



LTS Research Laboratories, Inc.
Safety Data Sheet
Zinc Peroxide

1. Product and Company Identification

Trade Name: Zinc peroxide
Chemical Formula: ZnO₂
Recommended Use: Scientific research and development

Manufacturer/Supplier: LTS Research Laboratories, Inc.
Street: 2001 Oaks Pkwy
City: Belmont
State: North Carolina
Zip Code: 28012
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:

Danger



Hazard Statements:

H271: May cause fire or explosion; strong oxidizer
H315: Causes skin irritation
H319: Causes serious eye irritation
H410: Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking
P220: Keep/Store away from clothing/ other combustible materials
P221: Take any precaution to avoid mixing with combustibles
P264: Wash skin thoroughly after handling
P273: Avoid release to the environment
P280: Wear protective gloves/protective clothing/eye protection/face protection
P283: Wear fire/ flame resistant/ retardant clothing
P302 + P352: IF ON SKIN: Wash with plenty of soap and water
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P306 + P360: IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes
P332 + P313: If skin irritation occurs: Get medical advice/ attention
P337 + P313: If eye irritation persists: Get medical advice/ attention
P362: Take off contaminated clothing and wash before reuse
P370 + P378: In case of fire: Use CO₂, dry sand, dry chemical, or alcohol-resistant foam to extinguish

P371 + P380 + P375: In case of major fire and large quantities:
Evacuate area. Fight fire remotely due to the risk of explosion.
P391: Collect spillage
P501: Dispose of contents/ container to an approved waste disposal

HMIS Health Ratings (0-4):

Health:	2
Flammability:	0
Physical:	0

3. Composition

Chemical Family:	Inorganic compound
Additional Names:	Zinc peroxide

Zinc Peroxide (ZnO ₂):	
Percentage:	100 wt%
CAS No:	1314-22-3
EC No:	215-226-7

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. Firefighting Measures

Flammability:	Non-flammable, except as powder
Extinguishing Media:	No special restrictions – use suitable extinguishing agent for surrounding material and type of fire. Do not use water for metal fires – use CO ₂ , sand, extinguishing powder.
Spec. Fire Fighting Procedure:	Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products.

6. Accidental Release Measures

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

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

Permissible Exposure Limits:	5 mg/m ³ as ZnO, long-term value
Threshold Limit Value:	N/A
Special Equipment:	None
Respiratory Protection:	Dust Respirator
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

Color	N/A
Form:	Powder, Granules, Pellets, Sputtering target, Custom parts
Odor:	N/A
Water Solubility:	N/A
Boiling Point:	N/A
Melting Point:	212 °C
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	1.57 g/cm ³
Molecular weight:	97.38 g/mol

10. Reactivity

Stability:	Stable under recommended storage conditions
Reacts With:	Reducing Agent, Strong reducing agents, Combustible material
Incompatible Conditions:	Excess heat. Combustible material
Hazardous Decomposition Products:	None under normal use conditions

11. Toxicological Information

Potential Health Effects:	
Eyes:	Causes serious eye irritation
Skin:	Causes skin irritation
Ingestion:	May cause irritation
Inhalation:	May cause irritation
Chronic:	N/A
Signs & Symptoms:	N/A
Aggravated Medical Conditions:	N/A
Median Lethal Dose:	LD50 = 5,000 mg/kg for rat by mouth
Carcinogen:	N/A

12. Ecological Information

Aquatic Toxicity: Very toxic to aquatic life with long lasting effects
Persistent Bioaccumulation Toxicity: N/A
Very Persistent, Very Bioaccumulative: N/A
Notes: N/A

13. Disposal Considerations

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

14. Transportation Data

Hazardous: Hazardous for transportation



Hazard Class: 5.1
Packing Group: II
UN Number: UN1516
Proper Shipping Name: Zinc peroxide

15. Regulatory Information

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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