

SAFETY DATA SHEET

1. Identification

Product identifier : Greenway Biotech, Inc. Chelated Zinc EDTA
Other means of identification : Synonyms DISODIUM ZINC EDTA

Recommended use : Agricultural/ Horticultural Use- Micronutrient
Fertilizer- Refer to product label.

Recommended restrictions : Refer to product label.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name : Greenway Biotech, Inc.
Address : 17861 RD 24
Madera, CA 93638
United States
Telephone : Corporate Office 1-562-351-5168
Website : www.greenwaybiotech.com
E-mail : sales@greenwaybiotech.com
Contact person : EH&S / Regulatory Department

Emergency phone number : CHEMTREC (24 hours):
USA, Canada, Puerto Rico 1-800-424-9300
Virgin Islands 1-800-424-9300
International Maritime +1 (703) 527-3887

2. Hazard(s) identification

Physical hazards : Not classified.
Health hazards : Not classified.
Environmental hazards : Not classified.
OSHA defined hazards : Not classified.

Label elements

Hazard symbol : None.
Signal word : None.
Hazard statement : The substance does not meet the criteria for classification.

Precautionary statement

Prevention : Observes good industrial hygiene practices.
Response : Wash hands after handling.
Storage : Store away from incompatible materials.
Disposal : Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified : (HNOC)
: None known.
Supplemental information : None.

3. Composition/information on ingredients

Substances

The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

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

5. Fire-fighting measures

Suitable extinguishing media	: Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	: Do not use a water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	: During fire, gasses 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 fire.
Fire fighting equipment/instructions	: Use water spray to cool unopened containers.
Specific methods	: Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	: No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	: Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.
Methods and materials for Containment and cleaning up	: Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush the area with water. : Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean the surface thoroughly to remove residual contamination. : Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions : Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling : Observe good industrial hygiene practices.
Conditions for safe storage : Store in a tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).
including any incompatibilities

8. Exposure controls/personal protection

Occupational exposure limits

U.S. - OSHA

Material	Type	Value	Form
Brandt Sequestar 14% Zn	TWA	5 mg/m3 15 mg/m3	DUST: Respirable fraction DUST: Total dust

ACGIH Material	Type	Value	Form
Brandt Sequestar 14% Zn	TWA	3 mg/m3 10 mg/m3	DUST: Respirable particles DUST: Inhalable particles

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 acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection : If contact is likely, safety glasses with side shields are recommended.
Hand protection : Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.
Other : Use of an impervious apron is recommended.

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards : Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations : Observe any medical surveillance requirements. 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.

9. Physical and chemical properties

Appearance
Physical state : Liquid.
Form : Liquid. Dry flowable granules.
Color : White
Odor : Odorless.
Odor threshold : Not available.
pH : Not available

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) : Not available.

Upper/lower flammability or explosive limits
Flammability limit - lower (%) : Not available.
Flammability limit - upper (%) : Not available.
Explosive limit - lower (%) : Not available.
Explosive limit - upper (%) : Not available.

Vapor pressure : Not available.

Vapor density : Not available.

Relative density : Not available.

Solubility(ies)

Solubility (water) : Not available

Partition coefficient (n-octanol/water) : **-8.841**

Auto-ignition temperature : **> 986 °F (> 530 °C)**

Decomposition temperature : Not available

Viscosity : Not available..

Other information

Bulk density : 650 - 900 kg/m3

Explosive properties : Not explosive.

Molecular formula : C10H12N2O8Zn.2Na

Molecular weight : 399.57 g/mol

Oxidizing properties : Not oxidizing.

Particle size : 123.66 µm D10

: 209.67 µm D50

: 333.51 µm D90

pH in aqueous solution : 6 - 8 (2% solution)

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 : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.

Incompatible materials : Strong oxidizing agents.

Hazardous decomposition products : No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation : No adverse effects due to inhalation are expected.
Skin contact : No adverse effects due to skin contact are expected.
Eye contact : Direct contact with eyes may cause temporary irritation
Ingestion : Expected to be a low ingestion hazard.

