

# Safety Data Sheet

Issue Date: 02-Jan-1998

Revision Date: 1-April-2016

Version 2

## 1. IDENTIFICATION

### Product Identifier

**Product Name** PolyAmine Zinc

### Other means of identification

**SDS #** FFN: 00003

### Recommended use of the chemical and restrictions on use

**Recommended Use** Fertilizer.

### Details of the supplier of the safety data sheet

#### **Supplier Address**

Verdesian Life Sciences, U.S., LLC.  
1001 Winstead Drive, Suite 480

### Emergency Telephone Number

**Company Phone Number** Business Phone: (800) 868-6446  
Fax Phone: (919) 535-3652  
**Emergency Telephone (24 hr)** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

**Appearance** Dark liquid

**Physical State** Liquid

**Odor** Citrus

### Classification

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

### Signal Word

**Danger**

### Hazard Statements

Causes severe skin burns and eye damage



### Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray  
Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
Immediately call a poison center or doctor/physician  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
Wash contaminated clothing before reuse  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Immediately call a poison center or doctor/physician  
IF SWALLOWED: rinse mouth. Do NOT induce vomiting

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other Hazards**

Very toxic to aquatic life with long lasting effects

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Organic Acid	Proprietary	1-10
Zinc sulfate	7733-02-0	1-10

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

### 4. FIRST-AID MEASURES

**First Aid Measures**

<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek immediate medical attention/advice.
<b>Skin Contact</b>	Wash with soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.
<b>Inhalation</b>	Remove to fresh air. Call a physician immediately.
<b>Ingestion</b>	Call a physician or poison control center immediately.

**Most important symptoms and effects**

<b>Symptoms</b>	Inhalation may cause irritation to nasal passages. Contact will cause irritation and redness to exposed areas.
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**Indication of any immediate medical attention and special treatment needed**

<b>Notes to Physician</b>	Treat symptomatically.
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### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical. Carbon dioxide (CO<sub>2</sub>). Foam. Water spray (fog).

**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**

Combustion products may be toxic.

**Hazardous Combustion Products** Nitrogen oxides (NOx).

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use water spray to keep fire-exposed containers cool. Do not release runoff from fire control methods to sewers or waterways.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** Use personal protective equipment as required.

**Methods and material for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Clean-Up** Absorb liquids by covering with clay or tuber absorbent material. Vacuum or sweep up material and place in a disposal container.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on Safe Handling** Handle in accordance with good industrial hygiene and safety practice. Observe precautions found on the label. Wash thoroughly after handling. Use personal protection recommended in Section 8. Do not breathe dust/fume/gas/mist/vapors/spray.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Do not contaminate food or feed stuffs. Protect from freezing. Store locked up.

**Incompatible Materials** Strong oxidizers.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Organic Acid	-	15 mg / m <sup>3</sup> (Total)	-

**Appropriate engineering controls**

**Engineering Controls** Apply technical measures to comply with the occupational exposure limits.

**Individual protection measures, such as personal protective equipment**

<b>Eye/Face Protection</b>	Avoid contact with eyes.
<b>Skin and Body Protection</b>	Protective gloves are not required, but recommended. Wear suitable protective clothing.
<b>Respiratory Protection</b>	None normally required. If vapors may exceed acceptable levels, use an OSHA/NIOSH-approved respirator or mask for protection against pesticide dusts, mists, and vapors.
<b>General Hygiene Considerations</b>	Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

<b>Physical State</b>	Liquid	<b>Odor</b>	Citrus
<b>Appearance</b>	Dark liquid	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Dark Colored		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
<b>pH</b>	2.00		
<b>Melting Point/Freezing Point</b>	Not determined		
<b>Boiling Point/Boiling Range</b>	100 °C / 212 °F		
<b>Flash Point</b>	Does not flash		
<b>Evaporation Rate</b>	Slower than butyl acetate		
<b>Flammability (Solid, Gas)</b>	n/a-liquid		
<b>Upper Flammability Limits</b>	Not applicable		
<b>Lower Flammability Limit</b>	Not applicable		
<b>Vapor Pressure</b>	Not available		
<b>Vapor Density</b>	Not available		
<b>Specific Gravity</b>	Not determined		
<b>Water Solubility</b>	Miscible in water		
<b>Solubility in other solvents</b>	Not determined		
<b>Partition Coefficient</b>	Not determined		
<b>Auto-ignition Temperature</b>	Not determined		
<b>Decomposition Temperature</b>	Not determined		
<b>Kinematic Viscosity</b>	Not determined		
<b>Dynamic Viscosity</b>	Not determined		
<b>Explosive Properties</b>	Not determined		
<b>Oxidizing Properties</b>	Not determined		
<b>Density</b>	10.28 wt/gal		

**10. STABILITY AND REACTIVITY****Reactivity**

Not reactive under normal conditions.

