Safety Data Sheet

Issue Date: 01-May-2013 **Revision Date:** 14-May-2024 **Version 9**

1. IDENTIFICATION

Product Identifier

Product Name Zinc Sulfate Monohydrate

Other means of identification

SDS # OBM-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 Minerals, 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 (24 hr) Chemtrec 1-800-424-9300 (North America) 1-703-527-3887 (International)

2. HAZARDS IDENTIFICATION

Appearance - White Granules or Powder **Physical State -** Solid **Odor -** Odorless

Classification

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

Signal Word
Warning

Hazard statements
Harmful if swallowed or inhaled
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 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
IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
Rinse mouth

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

**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

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

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

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use CO2, 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.

Environmental precautions

Environmental precautions	See Section 12 for additional Ecological Information.

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 Clean-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	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	238 °C	decomposing
Boiling Point/Boiling Range	Not Applicable	
Flash Point	Not Applicable	
Evaporation Rate	Not Applicable	
Flammability (Solid, Gas)	Not determined	
Flammability Limits in Air		
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	Not determined	
Vapor Density	Not Applicable	
Relative Density	3.28	
Water Solubility	30 - 37% @ 21 ° C/ 70 ° F	Crystallization point
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition 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	Do not inhale.
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

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

The following values are calculated based on chapter 3.1 of the GHS document.

ATEmix (oral)	500.00 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity
Very toxic to aquatic life with long lasting effects.

Component Information
Not available

Persistence/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.

California Hazardous Waste Status

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.

DOT

Class 9 placards are not required for domestic transportation. However, a bulk package or bulk truck (IBC) with more than a Reportable **Quantity of 1000 pounds** must be marked with the appropriate 3077 ID (Identifications number) number on a white square-on-point display. CFR 172.504 (f) (9). In accordance with FMCSR's (Federal Motor Carrier Safety Regulations) only drivers of vehicles transporting hazardous materials that are required to be placarded in accordance with Subpart F of Part 172 of the HMR must have a hazardous materials endorsement to the CDL. Thus, a hazardous materials endorsement is NOT required for a driver transporting class 9 materials because no placard is required, only a marking is required.
In Packages less than 1000 lbs. this material is not Hazardous.

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

Chemical Name	TSCA	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Zinc Sulfate, monohydrate	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)
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
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, monohydrate - 7446-19-7	7446-19-7	100	1.0

CWA (Clean Water Act)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Zinc Sulfate, monohydrate		X		

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

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

This SDS is compliant with OSHA Hazard Communication Standard under 29 CFR 1910.1200, Regulation (EC) 1907/2006 (REACH), and Regulation (EC) 1272/2008 (CLP).

Issue Date: 01-May-2013
Revision Date: 14-May-2024
Revision Note: Company Name 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