Material Safety Datasheet

Company Details

Name: PROTEA CHEMICALS
Address: 1 Berrange Road
Wadeville
Germiston
1422

Trade / Commercial Name: ZINC SULFATE
Chemical Name: environmentally hazardous substance, solid, NOS
Formula: Molecular formula: \( \text{O}_4\text{SZn} \times 7\text{H}_2\text{O} \)
Chemical Family: 030 Zinc compounds 016 Sulphates
Synonyms: Sulfuric acid, zinc salt (1:1), heptahydrate * White vitriol (heptahydrate) * Zinc vitriol
Un No: 3077
ERG No: 171

1. Product and Company Identification

2. Hazards Identification

Irritating to eyes and skin. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. Composition

Hazardous Components: zinc sulphate

4. First Aid Measures

First Aid Skin: Remove & isolate contaminated clothing, including shoes. Flush skin with running water for 20 minutes.
First Aid Eyes: Flush eyes with water for 20 minutes. Hold eyelids open while washing.
First Aid Ingested: Seek medical treatment.
First Aid Inhalation: Move victim to fresh air. If not breathing give artificial respiration. If breathing of victim is difficult administer oxygen for a maximum period of one hour.

5. Fire Fighting Measures

Small Fires: Dry chemical, CO2, water spray or regular foam.
Large Fires: Water spray, fog or regular foam.
Move containers from fire area if you can do it without risk.
Do not scatter spilled material with high pressure water streams.
Dike fire-control water for later disposal.
Fire involving Tanks: Cool containers with flooding quantities of water until well after fire is out.
Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
ALWAYS stay away from the ends of tanks.
Isolate spill or leak area immediately for at least 10 to 25 metres (30 to 80 feet) in all directions.
Keep unauthorized personnel away. Stay upwind.
Wear positive pressure self-contained breathing apparatus (SCBA).
Structural firefighters' protective clothing will only provide limited protection.
If ROAD OR RAIL TANKER is involved in a fire, ISOLATE for 800 metres (1/2 mile) in all directions; also, consider initial evacuation for 800 metres (1/2 mile) in all directions.
6. Accidental Release Measures

PRECAUTIONS:
Restrict access to area.
Provide adequate protective equipment and ventilation.
Remove sources of heat and flame.
Notify occupational and environmental authorities.

SPILL OR LEAK:
Do not touch or walk through spilled material.
Stop leak if you can do it without risk.
Small Dry Spills
With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.
Large Spills
Cover powder spill with plastic sheet or tarp to minimize spreading.
Prevent entry into waterways, sewers, basements or confined areas.

7. Handling And Storage

Handling And Storage Precautions
KEEP CONTAINER TIGHTLY CLOSED. STORE IN COOL, DRY, WELL-VENTILATED AREA. RETAINED RESIDUE MAY MAKE EMPTY CONTAINERS HAZARDOUS, USE CAUTION.

Other Precautions
DON'T BREATHE DUST, GET IN EYES, ON SKIN/CLOTHING. DON'T TAKE INTERNALLY. MATERIAL SHOULD BE HANDLED/TRANSFERRED IN AN APPROVED FUME HOOD/W/EQUIVALENT VENTILATION.

Storage in the same room or space is prohibited with the following classes:
The rooms or spaces should be at least 10M apart.
Explosives

8. Exposure Controls/Personal Protection

Occupational Exposure Limits
No Exposure Limits Established

Controls
The control measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure.
The best protection is to enclose operations and/or provide local exhaust ventilation at the site of chemical release.
Use a non-sparking, grounded ventilation system separate from other exhaust ventilation systems. Exhaust directly to the outside.
Supply sufficient replacement air to make up for air removed.
Have a safety shower/eye wash fountain readily available in the immediate work area

Personal Protection
If engineering controls and work practices are not effective in controlling this material, then wear suitable personal protection equipment, including chemical safety goggles & face shield, boots, imperious gloves, coveralls, & respiratory protection.
Have appropriate equipment available for use in emergencies.

9. Physical & Chemical Properties

White, odourless crystals
Physical State: Solid
pH value
at 50 g/l H2O (20°C) ~4.6
Melting point ~40°C

10. Stability And Reactivity

Conditions to Avoid
Strong heating.

Incompatible Materials
11. Toxicological Information

ROUTE OF EXPOSURE
Skin Contact: May cause skin irritation.
Skin Absorption: May be harmful if absorbed through the skin.
Eye Contact: Causes severe eye irritation.
Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.
Ingestion: Harmful if swallowed.

TARGET ORGAN(S) OR SYSTEM(S)

TOXICITY DATA
Oral
Rat
1,260 mg/kg
LD50

Oral
Rat
2150 mg/kg
LD50

Intraperitoneal
Rat
200 MG/KG
LD50

Oral
Mouse
2200 mg/kg
LD50

Intraperitoneal
Mouse
75 MG/KG
LD50

CHRONIC EXPOSURE - MUTAGEN
Species: Mouse
Route: Intraperitoneal
Dose: 20 GM/KG
Mutation test: DNA inhibition

12. Ecological Information

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13. Disposal Considerations

Disposal Method Product
There are no uniform EC regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding laws and regulations. We recommend that you contact the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste.

Disposal Method Packaging
Disposal in accordance with local legal provisions.

14. Transport Information

UN No
3077

Hazchem Code
2we
15. Regulatory Information

**EEC Hazard Classification**

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**Risk Phases**
Harmful if swallowed. Risk of serious damage to eyes.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety Phases**
Do not breathe dust.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear eye/face protection. If swallowed, seek medical advice immediately and show this container or label.

This material and its container must be disposed of as hazardous waste.

Avoid release to the environment.

National Legislation

16. Other Information

Reason for Alteration: General update.

The information contained herein is based on the present state of our knowledge.

It characterizes the product with regard to the appropriate safety precautions.

It does not represent a guarantee of the properness of the product.

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