

ZINC OXIDE

Safety Data Sheet

According to REACH Regulation (1907/2006/EC) and Regulation (EU) 2020/878

Date of Issue : 01-01-2026
Last revision Date: Not applicable

Revision: 00

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier**Name:** Zinc Oxide**Chemical name:** Zinc oxide**CAS number:** 1314-13-2**EC number:** 215-222-5**Registration number under REACH Regulation:** A registration number is not available for this substance as the substance or its uses are exempted from registration or the annual tonnage does not require registration.**Nanoform:** Not applicable**1.2. Relevant identified uses of the substance or mixture and uses advised against****Identified uses:**

Manufacture of substances

Uses advised against:

Not for ingestion or use in food unless specified by regulation.

1.3. Details of the supplier of the safety data sheetManufacturer, importer, or distributor: **Manufacturer****Name:** Waylink Life Science Private Limited**Full address: Corporate office:**7, G. C. Avenue, Floor No. 4, Room No. 5
Kolkata – 700013, West Bengal, India**Manufacturing Premises situated at:**Waylink Life Science Private Limited,
D-7B, D-8 & D-16, Panki Industrial Area, Site-1,
Kanpur – 208022, Uttar Pradesh, IndiaE-mail address of the competent person responsible for the Safety Data Sheet: marketing@waylinklifescience.com**1.4. Emergency telephone number**

Emergency Phone: (+91) 6291111373 (Mr. Arun Kr Baid – Director)



SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 on classification, labelling and packaging:

H400: Aquatic Acute 1

H410: Aquatic Chronic 1

2.2. Label elements

Hazard pictogram



Hazard statements

Warning

Hazard statements:

H400: Very toxic to aquatic life

H410: Very toxic to aquatic life with long lasting effects

Precautionary statements:

P273: Avoid release to the environment

P391: Collect spillage

P501: Dispose of contents/container in accordance with regulations

Additional labelling information:

EUH210: Safety data sheet available on request.

2.3. Other hazards

PBT/vPvB: No data available.

Endocrine disrupting properties: Not applicable

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**3.1. Substances**

Chemical name: Zinc oxide

CAS number: 1314-13-2

EC number: 215-222-5

Index number under CLP Regulation: 030-013-00-7

Registration number under REACH Regulation: Registered; exempted from registration.

Nanoform: Not applicable

3.2 Mixtures

Not applicable.

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

4.1.1. General information:

Remove contaminated clothing and shoes. Ensure adequate ventilation. Seek medical advice if symptoms persist or in case of doubt.

4.1.2. Following inhalation:

Move the affected person to fresh air and keep at rest in a comfortable position for breathing. If respiratory irritation, coughing or other symptoms persist, seek medical attention.

4.1.3. After skin contact:

Wash affected areas thoroughly with soap and plenty of water. If skin irritation occurs or persists, obtain medical advice.

4.1.4. Following eye contact:

In case of contact with eyes, rinse immediately with plenty of water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing and seek medical attention if irritation persists.

4.1.5. After swallowing:

Rinse mouth thoroughly with water. Do not induce vomiting. Seek medical advice if feeling unwell.

4.1.6. Self-protection of the first aider:

Use personal protective equipment as appropriate. Avoid contact with dust and ensure adequate ventilation during rescue.

4.2 Most important symptoms and effects, both acute and delayed

Mild eye irritation.

Mild skin irritation.

4.3. Indication of any immediate medical attention and special treatment needed

No specific treatment is required. Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media:

Water,
Foam.
Carbon dioxide (CO₂),
Dry powder.

Extinguishing media which must not be used for safety reasons:

None specifically, but avoid dispersing large amounts of powder into air, as dust clouds can be a minor fire hazard.

5.2. Special hazards arising from the substance or mixture

None known; non-flammable solid.

5.3. Advice for firefighters

Use self-contained breathing apparatus and protective clothing.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear appropriate protective clothing, gloves, and eye protection.

