



LTS Research Laboratories, Inc.
Material Safety Data Sheet
Zinc Sulfide

1. Product and Company Identification

Trade Name: Zinc sulfide
Chemical Formula: ZnS
Recommended Use: Scientific research and development

Manufacturer/Supplier: LTS Research Laboratories, Inc.
Street: 37 Ramland Road
City: Orangeburg
State: New York
Zip Code: 10962
Country: USA
Tel #: 855-587-2436 / 855-lts-chem

24-Hour Emergency Contact: 800-424-9300 (US & Canada)
+1-703-527-3887 (International)

2. Hazards Identification

Signal Word: None

Hazard Statements: H303: May be harmful if swallowed

Precautionary Statements: P261: Avoid breathing dust/fume/gas/mist/vapors/spray

HMIS Health Ratings (0-4):
Health: 1
Flammability: 0
Physical: 1

3. Composition

Chemical Family: Salt
Additional Names: Zinblend, Wurtzite, Zinc sulphide

Zinc sulfide (ZnS):
Percentage: 100 wt%
CAS #: 1314-98-3
EC #: 215-251-3

4. First Aid Procedures

General Treatment: Seek medical attention if symptoms persist.
Special Treatment: None
Important Symptoms: None

Inhalation: Remove victim to fresh air. Supply oxygen if breathing is difficult.
Ingestion: Give one to two glasses of water and induce vomiting. Never induce vomiting or give anything by mouth to an unconscious person.

Skin: Wash affected area with mild soap and water. Remove any contaminated clothing.

Eyes: Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing

5. Fire and Explosion Hazards Data

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| Flammability: | Non-flammable |
| Flash Point: | N/A |
| Autoignition Temperature: | N/A |
| Extinguishing Media: | No special restrictions – use suitable extinguishing agent for surrounding material and type of fire. |
| Spec. Fire Fighting Procedure: | Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. |

6. Accidental Release Measures

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| If Material Is Released/Spilled: | Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Take care not to raise dust. |
| Environmental Precautions: | Isolate runoff to prevent environmental pollution. |

7. Handling and Storage

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| Handling Conditions: | Wash thoroughly after handling. |
| Storage Conditions: | Store in a cool dry place in a tightly sealed container. Store apart from materials and conditions listed in section 10. |
| Work/Hygienic Maintenance: | Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air. |
| Ventilation: | Provide sufficient ventilation to maintain concentration at or below threshold limit. |

8. Exposure Controls and Personal Protection

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| Permissible Exposure Limits: | None |
| Threshold Limit Value: | None |
| Special Equipment: | None |
| Respiratory Protection: | Use a respirator with type N95 (USA) or PE (EN 143) cartridges as a backup to engineering controls. Risk assessment should be performed to determine if purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards. |
| Protective Gloves: | Rubber gloves |
| Eye Protection: | Safety glasses or goggles |
| Body Protection: | Protective work clothing. Wear close-toed shoes and long sleeves/pants. |

9. Physical and Chemical Characteristics

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| Color | White |
| Form: | Powder, Granules, Pellets, Sputtering target, Custom parts |
| Odor: | Odorless |
| Water Solubility: | 0.0069 g/l |
| Boiling Point: | 1,185 °C (sublimes) |
| Melting Point: | N/A |
| Density: | 4.09 g/cc |
| Molecular weight: | 97.474 g/mol |

10. Reactivity

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| Stability: | Stable under recommended storage conditions |
| Reacts With: | Oxidizing agents, acids |
| Incompatible Conditions: | None |
| Hazardous Decomposition Products: | Metal oxide fume,SO _x |

11. Toxicological Information

Potential Health Effects:

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| Eyes: | May cause irritation |
| Skin: | May cause irritation |
| Ingestion: | Contact with acids liberates toxic gas |
| Inhalation: | May cause irritation |
| Chronic: | Zinc-containing fumes may cause metal fume fever. Sulfides may cause irritation to skin, corrosive by ingestion. Hydrogen sulfide, if generated, is toxic, a severe irritant and flammable. Effects include conjunctivitis, headache, nausea, dizziness, coughing, pulmonary edema and leading to death. |

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| Signs & Symptoms: | N/A |
| Aggravated Medical Conditions: | N/A |

Median Lethal Dose: >2000 mg/kg for rat by mouth or skin

Carcinogen: EPA-D: Not classifiable as to human carcinogenicity: inadequate human and animal evidence of carcinogenicity or no data are available.
EPA-I: Data are inadequate for an assessment of human carcinogenic potential.
EPA-II: Inadequate information to assess carcinogenic potential.

12. Ecological Information

Ecological data is not available.

13. Disposal Considerations

Dispose of in accordance with local, state, national, and international regulations.

14. Transportation Data

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|-----------------------|-----------------------------------|
| Hazardous: | Not hazardous for transportation. |
| Hazard Class: | N/A |
| Packing Group: | N/A |
| UN Number: | N/A |
| Proper Shipping Name: | N/A |

15. Regulatory Information

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| Sec 302 Extremely Hazardous: | No |
| Sec 304 Reportable Quantities: | N/A |
| Sec 313 Toxic Chemicals: | Yes |

16. Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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