



SAFETY DATA SHEET

Issue Date 01-May-2013

Revision Date 30-October-2019

Version 6

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

Appearance – Clear Liquid

Physical State – Liquid

Odor – Odorless

Classification

Acute toxicity - Oral

Category 4

Signal Word

Warning

Hazard Statements

Harmful if swallowed



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

Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin Contact	Immediately begin flushing skin continuously for a minimum of 15 minutes. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. Call a physician.
Inhalation	Remove victim(s) to fresh air, as quickly as possible. Call a physician.
Ingestion	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

Symptoms	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

Note to Physicians	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

Personal Precautions	Wear protective clothing as described in Section 8 of this safety data sheet.
Methods for Containment	Prevent further leakage or spillage if safe to do so. Contain spills to prevent migration and entry into any waterway.
Methods for Cleaning Up	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

Advice on Safe Handling	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

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Engineering Controls	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

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	Liquid		
Appearance	Clear liquid	Odor	Odorless
Color	Colorless and water white	Odor Threshold	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

<u>Reactivity</u>	Not reactive under normal conditions.
<u>Chemical Stability</u>	Stable under recommended storage conditions.
<u>Possibility of Hazardous Reactions</u>	None under normal processing.
<u>Hazardous Polymerization</u>	Hazardous polymerization does not occur.
<u>Conditions to Avoid</u>	Keep out of reach of children.
<u>Incompatible Materials</u>	None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

<u>Eye Contact</u>	Avoid contact with eyes.
<u>Skin Contact</u>	Avoid contact with skin.
<u>Inhalation</u>	Avoid inhalation of vapors.
<u>Ingestion</u>	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 <i>Chlorella vulgaris</i> 64.8 mg/L: 72 h EC50 <i>Chlorella vulgaris</i> 2.4 mg/L: 96 h EC50 <i>Pseudokirchneriella</i> <i>subcapitata</i> static 0.056 mg/L: 72 h	LC50 <i>Oncorhynchus mykiss</i> flow-through 0.162 mg/L: 96 h LC50 <i>Oncorhynchus mykiss</i> semi-static 0.03 - 0.05 mg/L: 96 h LC50 <i>Oncorhynchus mykiss</i> static 0.34-0.93 mg/L: 96 h LC50 <i>Pimephales promelas</i> flow-through 0.06 mg/L: 96 h LC50 <i>Pimephales promelas</i> static 0.218 - 0.42 mg/L: 96 h LC50 <i>Pimephales promelas</i> 0.23 - 0.48 mg/L: 96 h LC50 <i>Pimephales promelas</i> semi-static 0.168 - 0.25 mg/L: 96 h LC50 <i>Cyprinus carpio</i> semi-static 0.15 mg/L: 96 h LC50 <i>Cyprinus carpio</i> static 16.85 - 27.18 mg/L: 96 h LC50 <i>Lepomis macrochirus</i> flow-through 3 - 4.6 mg/L: 96 h LC50 <i>Lepomis macrochirus</i> static 3.55 - 6.32 mg/L: 96 h LC50 <i>Poecilia reticulata</i> 0.63 mg/L: 96 h LC50 <i>Poecilia reticulata</i> semi-static 49.2 - 64.2 mg/L: 96 h LC50 <i>Poecilia reticulata</i> 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 <i>Daphnia magna</i> 0.75 mg/L: 48 h EC50 <i>Daphnia magna</i> Static 0.538 - 0.908 mg/L: 48 h

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.

In Packages less than 1000 lbs. this material is not Hazardous.

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 lbs.	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

<u>NFPA</u>	Health Hazards	Flammability	Instability	Special Hazards
	2	0	0	Not determined
<u>HMIS</u>	Health Hazards	Flammability	Physical Hazards	Personal Protection
	2	0	0	Not determined

Issue Date	01-May-2013
Revision Date	30-October-2019
Revision Note	Minor changes.

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