6.2 Environmental precautions

Prevent entry into drains, surface water, groundwater, or soil.

6.3. Methods and material for containment and cleaning up

Collect mechanically (shovel, broom, vacuum with HEPA filter). Place it in labeled containers; clean residues with damp cloth/water.

6.4. Reference to other sections

See protective measures under point 8 and 13.

SECTION 7. HANDLING AND STORAGE**7.1. Precautions for safe handling**

Avoid dust formation. Use adequate ventilation and appropriate PPE. Follow good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated place. Keep container tightly closed.

7.3. Specific end use(s)

Industrial additive, pigment, or cosmetic & pharmaceutical excipient.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits:

No harmonized EU occupational exposure limit established.

Indicative national limits may apply; 10 mg/m³ (inhalable), 5 mg/m³ (respirable fraction)

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Technical conditions and measures at process level (source) to prevent release

8.2.2. Individual protection measures, such as personal protective equipment

Respiratory protection:

Not normally required. Use a suitable dust mask/respirator if dust formation occurs.

Hand protection:

Protective gloves.

Eye protection:

Safety glasses are recommended if dust exposure is possible.

Skin protection:

Protective clothing or lab coat.

General protection and hygiene measures:

Avoid contact with dust. Remove contaminated clothing. Wash hands thoroughly after handling

8.2.3. Environmental exposure controls

Prevent release to drains, water, or soil.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state, colour	Solid (powder), White
Odour	Odourless
pH	6–8 (10% suspension in water)
Melting point	~ 1975 °C.
Freezing point	Not applicable
Boiling point / Range	Not applicable (decomposes above 1975 °C)
Flash point	Not applicable, the substance is solid.
Flammability (solid, gas)	Product is not classified as flammable; may form combustible dust clouds.
Lower and upper explosion limit	Not applicable, the substance is solid.
Vapour pressure	Negligible.
Relative density / bulk density	Relative Density ~ 5.61 g/cm ³ ; Bulk density ~ 1.0–1.2 g/cm ³
Solubility	Insoluble in water.
Partition coefficient n-octanol/water (log value)	Not applicable
Kinematic viscosity	Not applicable, the substance is solid.
Vapour density	Not applicable, the substance is solid.
Evaporation rate	Not applicable, the substance is solid.
Auto-ignition temperature	Not applicable,
Decomposition temperature	> 1975 °C
Particle characteristics	The product does not contain nanoforms. Typically supplied as powder or granules; particle size varies by grade.

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Explosives	Not classified
Aerosol	Not applicable (product is supplied as a solid/powder/granules).
Gases under pressure	Not applicable (the substance is a solid)
Self-heating substances and mixtures	Not self-heating.
Substances and mixtures, which emit flammable gases in contact with water	Does not emit flammable gases on contact with water.
Self-reactive substances and mixtures	Not self-reactive.
Pyrophoric liquids	Not applicable (the substance is a solid)
Pyrophoric solids	Not pyrophoric.
Flammable liquids	Not applicable (the substance is a solid)
Flammable gases	Not applicable (the substance is a solid)
Flammable solids	Not classified as flammable solid.
Oxidising liquids	Not applicable (the substance is a solid)
Oxidising gases	Not applicable (the substance is a solid)
Oxidising solids	There are no chemical groups that indicate oxidizing properties.
Organic peroxides	Not applicable (the substance is a solid).
Corrosive to metal	Not corrosive to metals.
Desensitised explosives	No data available.

9.2.2. Other safety characteristics

No data available.

9.1. Information on basic physical and chemical properties

SECTION 10. STABILITY AND REACTIVITY**10.1. Reactivity**

See section 10.5.

10.2. Chemical stability

Stable

10.3. Possibility of hazardous reactions

No hazardous polymerization occurs.

