

1. IDENTIFICATION

Product Name Zinc Sulfate Granular
Recommended use Fertilizer and Animal Feed
Supplier Valudor Products, LLC
 179 Calle Magdalena Suite 100
 Encinitas, CA 92024
 (760) 635 8500
Emergency Telephone 800-535-5053 (Infotrac)

2. HAZARD IDENTIFICATION

Classification

This product considered hazardous under the U.S. OSHA 29 CFR 1910.1200 Hazard Communication Standard.

Eye damage/Irritation	Category 1
Acute Toxicity - oral	Category 4

Label Elements

GHS Pictograms



Signal Word

Danger

Hazard Statements

Causes serious eye damage
Harmful if swallowed

Precautionary Statements – Prevention

Wear eye protection/face protection
Wash thoroughly after handling
Do not eat, drink or smoke when using this product.

Response Ingestion

If swallowed: Call a poison center/doctor if you feel unwell
Rinse mouth
IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.

Eye

Disposal

Immediately call a poison center/doctor
Dispose of contents/container in accordance with local/regional/national/international regulations

Hazards not other classified

None

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance

Chemical name	CAS-No	Weight-%
<u>Zinc Sulfate Monohydrate</u>	<u>7446-19-7</u>	<u>90-100</u>

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact	Immediately rinse with plenty of water. Remove contact lenses, if present and easy to do so. Keep eye wide open while rinsing. Continue rinsing for 15 minutes. Call a doctor/physician immediately
Skin Contact	Wash off immediately with plenty of water. Remove all contaminated clothes and shoes. If skin irritation persists, call a doctor/physician
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	If swallowed, give several glasses of water to drink. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.

Most important symptoms/effects, acute and delayed

Symptoms	No information available
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5. FIRE-FIGHTING MEASURES

<u>Suitable extinguishing Media</u>	Use any means suitable for extinguishing surrounding fire.
Unsuitable Extinguishing Media	Use water carefully as material will react with water to form acidic solution. Water spray may be used to keep fire exposed containers cool.

Specific Hazards Arising from the chemical

Hazardous combustion products	Thermal decomposition can lead to the release of irritation or toxic gases and vapors; including and not limited to: Oxides of zinc and sulfur
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Protective equipment and precautions for fire-fighters

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	Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists. Use personal protection recommended in
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Section 8. Ensure adequate ventilation.

Methods and materials for containment and cleanup

Methods for clean-up Sweep or vacuum up and place in an appropriate closed container. Keep unauthorized personnel away. Avoid generating dust.

Environmental Precautions Prevent entry into waterways or sewers

7. HANDLING AND STORAGE

Precautions for safe handling

Do not breathe dust. Avoid direct or prolonged contact with skin, eyes and clothing. Do not ingest. Do not use in areas without adequate ventilation. Use personal protective equipment recommended in section 8. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practices.

Conditions for safe storage, including any incompatibilities

Store in a cool/low-temperature, well-ventilated, dry place. Keep containers closed and labeled when not in use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the regional specific regulatory bodies

Appropriate engineering controls

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Maintain eye wash fountain and quick-drench facilities in work area.

Personal Protective Equipment

Eye/face protection	Use chemical safety goggles
Skin protection	Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
Respiratory protection	Not required under normal circumstances. If exposure limits are exceeded or if irritation or other symptoms are experienced use a NIOSH/MSHA approved respirator
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practices. Do not eat, drink or smoke when using this product.

9. PHYSICAL and CHEMICAL PROPERTIES

Appearance	White granules
Physical state	Solid
Odor	Odorless
Odor threshold	No information available
pH	4.0-5.2 (50 g/L)

Melting point / freezing point	No information available
Boiling point / Boiling range	Not applicable
Flash point	Not applicable
Evaporation rate	Not applicable
Flammability	No information available
Flammability or explosive limits	
Upper	No information available
Lower	No information available
Vapor pressure	No information available
Vapor density	No information available
Specific Gravity	3.28
Solubility in water	54g/100 ml at 70° F
Partition coefficient	No information available
Auto-ignition temperature	No information available
Decomposition temperature	No information available
Viscosity	No information available

10. STABILITY AND REACTIVITY

Reactivity	None known under normal conditions
Chemical stability	Stable under ordinary conditions of use and storage. Hygroscopic: absorbs moisture or water from the air.
Possibility of hazardous reactions	None under normal processing
Conditions to avoid	Avoid dust formation
Incompatible materials	Strong bases. Exposure to moist air or water.
Hazardous decomposition products	Zinc sulfate can decompose at high temperatures to form toxic oxides, sulfur and zinc oxide.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Skin contact	May cause skin irritation
Eye contact	Causes serious eye damage
Inhalation	May cause irritation of respiratory tract
Ingestion	Harmful if swallowed

Symptoms related to the physical chemical and toxicological characteristics

Symptoms may include redness, itching, pain, coughing, sore throat, shortness of breath, temporary loss of vision, abdominal pain, diarrhea, nausea, vomiting

Delayed and immediate effects and also chronic effects form short and long-term exposure

Skin damage/irritation	Not classified
Eye damage/irritation	Causes serious eye damage
Sensitization	Not classified
Mutagenic effects	Not classified

Carcinogenicity	No component of this product is identified as a known or anticipated carcinogen by NTP, IARC, OSHA or ACGIH
Reproductive toxicity	Not classified
STOT – single exposure	Not classified
STOT – repeated exposure	Not classified
Aspiration hazard	Not classified

Acute Toxicity**Component information**

Component	Cas-No	LD50 Oral	LD50 Dermal	LC50 Inhalation
Zinc sulfate	7733-02-0	574 mg/kg	>2,000 mg/kg	-

12. ECOLOGICAL INFORMATION

Ecotoxicity Very toxic to aquatic life with long lasting effects

Component	Species	Data
Zinc sulfate (CAS 7733-02-0)		
<u>Aquatic</u>		
Fish LC50	Rainbow trout (Oncorhynchus mykiss)	0.24 – 0.83 mg/l 96h
Crustacea EC 50	Water Flea (Daphnia Magna)	7.4 mg/l 48h

Persistence and degradability No information available

Bioaccumulative potential No information available

Mobility in soil No information available

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Processing, use or contamination of this product may occur during product use. Accordingly, it is the responsibility of the user to determine the proper disposal methodologies. Consult the appropriate state, regional or local regulations to ensure complete and accurate classification. Dispose of contaminated packaging in accordance with local regulations.

14. TRANSPORT INFORMATION

DOT Not Regulated

Classification depends on package size, mode of transport and other factors. Always consult local regulations before shipment

15. REGULATORY INFORMATION

International Inventories

TSCA	Listed
DSL	Listed

US Federal Regulations**TSCA section 12(b) Export Notification**

Not regulated

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains the following compounds which are subject to the reporting requirements of the Act and 40 CFR, Part 372: Zinc compounds 90-100%

SARA 311/312 Hazard Categorization

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Pressure	No
Reactivity	No

CERCLA/SARA 302 & 304

Section 302 & 304 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains the following compounds which are subject to the reporting requirements of the Act and 40 CFR, Part 355.

Chemical name	Cas-No	CERCLA RQ
Zinc sulfate	7733-02-0	1000 lbs.

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): Zinc Sulfate

US State Regulations**California Proposition 65**

This product does not contain any proposition 65 chemicals

16. OTHER INFORMATION

NFPA Ratings Health: 2 Flammability: 0 Reactivity: 0

Creation Date: 02/21/2016

Revision Date: 10/15/2019

Revision Number: 1.0

Revision Information: Creation

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

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Revision Date: 10/15/2019

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