiling point and boiling range; **216F**2(g) Flash point; **None flammable**
(h) Evaporation rate; **NA**
(i) Flammability (solid, gas); **None**
(j) Upper/lower flammability or explosive limits; (k) Vapor pressure similar to water; (l) Vapour density 1.21 to 1.23 g/cm3 ; (m) Relative density; **NA**
(n) Solubility(ies); **Water soluble**
(o) Partition coefficient: n-octanol/water; (p) Auto-ignition temperature; **NA**
(q) Decomposition temperature; (r) Viscosity. **NA**

Section 10 Stability & Reactivity

(a) Reactivity **Stable**
(b) Chemical stability; **Product is stable under normal conditions**
(c) Possibility of hazardous reactions; **No**
(d) Conditions to avoid (e.g. static discharge, shock or vibration); **Extreme or elevated temperatures**
(e) Incompatible materials; Strong oxidizing agents, strong acids, strong bases and water reactive substances. Not compatible with copper, zinc, or their alloys (i.e. bronze, brass, galvanized metals, etc.).
(f) Hazardous decomposition products. Heating this product will evolve ammonia. Decomposition will produce ammonia, sulfur, sulfur oxides and oxides of nitrogen, carbon and iron.

Section 11 Toxicological Information

(a) Likely routes of exposure; **Ingestion, skin, inhalation**
(b) Symptoms related to the physical, chemical and toxicological characteristics; Eyes: Contact with the eyes by product mist or solution may cause irritation or a burning sensation. Skin: Prolonged or repeated contact with product mist or solution may cause skin irritation. Absorption is unlikely to occur. Ingestion: Ingestion of product solution may cause irritation of the gastrointestinal tract to include nausea, vomiting and diarrhea. Inhalation: Inhalation of product mist may cause irritation of the nose, throat and respiratory tract.
(c) Delayed and immediate effects and also chronic effects from short and long term exposure; **None known**
(d) Numerical measures of toxicity (such as acute toxicity estimates). Iron Citrate: LD50 oral (rat): 1487 mg/kg (100% basis), ATE >2000 mg/kg in product Ammonium Sulfate: LD50 oral (rat): 2840 mg/kg Ammonium Iron Citrate: Not available

Section 12 Ecological Information

This product is not bioaccumulative. Not harmful to ozone layer.
(a) Exotoxicity Ammonium Sulfate: LC50 (48 hr) Daphnia magna (Water flea): 14 mg/L. Freshwater; static; LC50 (96 hr) Poecilia retiulata (guppy): 126 mg/L. Freshwater, renewal ; LC50 (96 hr) Oncorhynchus mykiss (Rainbow Trout): 36.7 mg/L. Freshwater, flow-through; Iron Citrate: Not available; Ammonium Iron Citrate : LD50 (96 hr) Anguilla japonica (Japanese Eel): 123 mg/kg bdwt, injection

Section 13 Disposal Considerations

(a) Disposal Instructions: Agronomical land application at recommended rates or dispose of in accordance with local/regional/national regulations. Containers may be triple rinsed and offered for recycling

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 - Yes, Chronic - N, Reactive - N

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

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.