10.4. Conditions to avoid

Avoid strong acids or bases

10.5. Incompatible materials

Strong acids, strong bases, and reducing agents

10.6. Hazardous decomposition products

In the event of fire: see section 5

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

11.1.1. acute effects (acute toxicity, irritation and corrosivity)

11.1.1.1. LD50 oral:	> 5,000 mg/kg body weight (rat) Not classified for acute oral toxicity.
11.1.1.2. LD50 dermal:	> 2,000 mg/kg body weight (rabbit) Not classified for acute dermal toxicity.
11.1.1.3. LC50 inhalation:	>5 mg/L (4 h) (rat)
11.1.1.4. Skin corrosion / irritation:	Not classified
11.1.1.5. Serious eye damage / irritation:	Mild transient irritation possible
11.1.1.6. Specific target organ toxicity – single exposure:	Not classified

11.1.2. Sensitization

Respiratory sensitization: No data available
Skin sensitization: No data available

11.1.3. Repeated dose toxicity

Specific target organ toxicity — repeated exposure: No data available

11.1.4. CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity: Not carcinogenic
Germ cell mutagenicity: Not mutagenic
Reproductive toxicity: Not toxic for reproduction
Reproductive toxicity, effects on or via lactation: No data available

11.1.5. Aspiration hazard

Not applicable

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Not applicable.

11.2.2. Other information

No data available.

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity

Very toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

Not biodegradable

12.3. Bioaccumulative potential

Low potential

12.4. Mobility in soil

Low

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Endocrine disrupting properties

This substance is not identified as having endocrine-disrupting properties for human health or the environment in accordance with Article 57(f) of Regulation (EC) No 1907/2006 (REACH).

The substance is not classified as an endocrine disruptor under Regulation (EC) No 1272/2008 as amended by Commission Regulation (EU) 2023/707.

12.7. Other adverse effects

No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Dispose of in accordance with local, regional, and national regulations. Avoid release into the environment.

SECTION 14. TRANSPORT INFORMATION

14.1. UN number or ID number: Not a hazardous material with respect to these transportation regulations.

14.2. UN proper shipping name: Not a hazardous material with respect to these transportation regulations.

14.3. Transport hazard class(es): Not a hazardous material with respect to these transportation regulations.

14.4. Packing group: Not a hazardous material with respect to these transportation regulations.

14.5. Environmental hazards: Not a hazardous material with respect to these transportation regulations.

14.6. Special precautions for user

No data available.

14.7. Maritime transport in bulk according to IMO instruments:

Not applicable

SECTION 15. REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

This substance is subject to the provisions of Regulation (EC) No 1907/2006 (REACH), Regulation (EC) No 1272/2008 (CLP) and Commission Regulation (EU) 2020/878. The substance is not listed in Annex XIV (Authorisation List) of REACH and no specific restrictions under Annex XVII apply. No EU harmonised occupational exposure limits have been established for this substance.

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out for this substance.

SECTION 16. OTHER INFORMATION

Revision 00: Safety Data Sheet format prepared as per EU-REACH guidelines for Zinc Oxide.

The information contained in this brochure is a guide for the user and based on both reference texts and on our own experience. It is intended to reflect the current state of the art but shall under no circumstances compromise our liability. This information cannot be used as a substitute for patented processes. Users shall comply with the legal dispositions and regulations in force, particularly those relating to Health and Safety and the Storage and Transport of Dangerous Goods.

Abbreviations:

ADR – European Agreement concerning the International Carriage of Dangerous Goods by Road

CAS – Chemical Abstracts Service

CLP – Classification, Labelling and Packaging Regulation (EC) No 1272/2008

EC – European Community

ECHA – European Chemicals Agency

IATA – International Air Transport Association

IMDG – International Maritime Dangerous Goods Code

IMO – International Maritime Organization

LC₅₀ – Lethal Concentration, 50%

LD₅₀ – Lethal Dose, 50%

PBT – Persistent, Bioaccumulative and Toxic

REACH – Registration, Evaluation, Authorisation and Restriction of Chemicals

SDS – Safety Data Sheet

STOT – Specific Target Organ Toxicity

vPvB – very Persistent and very Bioaccumulative