Safety Data Sheet

Section 1 Identification

(a) GHS product identifier; **Tara Edge**
(b) Other means of identification; **NA**
(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; **Multiple glucose substances, 14% Urea Triazone, Ammonium Iron Citrate, other proprietary blend**
(b) Common name, synonyms, etc.; **Urea**
(c) CAS number and other unique identifiers; **57-13-6/Proprietary**
(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. **Urea 14.0%**

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**: Flush with clean water for 15 minutes. If irritation persists, consult a physician. As with all chemicals, eye protection should be used. **Skin**: Wash with soap and water. If irritation develops, consult physician. **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. Fire extinguisher/other**
(b) Specific hazards arising from the chemical (e.g. nature of any hazardous combustion products). **NA** 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 laundered for reuse.
(b) Environmental precautions. **Avoid contaminating bodies of water and/or areas directly effecting wildlife/populace.**
(c) Methods and materials for containment and cleaning up. Stop flow of material if safe to do so. 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 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 form other laundry.
(b) Conditions for safe storage, including any incompatibilities. Store in well ventilated, cool, dry place, away from where freezing is possible. Keep away from sources of heat or flame. Store totes and smaller containers our of direct sunlight at moderate temperatures. Keep containers tightly closed when not in use. Do not let product go below 32ºF.
(c) Incompatibilities. This product is not compatible with copper, zinc, or their alloys. These materials should not be used in piping, handling systems, or storage containers for this product.

Section 8 Exposure Controls & Personal Protection

(a) Control parameters e.g. occupational exposure limit values or biological limit values. 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. Repiratory: 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 brown/Black** (b) Odour; **Mild/Pungent/Rust/Ammonia** (c) Odour threshold; **NA** (d) pH; **6.0-9.0** (e) Melting point/freezing point; **NA/32F** (f) Initial boiling point and boiling range; **216F** (g) Flash point; **None flammable** (h) Evaporation rate; **NA** (i) Flammability (solid, gas); **None** (j) Upper/lower flammability or explosive limits; **NA** (k) Vapour pressure; similar to water (l) Vapour density; 1.21 to 1.23 g/cm3 (m) Relative density; **NA** (n) Solubility(ies); **Yes** (o) Partition coefficient: n-octanol/water; (p) Auto-ignition temperature; **NA** (q) Decomposition temperature; **NA** (r) Viscosity. **NA**
Section 10 Stability & Reactivity	(a)Reactivity **NA/Stable** (b) Chemical stability; **Yes** (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. (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, eye contact** (b) Symptoms related to the physical, chemical and toxicological characteristics; Eyes: contact with the eyes by mist or solution may cause irritation or a burning sensation. Skin: Prolonged or repeated contact may cause irritation. Absorption unlikely to occur. Ingestion may cause nausea, vomiting, and diarrhea. Inhalation: 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: LD 50 oral (rat): 2840 mg/kg Ammonium Iron Citrate: not available
Section 12 Ecological Information	(a) Ecotoxicity (aquatic and terrestrial, where available); 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): oncorhychus mykiss (Rainbow trout): 36.7 mg/L, Freshwater flow-through: Iron Citrate: Not Available, Ammonium Iron Ctirate: LD50 (96 hr) Anguilla japonica (Japanese eel): 123 mg/kg bdwt, injection (b) Persistence and degradability; **Compounds biodegrade** (c) Bioaccumulative potential; **None** (d) Mobility in soil; **Yes** (e) Other adverse effects. **None**
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 product is not hazardous as defined by the US Department of Transportation.
Section 15 Regulatory Information	Safety, health and environmental regulations specific for the product in question. This product has been reviewed according to EPA Hazard Categories promulgated under Sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act (SARA) and is considered to meet the following categories: Fire: No, Pressure: No, Acute: Yes, 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
Section 16 Other	Elements of this product are contained in USEPA Toxic Substance Control Act Inventory

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.