

# Safety Data Sheet

Issue Date: 17-Dec-2021

Revision Date: 23-Feb-2022

Version 4

## 1. IDENTIFICATION

### Product identifier

**Product Name** ZincNine

### Other means of identification

**SDS #** ESL-038

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

**Recommended Use** For industrial use.

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

#### **Supplier Address**

Earth Science Laboratories, Inc.  
903 N 47th Street, Suite 105  
Rogers, AR 72756  
earthsciencelabs.com

### Emergency telephone number

**Company Phone Number** 1-800-962-1492

**Emergency Telephone** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

**Appearance** Colorless Liquid

**Physical state** Liquid

**Odor** Pungent

### Classification

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2

### Signal Word

**Warning**

### Hazard statements

Harmful if swallowed  
Causes skin irritation  
Causes serious eye irritation



### Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
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  
If eye irritation persists: Get medical advice/attention  
IF ON SKIN: Wash with plenty of water  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash before reuse  
IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell  
Rinse mouth  
Do NOT induce vomiting

**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-%
Trade secret	Component A	Trade secret
Ammoniated Zinc (derived from Zinc Oxide)	1314-13-2	8-13
Ammonium hydroxide	1336-21-6	2.0-2.9

\*\*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****Description of first aid measures**

<b>General Advice</b>	Immediately call a poison center or doctor/physician.
<b>Eye Contact</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention
<b>Skin Contact</b>	IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
<b>Inhalation</b>	Not an expected route of exposure. If symptomatic, move to fresh air.
<b>Ingestion</b>	Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor if you feel unwell.

**Most important symptoms and effects, both acute and delayed**

<b>Symptoms</b>	Harmful if swallowed. Causes skin irritation. Causes serious eye irritation.
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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.

**Unsuitable Extinguishing Media** Not determined.

### Specific Hazards Arising from the Chemical

None known.

### 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.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions** Caution should be exercised regarding personal safety and exposure to released product. Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind.

### Environmental precautions

**Environmental precautions** See Section 12 for additional Ecological Information.

### Methods and material for containment and cleaning up

**Methods for Containment** Flush with water into retaining area or container.

**Methods for Clean-Up** Neutralize spill with a weak acid such as vinegar or acetic acid.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on Safe Handling** Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing and eye/face protection.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Store locked up. Store in a safe place away from pets. KEEP OUT OF THE REACH OF CHILDREN. Store away from excessive heat. The product will freeze. Always keep container closed. Never store the product in any other container than its original container. Bulk product shall be stored and handled in fiberglass, PVC, polypropylene or plastic equipment. Keep away from galvanized piping and long term nylon storage. Container should be nonreactive with ammonia. Do not use any non-ferrous metals such as copper, brass, bronze, aluminum, tin, zinc metals.

**Incompatible Materials** Strong acids. Bleach. Galvanized metal. Copper. Brass. Bronze. Aluminum alloys.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ammoniated Zinc 1314-13-2	STEL: 10 mg/m <sup>3</sup> respirable particulate matter TWA: 2 mg/m <sup>3</sup> respirable particulate matter	TWA: 5 mg/m <sup>3</sup> fume TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 5 mg/m <sup>3</sup> fume (vacated) TWA: 10 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) STEL: 10 mg/m <sup>3</sup> fume	IDLH: 500 mg/m <sup>3</sup> Ceiling: 15 mg/m <sup>3</sup> dust TWA: 5 mg/m <sup>3</sup> dust and fume STEL: 10 mg/m <sup>3</sup> fume

**Appropriate engineering controls****Engineering Controls**

Showers. Eyewash stations. Ventilation systems.

**Individual protection measures, such as personal protective equipment****Eye/Face Protection**

Goggles or face shield.

**Skin and Body Protection**

Wear long-sleeved shirt, long pants, and shoes plus socks. Impervious protective gloves.

**Respiratory Protection**

A NIOSH/MSHA approved air purifying respirator with an approved ammonia gas cartridge or canister may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits.

