

Issue Date 01-May-2013

Revision Date 28-Aug-2018

Version 5

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product Identifier

**Product Name** Zinc Sulfate Solution, 32 – 34%

### Other Means of Identification

**SDS #** OBC-005

**UN/ID No** UN3082

### Recommended Use of the Chemical and Restrictions on Use

**Recommended Use** For industrial use.

### Details of the Supplier of the Safety Data Sheet

#### **Manufacturer Address**

Old Bridge Chemicals, Inc.  
554 Waterworks Rd.  
Old Bridge, NJ 08857

### Emergency Telephone Number

**Company Phone Number** (732) 727-2225 (normal business hours)

(800) 275-3924 (24 hour number)

**Emergency Telephone** Chemtrec 1-800-424-9300 (North America) 1-703-527-3887 (International)

## 2. HAZARDS IDENTIFICATION

### Classification

Acute toxicity - Oral

Category 4

### Signal Word

Warning

### Hazard Statements

Harmful if swallowed



**Appearance** Clear liquid

**Physical State** Liquid

**Odor** Odorless

### Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Water	7732-18-5	66 - 68
Zinc sulfate	7733-02-0	32 - 34

### 4. FIRST AID MEASURES

#### First Aid Measures

<b>Eye Contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin Contact</b>	Immediately begin flushing skin continuously for a minimum of 15 minutes. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. Call a physician.
<b>Inhalation</b>	Remove victim(s) to fresh air, as quickly as possible. Call a physician.
<b>Ingestion</b>	Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water or milk immediately.

#### Most Important Symptoms and Effects, both Acute and Delayed

<b>Symptoms</b>	May cause burns to mouth, throat and skin. May cause eye damage if direct contact occurs. May cause severe irritation to upper respiratory tract.
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#### Indication of any Immediate Medical Attention and Special Treatment Needed

<b>Note to Physicians</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** None known.

#### Specific Hazards Arising from the Chemical

Product will not burn.

**Hazardous Combustion Products** Toxic gases may be formed by fire.

#### 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

<b>Personal Precautions</b>	Wear protective clothing as described in Section 8 of this safety data sheet.
<b>Methods for Containment</b>	Prevent further leakage or spillage if safe to do so. Contain spills to prevent migration and entry into any waterway.
<b>Methods for Cleaning Up</b>	Can be carefully reacted with Sodium Carbonate to form an insoluble Zinc Carbonate solid that can be scooped up and sent to an approved disposal facility. Keep in suitable, closed containers for disposal. Dispose of in accordance with federal, state and local regulations.

## 7. HANDLING AND STORAGE

### Precautions for Safe Handling

<b>Advice on Safe Handling</b>	Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8.
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### Conditions for Safe Storage, Including any Incompatibilities

<b>Storage Conditions</b>	Heated storage is necessary to prevent crystallization. Keep the container tightly closed and dry.
<b>Incompatible Materials</b>	None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b><u>Exposure Guidelines</u></b>	No exposure limits noted for ingredient(s)
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### Appropriate Engineering Controls

<b>Engineering Controls</b>	Use adequate exhaust ventilation to prevent inhalation of product vapors. Maintain eyewash / safety shower stations in areas where chemical is handled.
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### Individual Protection Measures, such as Personal Protective Equipment

<b>Eye/Face Protection</b>	OSHA approved chemical safety goggles with full face shield.
<b>Skin and Body Protection</b>	Rubber apron and gloves. Rubber boots.
<b>Respiratory Protection</b>	Ensure adequate ventilation, especially in confined areas.
<b>General Hygiene Considerations</b>	Do not eat, drink or smoke when using this product

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on Basic Physical and Chemical Properties

<b>Physical State</b>	Liquid		
<b>Appearance</b>	Clear liquid	<b>Odor</b>	Odorless
<b>Color</b>	Colorless and water white	<b>Odor Threshold</b>	Not determined

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	2.5 - 6	
Melting Point/Freezing Point	21 °C / 70 °F	Crystallization Point
Boiling Point/Boiling Range	104 °C / 219 °F	
Flash Point	Will not burn	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Not determined	
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	Not determined	
Vapor Density	Vapor is water	
Specific Gravity	1.405 - 1.445	
Water Solubility	Completely soluble	
Solubility in Other Solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	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**      Hazardous polymerization does not occur.

