SAFETY DATA SHEET

Issue Date 01-May-2013 **Revision Date** 02-May-2013 **Version** 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Zinc Sulfate Monohydrate

Other Means of Identification

SDS # OBC-006

UN/ID No UN3077

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 White granules or powder **Physical State** Solid **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

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Precautionary Statements - Response

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-%
Zinc sulfate, monohydrate	7446-19-7	100

4. FIRST AID MEASURES

First Aid Measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Call a physician. Wash contaminated clothing before reuse.

Inhalation Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Keep patient warm and at rest.

Ingestion Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Induce vomiting, but only if victim is fully conscious. Never give anything by mouth to an unconscious person.

Most Important Symptoms and Effects, both Acute and Delayed

Symptoms For Acute Exposure: May cause skin and eye irritation. May cause corneal burn. May cause gastrointestinal disturbance. May cause nose and throat irritation.
For Chronic Exposure: May cause dermatitis or irritation in some individuals upon prolonged contact. May cause conjunctivitis. May cause inhalation reflex bronchial constriction.

Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use CO_2, dry chemical, or foam. Water may be used ONLY to keep surrounding containers cool.

Unsuitable Extinguishing Media Caution: Use of water spray when fighting fire may be ineffective.

Specific Hazards Arising from the Chemical
Product is not flammable.

Hazardous Combustion Products May release toxic oxides of Zinc and Sulfur in a 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 and Material for Containment and Cleaning Up

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.

7. HANDLING AND STORAGE

Precautions for Safe Handling

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

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

Exposure Guidelines No exposure limits noted for ingredient(s)

Appropriate Engineering Controls

Engineering Controls Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection Wear splash proof or dust proof safety goggles wherever there is a potential for eye contact.

Skin and Body Protection Wear suitable protective clothing. Use chemical resistant gloves, if needed, to avoid prolonged or repeated skin contact. Consult the glove manufacturer for the most appropriate glove material. Wash contaminated clothing, including shoes, before reuse. Wash thoroughly after handling before eating, drinking, smoking, or using toilet facilities.

Respiratory Protection In case of inadequate ventilation wear respiratory protection.

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

Physical State	Solid		
Appearance	White granules or powder	**Odor**	Odorless
Color	White	**Odor Threshold**	Not determined

Property	Values	Remarks • Method
pH	Not Applicable	
Melting Point/Freezing Point	21 °C / 70 °F	Crystallization Point
Boiling Point/Boiling Range	Not Applicable	
Flash Point	Not Applicable	
Evaporation Rate	Not Applicable	
Flammability (Solid, Gas)	Not determined	
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	Not determined	
Vapor Density	Not Applicable	
Specific Gravity	3.28	
Water Solubility	30 - 37%	@ 21 °C/ 70 °F
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.

Hazardous Decomposition Products
May release toxic oxides of Zinc and Sulfur in a fire.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Eye Contact Avoid contact with eyes.

Skin Contact Avoid contact with skin.

Inhalation Avoid inhalation of dust.

Ingestion Harmful if swallowed.

Component Information Not available

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.

Component Information Not available

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, monohydrate 7446-19-7	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	UN3077
Proper Shipping Name	Environmentally hazardous substance, solid, n.o.s. (Zinc Sulfate)
Hazard Class	9
Packing Group	III
Reportable Quantity (RQ)	1000 lbs
Emergency Response Guide Number	ERG 171

IATA

UN/ID No	UN3077
Proper Shipping Name	Environmentally hazardous substance, solid, n.o.s. (Zinc Sulfate)
Hazard Class	9
Packing Group	III

IMDG

UN/ID No	UN3077
Proper Shipping Name	Environmentally hazardous substance, solid, n.o.s. (Zinc Sulfate)
Hazard Class	9
Packing Group	III

15. REGULATORY INFORMATION

International Inventories

TSCA	Listed

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, monohydrate 7446-19-7	1000 lbs	1000 lbs	1000 lbs

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic 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, monohydrate - 7446-19-7	7446-19-7	100	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, monohydrate 7446-19-7 (100)		X		

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Zinc sulfate, monohydrate - 7446-19-7	X

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Zinc sulfate, monohydrate 7446-19-7	X		X

16. OTHER INFORMATION

NFPA	**Health Hazards** 2	**Flammability** 0	**Instability** 0	**Special Hazards** Not determined
HMIS	**Health Hazards** 2	**Flammability** 0	**Physical Hazards** 0	**Personal Protection** Not determined

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Revision Note New format

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