Date of issue/ Date of revision : 07/08/2019 : 00/00/0000 Date of previous issue

Version 1.0

SAFETY DATA SHEET

Brandt Sequestar 13.2% Fe

Section 1. Identification

GHS product identifier : Brandt Sequestar 13.2% Fe

Product type solid

Uses

Area of application : Not Applicable

Supplier

Supplier's details : Greenway Biotech, Inc.

Address

Street 10632 Painter Ave

Postal code 90670

Santa Fe Springs City **United States** Country

: +1 562-351-5168 **Telephone number**

e-mail address of person

responsible for this SDS

Emergency telephone number (with hours of operation)

sales@greenwaybiotech.com

US: Chemtrec 24-hours Emergency Response: 1-800-424-

Canada: 24 Hour Emergency Service, (Canutec 613-996-

6666)

National advisory body/Poison Center

Name The National Poisons Emergency number

Telephone number 1 800 222 1222

Section 2. Hazards identification

Not Classified Physical hazards

Health hazards Not classified :

OSHA defined hazards Not Classified :

Hazard Symbol : None

Signal word : None Hazard statement : The mixture does not meet the criteria for classification

Prevention: Observe good industrial hygiene practices.

Response : Wash hands after handling

Storage : Store away from incompatible materials.

Disposal : Dispose of waste residue in accordance with local/

regional/national/international regulations.

Hazards not otherwise classified : None known

Supplemental information

Hazard Statement: Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

Precautionary Statement: Avoid release to the environment.

Prevention: Not applicable

Environmental Hazards: Hazardous to the aquatic environment, acute hazard. Category 3.

Hazardous to the aquatic environment, long term hazard. Category 3.

Section 3. Composition/information on ingredients

Substances

| Chemical Name | Common name and synonyms | CAS number | % |
|--------------------------|--------------------------|------------|--------|
| Ferric EDTA, sodium salt | | 15708-41-5 | 90-100 |

Section 4. First aid measures

Inhalation: Move to fresh air. Call a physician if symptoms develop or persist.

Skin Contact: Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye Contact: Rinse with water. Get medical attention if irritation develops and persists.

Ingestion: Rinse mouth. Get Medical attention if symptoms occur.

Most Important symptoms/effects, acute and delayed: Direct contact with eyes may cause temporary irritation.

Indication of immediate medical attention and special treatment needed: Provide general supportive measures and treat symptomatically.

General Information: Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media: Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2)

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: During fire, gases hazardous to health may be formed.

Special Protective equipment and precautions for firefighters: Self-contained breathing apparatus and full protective clothing must be worn in case of a fire.

Firefighting equipment/instructions: Move container from fire area if it can be done without risk.

Specific Methods: Move container from fire area if it can be done without risk.

Section 6. Accidental release measures

Personal Precautions, protective equipment, and emergency procedures: Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate personal protective equipment. ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection see section 8 of the MSDS.

Methods and materials for containment and clean up: Stop the flow of material, if this is without risk. Large Spills: Dike the spilled material, where this is possible. Cover with a plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use. For waste disposal, see section 13 of the MSDS

Environmental precautions: Avoid release into the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

Section 7. Handling and storage

Precautions for safe handling: Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Avoid release to the environment. Do not empty into drains.

Conditions for safe storage, including any incompatibilities: Store in tightly closed container. Store in a cool dry place out of direct sunlight. Store away from incompatible materials (see section 10 of the MSDS).

Section 8. Exposure controls / personal protection

Occupational exposure limits: No exposure limits noted for ingredient(s).

Biological limit values: No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptance level.

Individual protection measures, such as personal protective equipment:

Eye/Face: Ware safety glasses with side shields (or goggles)

Skin protection: Hand: Wear appropriate chemical resistant gloves. Other: Wear suitable protective clothing.

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal Hazards: Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and /or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Section 9. Physical and chemical properties

Appearance:SolidPhysical State:SolidForm:Solid

Color Yellow to Brown Odor Odorless odor threshold Not available 4.5-5.5 **Melting Point/Freezing point** Not available Initial boiling point and boiling range: Not available **Flash Point** Not available **Evaporation rate** Not available Flammability (solid/gas)
Flammability limit – lower (%)
Flammability limit – upper (%) Not available Not available Not available Explosive limit – lower (%) Not available Explosive Limit - Upper Not available

Vapor density:Not availableReletive density:1.78 (OECD Guideline 109)Solubility (water):72 g/l @ 68 degrees F

Solubility (water)
Parrtition Coefficient

Vapor Pressure

(n-octanol/water) : -8.8 (calculated) The data refers to the undissociated

<0hPa

form of the substance

Auto-ignition temperature : Not available

Decomposition tempurature : > 411.8 °F (> 211 °C) (OECD Guideline 102)

Viscosity : Not available

Density : 1.78 g/cm³ (OECD Guidline 109)

pH in aqueous solution : 4.5 – 5.5 2% Solution

Section 10. Stability and Reactivity

Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical Stability: Material is stable under normal conditions.

Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.

Conditions to avoid: Avoid temperatures exceeding the decomposition temperature.

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products: No hazardous decomposition products are known.

Section 11. Toxicological information

Information on likely routes of exposure

Inhalation: Due to lack of data the classification in not possible. **Skin contact:** Due to lack of data the classification in not possible. **Eye contact:** Due to lack of data the classification in not possible. **Ingestion:** Due to lack of data the classification in not possible.

Symptoms related to the physical, chemical, and toxicological characteristics: Direct contact with

eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity: Not available.

Skin corrosion/irritation: Due to lack of data the classification is not possible

Serious eye damage/ eye irritation: Due to lack of data the classification in not possible.

Respiratory or skin sensitization

Respiratory sensitization: Due to lack of data the classification in not possible.

Skin sensitization: Due to lack of data the classification in not possible.

Germ cell mutagenicity: No data available to indicate product or any components present at greater

than 0.1% are mutagenic or genotoxic.

Carcinogenicity: Due to lack of data the classification in not possible.

Reproductive toxicity: Due to lack of data the classification in not possible.

Specific target organ toxicity single exposure: Due to lack of data the classification in not possible.

Specific target organ toxicity repeated exposure: Due to lack of data the classification in not possible.

Aspiration hazard: Due to lack of data the classification in not possible.

Section 12. Ecological Information

Ecotoxicity: Harmful to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.

| Product | Species | Test Results | |
|--|---------|-------------------------------|--|
| Brandt Sequestar 13.2% Fe (CAS 15708-41-5) | Fish | 100 mg/l, 96 hours, estimated | |

| Components | Species | Test Results |
|---|--------------------|-------------------------------|
| Ferric EDTA, Sodium Salt (CAS 15708-41-5) | Pimephales Pomelas | 100 mg/l, 96 hours, estimated |

Persistence and degradability: No data is available on the degradability of this product.

Bioaccumulative potential: Not available.

Partition coefficient n-octanol/water (log kow): Brandt Sequestar 13.2% Fe, -8.84 (calculated) The data refers to the undissociated form of the substance.

Mobility in soil: Not available

Other adverse effects: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

Section 13. Disposal Considerations

Disposal instructions: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazardous waste code: The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products: Dispose of in accordance with local regulations. Empty containers or liners may contain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

Section 14. Transportation Information

DOT: Not regulated as dangerous goods. **IATA:** Not regulated as dangerous goods. **IMDG:** Not regulated as dangerous goods.

Section 15. Regulatory information

US Federal Regulations: This product is not known to be a hazardous chemical as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - No

Delayed Hazard - No

Fire Hazard – No

Pressure Hazard - No

Reactivity Hazard - No

SARA 302 Extremely hazardous substance

No.

SARA 311/312 Hazardous Chemical

No.

SARA 313 (TRI reporting)

Not Regulated

Other Federal Regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not Regulated

Clean Air Act (CAA) Section 112® Accidental Release Prevention (40 CFR 68.130)

Not Regulated

Safe Drinking Water Act (SDWA)

Not Regulated

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02 (b) and 1310.04 (F)(2) and chemical Code Number.

Not listed.

Food and Drug Administration (FDA)

Us state regulations

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-know Act

Not Regulated

US. Pennsylvania RTK - Hazard Substances

Not regulated

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

Warning: This product contains a chemical known to the State California to cause cancer and birth defects or other reproductive harm.

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no) |
|-------------------------------|--|-----------------------|
| Australia | Australian inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Commercial Substances in china (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and new chemical substances (ENCS) | Yes |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| United States and Puerto Ricc | Toxic Substances Control Act (TSCA) Inventory | Yes |

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing county(s).

A "No" indicates that one or more components of the products are not listed or exempt from listing on the inventory administered by the governing country(s).

Section 16. Other information

Issue date: 05-03-2013

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Disclaimer: While the information contained herein are presented in good faith and believed to be accurate, it is provided for your guidance only. Because many factors may affect processing or application, we recommend that you make tests to determine the sustainability of a product for your particular purpose prior to use. No warranties of any kind, either expressed or implied, including warranties of merchantability or fitness for a particular purpose prior to use. No warranties of any kind, either expressed or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding products described or information set forth, or that the products, or information may be used without infringing the intellectual property rights of others. In no case shall the information provided be considered a part of our terms and conditions of sale. Further, you expressly understand and agree that the information furnished by our company hereunder are given gratis and we assume no obligation or liability for the information given or results obtained, all such being given and accepted at your risk.