

**1. Identification**

**Product identifier** Zume™  
**Recommended use** Agricultural/ Horticultural Use- Fertilizer- Refer to product label  
**Recommended restrictions** Refer to product label.

**Distributor information**

**Company name** Winfield Solutions, LLC  
**Address** P.O. Box 64589  
 St. Paul, MN 55164-0589  
**Telephone** Non-Emergency Business Inquiries  
 1-855-494-6343 (Mon - Fri, 8am - 5pm CST)

**Emergency phone numbers (24 hrs)**

FOR MEDICAL EMERGENCY: 1-877-424-7452

FOR CHEMICAL EMERGENCY INVOLVING A SPILL, LEAK, FIRE EXPOSURE OR ACCIDENT, CALL:  
 CHEMTREC 1-800-424-9300

**2. Hazard(s) identification**

**Physical hazards** Not classified.  
**Health hazards** Serious eye damage/eye irritation Category 2  
**Environmental hazards** Not classified.

**Label elements**



**Signal word** Warning  
**Hazard statement** Causes serious eye irritation.  
**Precautionary statement**  
**Prevention** Wash thoroughly after handling. Wear eye protection/face protection.  
**Response** If in eyes: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.  
**Storage** Store away from incompatible materials. See Section 7 and the product label for further information.  
**Disposal** Dispose of contents/container in accordance with Federal, state and local regulations. See Section 13 and the product label for further information.  
**Hazard(s) not otherwise classified (HNOC)** None known  
**Supplemental information** None

**3. Composition/information on ingredients**

**Mixtures**

Chemical name	Common name and synonyms	CAS number	%
Diammonium Zinc EDTA		67859-51-2	20 - < 30*
Other components below reportable levels			70 - < 80

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

## 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Wash off with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	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 area with water.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.  Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Avoid contact with eyes. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Store between 20°F - 110°F.

## 8. Exposure controls/personal protection

### Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	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. Provide eyewash station.

## Individual protection measures, such as personal protective equipment

<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin protection</b>	
<b>Hand protection</b>	Wear appropriate chemical resistant gloves.
<b>Other</b>	Wear suitable protective clothing.
<b>Respiratory protection</b>	In case of insufficient ventilation, wear suitable respiratory equipment.
<b>Thermal hazards</b>	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.

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Liquid
<b>Form</b>	Liquid
<b>Color</b>	Colorless to yellow

**Odor** Not available

**Odor threshold** Not available

**pH** 7.8

**Melting point/freezing point** 455 °F (235 °C) estimated

**Initial boiling point and boiling range** 219.2 °F (104 °C) estimated

**Flash point** Not available

**Evaporation rate** Not available

**Flammability (solid, gas)** Not applicable

### 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** 0.00001 hPa estimated

**Vapor density** Not available

**Relative density** 1.16 g/cm<sup>3</sup>

### Solubility(ies)

**Solubility (water)** Not available

**Partition coefficient (n-octanol/water)** Not available

**Auto-ignition temperature** Not available

**Decomposition temperature** Not available

**Viscosity** Not available

### Other information

**Explosive properties** Not explosive

**Oxidizing properties** Not oxidizing

**Percent volatile** 69.97 % estimated

**pH in aqueous solution** 8.15 (10% solution)

**Pounds per gallon** 9.68 - 9.71 lb/gal

**VOC** 0.28 % estimated

## 10. Stability and reactivity

### Chemical stability

#### Possibility of hazardous reactions

Material is stable under normal conditions.

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

Prolonged inhalation may be harmful.

#### Skin contact

No adverse effects due to skin contact are expected.

#### Eye contact

Causes serious eye irritation.

#### Ingestion

Expected to be a low ingestion hazard.

#### Symptoms related to the physical, chemical and toxicological characteristics

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

### Information on toxicological effects

#### Acute toxicity

Not known.

#### Product

#### Species

#### Test Results

#### Zume

##### Acute

##### **Dermal**

LD50

Rat

25780 mg/kg

##### **Inhalation**

LC50

Rat

14730 mg/m<sup>3</sup>

##### **Oral**

LD50

Rat

37400 mg/kg

#### Skin corrosion/irritation

Not anticipated to cause skin irritation.

#### Serious eye damage/eye irritation

Causes serious eye irritation.

#### Respiratory or skin sensitization

##### **Respiratory sensitization**

Not a respiratory sensitizer.

##### **Skin sensitization**

This product is not expected to cause skin sensitization.

#### Germ cell mutagenicity

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 1910.1001-1052)**

Not regulated.

##### **US. National Toxicology Program (NTP) Report on Carcinogens**

Not listed.

#### Reproductive toxicity

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

#### Specific target organ toxicity - single exposure

Not classified.

#### Specific target organ toxicity - repeated exposure

Not classified.

#### Aspiration hazard

Not an aspiration hazard.

#### Chronic effects

Prolonged inhalation may be harmful.

## 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
<b>Zume</b>		
<b>Aquatic</b>		
Fish	LC50 Fish	49739.4336 mg/l, 96 hours estimated

**Persistence and degradability** No data is available on the degradability of any ingredients in the mixture.

**Bioaccumulative potential**

**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 site. Dispose of contents/container in accordance with local/regional/national/international regulations.

**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 products** 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 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.

**Toxic Substances Control Act (TSCA)**

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

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Diammonium Zinc EDTA (CAS 67859-51-2) Listed.

*Zinc compounds are considered to be CERCLA hazardous substances though no RQ is established.*

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 304 Emergency release notification**

Not regulated.

**SARA 311/312 Hazard categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.

**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
Diammonium Zinc EDTA	67859-51-2	20 - <30

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

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

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
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	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*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** July 23, 2019 (new)

**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 user's particular use.