

## Material Safety Data Sheet

### ZINC SULPHATE

#### Section 1 - Product Identification

Product Name : Zinc Sulphate  
CAS No. : 7733-02-0  
Synonym : white vitriol, zinc sulfate, zinc vitriol.  
Company Identification : Tradeasia International Pte. Limited  
Address :  
133 Cecil Street # 12-03 Keck Seng Tower, Singapore  
Tel: +65-6227 6365  
Fax: +65-6225 6286  
Email: contact@chemtradeasia.com

#### Section 2 – Composition/Information on Ingredients

##### Substances

Name of substance	Zinc Sulphate
Identifiers	
CAS No	7733-02-0
Molecular formula	ZnSO <sub>4</sub>
Molar Mass	161.47 g/mol

#### Section 3 – Hazardous Ingredients & Occupational Exposure Limits

##### Classification of the substances or mixture

##### Classification According to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 4), H30  
Serious eye damage (Category 1), H318  
Acute aquatic toxicity (Category 1), H400  
Acute aquatic toxicity (Category 1), H400  
Chronic aquatic toxicity (Category 1), H410

##### Label Elements

##### Labeling According Regulation (EC) No 1272/2008

Hazard Pictogram(s):



Signal Word: Danger

##### Hazard Statements:

H302 Harmful if swallowed.  
H318 Causes serious eye damage.  
H410 Very toxic to aquatic life with long lasting effects.

##### Precautionary Statements

P280 Wear eye protection  
P264 Wash hands thoroughly after handling.

P305 + P351 + P338 If in Eyes: Rinse continuously with water for several minutes. Re move contact lenses, if present and easy to do.  
P330 Rinse mouth.  
P310 Immediately call a poison center/ doctor.  
P391 Collect spillage

**Hazards Not Otherwise Classified:** None known.

#### Section 4 – First-Aid Measures

**Inhalation:** Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

**Eye contact:** Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention immediately. Continue to rinse.

**Skin Contact:** Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.

**Ingestion:** Provide rest, warmth and fresh air. Immediately rinse mouth and drink plenty of water (200-300 ml). Get medical attention if any discomfort continues.

**Notes to physician:** No specific treatment. Treat symptomatically.

#### Section 5 – Employee Protection

**Flash Point:** Not flammable

**Extinguishing Media:** Dry chemical, Carbon Dioxide or Foam. Water may be ineffective, but water spray or fog may be used as a cooling agent.

**Fire and Explosion Hazards:** May release toxic Oxides of Zinc and Sulfur in a fire.

#### Section 6 – Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures:** Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

**Environmental Precautions:** Prevent further spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**Methods and Materials for Containment and Cleaning up:** Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### Section 7 – Handling and Storage

**Usage Precautions:** Avoid spilling, skin and eye contact. Provide good ventilation.

**Storage Precautions:** Keep container tightly closed. Keep in original container.

**Storage Class:** Chemical storage

#### Section 8 – Exposure Controls/Personal Protection (later)

**Exposure Limits/Guidelines:**

ACGIH: None listed

NIOSH: None listed

OSHA: None listed

## Personal Protective Equipment

**Eye/face protection:** Do not wear contact lenses when working with chemicals. Wear appropriate protective eyeglasses or chemical safety goggles as described in 29 CFR 1910.133.

**Skin and body protection:** Wear appropriate protective gloves to prevent skin exposure.

**Respiratory protection:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 and ANSI Z88.2. Use a NIOSH/MSHA approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

## Section 9 – Physical and Chemical Properties

### Information on basic physical and chemical properties

Physical State: Crystals

Color: White

Odor: Odorless

pH: 4.4-6 (5% aq soln)

Vapor Pressure: Not available

Vapor Density: Not available

Evaporation Rate: Negligible

Viscosity: Not available

Boiling Point: Not available

Freezing/Melting Point: 100°C

Decomposition Temperature: > 500°C

Solubility in water: Soluble

Specific Gravity/Density: 3.54 g/cm<sup>3</sup> @ 25°C

### Other data

No data available

## Section 10 – Stability and Reactivity

**Reactivity:** Substance has acid reaction.

**Chemical Stability:** Stable under normal conditions.

**Possibility of Hazardous Reactions:** : Reacts exothermically with (some) bases.

**Conditions to Avoid:** Keep away from naked flames.

**Incompatible Materials:** (strong) bases.

**Hazardous Decomposition Products:** On burning: release of toxic and corrosive gases/vapours (sulphur oxides, zinc oxide).