**Chemical Stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
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**Conditions to Avoid**

Excessive heat.

**Incompatible Materials**

Strong oxidizers.

**Hazardous Decomposition Products**

Nitrogen oxides (NOx).

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Product Information**

<b>Eye Contact</b>	Causes severe eye damage.
<b>Skin Contact</b>	Causes severe skin burns.
<b>Inhalation</b>	Avoid breathing vapors or mists.
<b>Ingestion</b>	Do not taste or swallow.

**Component Information**

<b>Chemical Name</b>	<b>Oral LD50</b>	<b>Dermal LD50</b>	<b>Inhalation LC50</b>
Organic Acid	= 3000 mg/kg ( Rat )	-	-
Zinc sulfate 7733-02-0	= 500 mg/kg ( Rat )	-	-
Glycine 56-40-6	= 7930 mg/kg ( Rat )	-	-

**Information on physical, chemical and toxicological effects**

**Symptoms** Please see section 4 of this SDS for symptoms.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Carcinogenicity** This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

**Numerical measures of toxicity**

Not determined

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Very toxic to aquatic life with long lasting effects.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Organic Acid		1516: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static		120: 72 h <i>Daphnia magna</i> mg/L EC50
Zinc sulfate 7733-02-0	64.8: 72 h <i>Chlorella vulgaris</i> mg/L EC50 2.4: 96 h <i>Chlorella vulgaris</i> mg/L EC50 0.056: 72 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 static	0.162: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 flow-through 0.03 - 0.05: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 semi-static 0.34 - 0.93: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static 0.218 - 0.42: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 0.06: 96 h <i>Pimephales promelas</i> mg/L LC50 static 0.23 - 0.48: 96 h <i>Pimephales promelas</i> mg/L LC50 0.168 - 0.25: 96 h <i>Pimephales promelas</i> mg/L LC50 semi-static 0.15: 96 h <i>Cyprinus carpio</i> mg/L LC50 semi-static 16.85 - 27.18: 96 h <i>Cyprinus carpio</i> mg/L LC50 static 3 - 4.6: 96 h <i>Lepomis macrochirus</i> mg/L LC50 flow-through 3.55 - 6.32: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 0.63: 96 h <i>Poecilia reticulata</i> mg/L LC50 49.23 - 64.16: 96 h <i>Poecilia reticulata</i> mg/L LC50 semi-static 0.48 - 1.72: 96 h <i>Poecilia reticulata</i> mg/L LC50 static	EC50 = 3.45 mg/L 15 min EC50 = 40.5 mg/L 30 min EC50 = 476 mg/L 5 min EC50 > 700 mg/L 16 h	0.75: 48 h <i>Daphnia magna</i> mg/L EC50 0.538 - 0.908: 48 h <i>Daphnia magna</i> mg/L EC50 Static

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

Not determined.

**Mobility**

Chemical Name	Partition Coefficient
Organic Acid	-1.72

**Other Adverse Effects**

Not determined

**13. DISPOSAL CONSIDERATIONS**

**Waste Treatment Methods**

- Disposal of Wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.
- Contaminated Packaging** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**California Hazardous Waste Status**

Chemical Name	California Hazardous Waste Status
Zinc sulfate 7733-02-0	Toxic

**14. TRANSPORT INFORMATION**

- Note** Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
- DOT** Not regulated
- IATA** Not regulated
- IMDG**  
**Marine Pollutant** This product contains zinc sulfate which is considered a marine pollutant according to the Globally Harmonized System of the Classification and Labelling of Chemicals

**15. REGULATORY INFORMATION**

**International Inventories**

Not determined

**US Federal Regulations**

**CERCLA**

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Zinc sulfate 7733-02-0	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

**SARA 311/312 Hazard Categories**

- Acute Health Hazard Yes
- Chronic Health Hazard No
- Fire Hazard No
- Sudden Release of Pressure Hazard No
- Reactive Hazard No

**SARA 313**

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Zinc sulfate - 7733-02-0	7733-02-0	1-10	1.0

**CWA (Clean Water Act)**

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances

Zinc sulfate 7733-02-0 ( 1-10 )	1000 lb	X		X
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**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Zinc sulfate - 7733-02-0	X

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Zinc sulfate 7733-02-0	X	X	X

<b>16. OTHER INFORMATION</b>
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**NFPA****Health Hazards****Flammability****Instability****Special Hazards**

Not determined

Not determined

Not determined

Not determined

**HMIS****Health Hazards****Flammability****Physical Hazards****Personal Protection**

Not determined

Not determined

Not determined

Not determined

**Issue Date:** 02-Jan-1998  
**Revision Date:** 1-Apr-2016  
**Revision Note:** Address Change

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**