

## 1. 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 (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**

<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Call a physician. Wash contaminated clothing before reuse.
<b>Inhalation</b>	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.
<b>Ingestion</b>	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**

<b>Symptoms</b>	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.
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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 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

<b>Physical state</b>	Solid	<b>Odor</b>	Odorless
<b>Appearance</b>	White granules or powder	<b>Odor Threshold</b>	Not determined
<b>Color</b>	White		
<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>	
<b>pH</b>	Not Applicable		
<b>Melting Point/Freezing Point</b>	21 °C / 70 °F	Crystallization point	
<b>Boiling Point/Boiling Range</b>	Not Applicable		
<b>Flash Point</b>	Not Applicable		
<b>Evaporation Rate</b>	Not Applicable		
<b>Flammability (Solid, Gas)</b>	Not determined		
<b>Flammability Limits in Air</b>			
<b>Upper Flammability Limits</b>	Not determined		
<b>Lower Flammability Limit</b>	Not determined		
<b>Vapor Pressure</b>	Not determined		
<b>Vapor Density</b>	Not Applicable		
<b>Relative Density</b>	3.28		
<b>Water Solubility</b>	30 - 37%	@ 21 °C/ 70 °F	
<b>Solubility in other solvents</b>	Not determined		
<b>Partition Coefficient</b>	Not determined		
<b>Auto-ignition 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** 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

<b>Eye Contact</b>	Avoid contact with eyes.
<b>Skin Contact</b>	Avoid contact with skin.
<b>Inhalation</b>	Do not inhale.
<b>Ingestion</b>	Harmful if swallowed.

### Component Information

Not available

### Information on physical, chemical and toxicological effects

<b>Symptoms</b>	Please see section 4 of this SDS for symptoms.
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### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.
<b>Carcinogenicity</b>	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.

<b>ATEmix (oral)</b>	500.00 mg/kg
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## 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

- 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
  
- 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/E LINCS	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

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	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**

<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

**Issue Date:** 01-May-2013  
**Revision Date:** 11-Apr-2018  
**Revision Note:** Regulatory update

**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**