### Conditions to Avoid

Keep out of reach of children.

### Incompatible Materials

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

### Information on Likely Routes of Exposure

#### **Product Information**

**Eye Contact**      Avoid contact with eyes.

<b>Skin Contact</b>	Avoid contact with skin.
<b>Inhalation</b>	Avoid inhalation of vapors.
<b>Ingestion</b>	Harmful if swallowed.

**Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	> 90 mL/kg ( Rat )	-	-
Zinc sulfate 7733-02-0	= 500 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**

Harmful to aquatic life.

**Component Information**

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Zinc sulfate 7733-02-0	EC50 Chlorella vulgaris 64.8 mg/L: 72 h EC50 Chlorella vulgaris 2.4 mg/L: 96 h EC50 Pseudokirchneriella subcapitata static 0.056 mg/L: 72 h	LC50 Oncorhynchus mykiss flow-through 0.162 mg/L: 96 h LC50 Oncorhynchus mykiss semi-static 0.03 - 0.05 mg/L: 96 h LC50 Oncorhynchus mykiss static 0.34-0.93 mg/L: 96 h LC50 Pimephales promelas flow-through 0.06 mg/L: 96 h LC50 Pimephales promelas static 0.218 - 0.42 mg/L: 96 h LC50 Pimephales promelas 0.23 - 0.48 mg/L: 96 h LC50 Pimephales promelas semi-static 0.168 - 0.25 mg/L: 96 h LC50 Cyprinus carpio semi-static 0.15 mg/L: 96 h LC50 Cyprinus carpio static 16.85 - 27.18 mg/L: 96 h LC50 Lepomis macrochirus flow-through 3 - 4.6 mg/L: 96 h LC50 Lepomis macrochirus static 3.55 - 6.32 mg/L: 96 h LC50 Poecilia reticulata 0.63 mg/L: 96 h LC50 Poecilia reticulata semi-static 49.2 - 64.2 mg/L: 96 h LC50 Poecilia reticulata Static 0.48 - 1.72 mg/L 96 h	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	EC50 Daphnia magna 0.75 mg/L: 48 h EC50 Daphnia magna Static 0.538 - 0.908 mg/L: 48 h

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
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**Persistence and Degradability**

Not determined

**Bioaccumulation**

Not determined

**Mobility**

Not determined

**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. With prior approval the material can be returned to the manufacturer.

**Contaminated Packaging**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

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. This material is a hazardous substance and regulated for transportation to, from, or within the U.S. in packages of 1000 lbs or more.**

**DOT**

UN/ID No UN3082  
 Proper Shipping Name Environmentally hazardous substance, liquid, N.O.S. (Zinc Sulfate)  
 Hazard Class 9  
 Packing Group III  
 Reportable Quantity (RQ) 1000 lbs

**IATA**

UN/ID No UN3082  
 Proper Shipping Name Environmentally hazardous substance, liquid, N.O.S. (Zinc Sulfate)  
 Hazard Class 9  
 Packing Group III

**IMDG**

UN/ID No UN3082  
 Proper Shipping Name Environmentally hazardous substance, liquid, N.O.S. (Zinc Sulfate)  
 Hazard Class 9  
 Packing Group III

## 15. REGULATORY INFORMATION

### International Inventories

Not Determined

#### 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*

### US Federal Regulations

#### CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

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

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Zinc sulfate - 7733-02-0	7733-02-0	32 - 34	1.0

#### CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Zinc sulfate 7733-02-0 ( 32 - 34 )	1000 lb	X		X

### US State Regulations

#### California Proposition 65

This product contains no Proposition 65 chemicals.

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

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Zinc sulfate 7733-02-0	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>
	2	0	0	Not determined
<b><u>HMIS</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Physical Hazards</b>	<b>Personal Protection</b>
	2	0	0	Not determined

<b>Issue Date</b>	01-May-2013
<b>Revision Date</b>	28-Aug-2018
<b>Revision Note</b>	Formulation 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**