**General Hygiene Considerations** 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>	Pungent
<b>Appearance</b>	Colorless liquid	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Colorless		

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
<b>pH</b>	9.7-10.5	
<b>Melting point / freezing point</b>	Not determined	
<b>Boiling point / boiling range</b>	Not determined	
<b>Flash point</b>	Not determined	
<b>Evaporation Rate</b>	Not determined	
<b>Flammability (Solid, Gas)</b>	Liquid-Not applicable	
<b>Flammability Limit in Air</b>		
<b>Upper flammability or explosive limits</b>	Not determined	
<b>Lower flammability or explosive limits</b>	Not determined	
<b>Vapor Pressure</b>	Not determined	
<b>Vapor Density</b>	Not determined	
<b>Relative Density</b>	1.2-1.3	
<b>Water Solubility</b>	Not determined	
<b>Solubility in other solvents</b>	Not determined	
<b>Partition Coefficient</b>	Not determined	
<b>Autoignition 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	

**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.

**Hazardous Polymerization**

Will not occur.

**Conditions to Avoid**

Incompatible Materials.

**Incompatible materials**

Strong acids. Bleach. Galvanized metal. Copper. Brass. Bronze. Aluminum alloys.

**Hazardous decomposition products**

Sulfur dioxide. Sulfur trioxide. Ammonia.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Product Information****Eye Contact** Avoid contact with eyes.**Skin Contact** Avoid contact with skin.**Inhalation** Do not inhale.**Ingestion** Harmful if swallowed.**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ammonium hydroxide 1336-21-6	= 350 mg/kg ( Rat )	-	-
Component A	= 2840 mg/kg ( Rat )	> 2000 mg/kg ( Rat )	-
Ammoniated Zinc 1314-13-2	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rat )	-

**Symptoms related to the physical, chemical and toxicological characteristics****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****Skin corrosion/irritation** Causes skin irritation.**Serious eye damage/eye irritation** Causes serious eye irritation.**Carcinogenicity** Based on the information provided, 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.

**Component Information**

Chemical name	Algae/aquatic plants	Fish	Crustacea
Ammonium hydroxide 1336-21-6		8.2: 96 h Pimephales promelas mg/L LC50	0.66: 48 h Daphnia pulex mg/L EC50 0.66: 48 h water flea mg/L EC50
Component A		123 - 128: 96 h Poecilia reticulata mg/L LC50 semi-static	14: 48 h Daphnia magna mg/L LC50

		32.2 - 41.9: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 5.2 - 8.2: 96 h Oncorhynchus mykiss mg/L LC50 static 126: 96 h Poecilia reticulata mg/L LC50 18: 96 h Cyprinus carpio mg/L LC50 250: 96 h Brachydanio rerio mg/L LC50 420: 96 h Brachydanio rerio mg/L LC50 semi-static 480: 96 h Brachydanio rerio mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50	
Ammoniated Zinc 1314-13-2		1.55: 96 h Danio rerio mg/L LC50 static	

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

There is no data for this product.

**Mobility**

Chemical name	Partition coefficient
Component A	-5.1

**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
Ammonium hydroxide 1336-21-6	Toxic Corrosive
Ammoniated Zinc 1314-13-2	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 material may meet the definition of a marine pollutant

## 15. REGULATORY INFORMATION

### International Inventories

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
Ammonium hydroxide	X	ACTIVE	X	X	X	X	X	X	X
Component A	X	ACTIVE	X	X	X	X	X	X	X
Zinc Oxide	X	ACTIVE	X	X	X	X	X	X	X

#### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

### US Federal Regulations

#### CERCLA

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Ammonium hydroxide 1336-21-6	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### CWA (Clean Water Act)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Ammonium hydroxide	1000 lb			X
Ammoniated Zinc		X		

### US State Regulations

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

Chemical name	New Jersey	Massachusetts	Pennsylvania
Ammonium hydroxide 1336-21-6	X	X	X
Component A		X	X
Ammoniated Zinc 1314-13-2	X	X	X

**16. OTHER INFORMATION**

<b><u>NFPA</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Instability</b>	<b>Special Hazards</b>
	1	0	0	Not determined
<b><u>HMIS</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Physical hazards</b>	<b>Personal Protection</b>
	1	0	0	See section 8

**Issue Date:** 17-Dec-2021  
**Revision Date:** 23-Feb-2022  
**Revision Note:** Reformulation

**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**