

Safety Data Sheet (SDS)

3/17/2025: File reviewed, more current MSDS/SDS not available. CAS

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Zinc Oxide

Signal Word
WARNING

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

Chemtrec Emergency Phone Number: (800) 424-10507

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Hazardous to the aquatic environment, acute toxicity (Category 1). Very toxic to aquatic life (H400).



Hazard class: Hazardous to the aquatic environment, chronic toxicity (Category 1). Very toxic to aquatic life with long lasting effects (H410).

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Zinc oxide	1314-13-2	ZnO	81.38	
Synonyms: Zinc white				

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If eye irritation persists eyes:** Get medical advice or attention (P337+P313).

If on skin: Wash with plenty of water. **If skin irritation occurs:** Get medical advice or attention (P332+P313).

If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

NFPA Code

When heated to decomposition, may emit toxic fumes.

None established

In case of fire: Use a tri-class dry chemical fire extinguisher.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Sweep up, place in sealed bag or container and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #4. Store with hydroxides, oxides, silicates and carbonates. Store in a cool, dry place.
Avoid release to the environment (P273).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264).
Exposure guidelines: PEL 15 mg/m³ (OSHA); TLV 2 mg/m³, STEL 10 mg/m³ (respirable fraction) (ACGIH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Pale-yellow granular powder. Odorless.	Melting point: 1975 °C
Soluble: Acids and alkali	Specific gravity: 5.47

SECTION 10 — STABILITY AND REACTIVITY

Zinc oxide, powder reacts violently with chlorinated rubber. Avoid heating.
Shelf life: Indefinite, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Harmful dust.	ORL-RAT LD ₅₀ : greater than 8437 mg/kg
Chronic effects: N.A.	IHL-MUS LC ₅₀ : 2500 mg/m ³
Target organs: N.A.	SKN-RBT LD ₅₀ : N.A.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.
Flinn Suggested Disposal Method #26a is one option.
Dispose of contents/container to an approved waste disposal plant (P501).

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (215-222-5).

SECTION 16 — OTHER INFORMATION

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N.A. = Not available, not all health aspects of this substance have been fully investigated.

N/A = Not applicable

Consult your copy of the Flinn Science Catalog/Reference Manual for additional information about laboratory chemicals.

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