Symptoms related to the physical ,chemical and toxicological characteristics : Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity : Not known.
Product **Species** **Test Results**

Brandt Sequestar 14% Zn

Acute

Oral

Solid

LD50

Rat

> 2000 mg/kg

Skin corrosion/irritation

Irritation Corrosion - Skin

Result: non-irritant

: Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation

Irritation Corrosion - Eye

Result: non-irritant

Respiratory or skin sensitization

Respiratory sensitization

Skin sensitization

Germ cell mutagenicity

: Not a respiratory sensitizer.
: This product is not expected to cause skin sensitization.
: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

: Not classifiable as to carcinogenicity to humans

IARC Monographs.

Overall Evaluation of

Carcinogenicity

: Not listed.

OSHA Specifically

Regulated Substances

(29 CFR 1910.1001-1050)

: Not regulated.

US. National Toxicology

Program (NTP) Report on

Carcinogens

: Not listed.

Reproductive toxicity

Specific target organ

toxicity - single exposure

: This product is not expected to cause reproductive or developmental effects.
: Not classified

Specific target organ

toxicity - repeated

exposure

: Not classified.

Aspiration hazard

: Not an aspiration hazard.

12. Ecological information

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Product

Species

Test Results

Brandt Sequestar 14% Zn

Aquatic

Fish

LC50

Channel catfish (*Ictalurus punctatus*)

> 500 mg/l, 96 hours

Persistence and degradability

: No data is available on the degradability of this substance.

Bioaccumulative potential

Partition coefficient

n-octanol / water (log Kow)

:-8.841

Mobility in soil

: No data 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.

13. Disposal considerations

Disposal instructions

: Collect and reclaim or dispose in sealed containers at licensed waste disposal sites.

Local disposal regulations

: Dispose in accordance with all applicable 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

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

Contaminated packaging

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

14. Transport information

DOT

: Not regulated as dangerous goods.

IATA

: Not regulated as dangerous goods.

IMDG

: Not regulated as dangerous goods.

15. Regulatory information

US federal regulations

: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b)

: Not regulated.

Export Notification

(40 CFR 707, Subpt. D)

CERCLA Hazardous

Substance List (40 CFR 302.4)

: Not listed

SARA 304 Emergency

release notification

: Not regulated.

OSHA Specifically

Regulated Substances

(29 CFR 1910.1001-1050)

: Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance	: Not listed.
SARA 311/312 Hazardous Chemical	: No
Classified hazard Categories	: Acute toxicity (any route of exposure)
SARA 313 (TRI reporting)	: Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List	: Not regulated.
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Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)	: Not regulated.
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Clean Water Act (CWA) Section 112(r) (40 CFR 68.130)	: Priority pollutant : Toxic pollutant
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Safe Drinking Water Act (SDWA)	: Not regulated.
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US state regulations

US. California Proposition 65 WARNING:	: This product can expose you to chemicals including arsenic, cadmium, and lead, which are 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.
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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 Chemical 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)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	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 country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing

country(s).

16. Other information, including date of preparation or last revision

Issue date	05-03-2013
Revision date	04-04-2019
Version #	03

Disclaimer

: The information provided in this Safety Data Sheet is correct to the best of Manufacturer's knowledge, information and belief at the date of its publication; however, it is provided only as a guidance for safe handling, use, processing, storage, transportation, disposal and release of the Product. No warranties of any kind, either expressed or implied, including warranties of merchantability or fitness for a particular purpose, are made with respect to the Product or the information provided herein, or that the Product or information herein may be used without infringing the intellectual property rights of others. The information provided in this Safety Data Sheet relates only to the specific Product designated and may not be valid if the Product is used in combination with other materials or in any other process, unless specified herein. The user assumes all risk and liability for loss, injury, damage or expense due to any use, handling, storage or disposal of the Product, and Manufacturer recommends that the user conducts its own tests of the Product to determine suitability of the Product for the user's particular use.

Revision information

:Composition / Information on Ingredients: Ingredients

Material name: Greenway Biotech, Inc. Chelated Zinc EDTA
Version #: 03 Revision date: 03/21/2024 Issue date: 05-03-2013