**Hazardous polymerization:** No data available.

## Section 11 – Toxicological Information

**RTECS#:** CAS# 7733-02-0: ZH5260000

### LD50/LC50:

CAS# 7733-02-0:

Draize test, rabbit, eye: 420 ug Moderate;

Oral, mouse: LD50 = 245 mg/kg;

Oral, rabbit: LD50 = 2 gm/kg;

**Carcinogenicity:** Not listed by ACGIH, IARC, NTP, or CA Prop 65..  
**Reproductive toxicity:** No data available  
**Specific target organ toxicity following single exposure:** No data available  
**Specific target organ toxicity following repeated exposure:** No data available  
**Aspiration hazard:** No data available

**Signs and symptoms of exposure:**

Irritation is generally caused by mechanical action.

**Inhalation (Breathing):** Respiratory Irritation: Upper airway irritation, may cause cough, redness of mouth and upper airways.

**Skin:** Skin Irritation. Exposure to powder or fine particulates of this material may cause slight skin redness, irritation.

**Eye:** Eye Irritation: Eye exposure may cause irritation, and redness to the eye lids, conjunctiva.

**Ingestion (Swallowing):** No known effects.

**Potential health effects**

Eye contact: May cause eye irritation.

Inhalation: May cause respiratory tract irritation.

Skin Contact: May cause skin irritation.

Ingestion: May cause irritation of the digestive tract.

**Interaction with Other Chemicals Which Enhance Toxicity:** None known.

## Section 12 – Ecological Information

**Ecotoxicity:** The product contains a substance which is very toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment. **Mobility:** The product is soluble in water.

**Degradability:** The product is not readily biodegradable.

## Section 13 – Disposal Considerations

**General Information:** Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority. Do not puncture or incinerate even when empty.

**Disposal Methods:** Dispose of waste and residues in accordance with local authority requirements.

## Section 14 – Transport Information

**DOT/TDG Classification:**

UN: 3077

Shipping Name: Zinc Sulphate (Hydrous). Marine pollutant

Class: 9

PG: III

Special Provision: Regulated if greater than the Reportable Quantity: 1,000 LBS (454 KG)

**Additional Information:**

No data available

## Section 15 – Regulatory Information

### 1. US Federal regulations

**TSCA:** CAS# 7733-02-0 is listed on the TSCA inventory.

**CERCLA Hazardous Substances and corresponding RQs:** CAS# 7733-02-0: 1000 lb final RQ; 454 kg final RQ

**SARA Codes:** CAS # 0-00-0: acute, reactive. CAS # 90-43-7: acute.

**SARA 313:** This product contain the following substance subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372: Zinc Compound.

**Clean Water Act:** CAS# 7733-02-0 is listed as a Hazardous Substance under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. CAS# 7733-02-0 is listed as a Toxic Pollutant under the Clean Water Act.

### 2. International regulations

#### CANADA

CAS# 7733-02-0 is listed on Canada's DSL List.

CAS# 7733-02-0 is listed on the Canadian Ingredient Disclosure List.

#### EU-Regulations

##### European Labeling in Accordance with EC Directives

##### Hazard Symbols:

Not available.

##### Risk Phrases:

##### Safety Phrases:

S 22 Do not breathe dust.

S 25 Avoid contact with eyes.

##### WGK (Water Danger/Protection)

CAS# 7733-02-0: 1

### 3. National regulations

**U.S. INVENTORY STATUS: Toxic Substance Control Act (TSCA):** All components are listed or exempt.

**TSCA 12(b):** This product is not subject to export notification.

### 4. US State regulations

#### ZINC SULPHATE

State or local regulations	U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - California - Right To Know List
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## Section 16 - Additional Information

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**References:** Not available.

**Other Special Considerations:** Not available.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall Tradeasia International Pte. Ltd. Be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Tradeasia International Pte. Ltd. has been advised of the possibility of such damages.