ChemicalBook

Chemical Safety Data Sheet MSDS / SDS

Zinc peroxide

Revision Date:2026-05-31 Revision Number:1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Product name	: Zinc peroxide
CBnumber	: CB9853036
CAS	: 1314-22-3
EINECS Number	: 215-226-7
Synonyms	: Zinc Peroxide,Zinc dioxide

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	: For R&D use only. Not for medicinal, household or other use.
Uses advised against	: none

Company Identification

Company	: Chemicalbook
Address	: Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing
Telephone	: 010-86108875

SECTION 2: Hazards identification

GHS Label elements, including precautionary statements

Symbol(GHS)

Signal word Danger

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P220 Keep/Store away from clothing/…/combustible materials.

P264 Wash skin thouroughly after handling.

P273 Avoid release to the environment.

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.

Continuerinsing.

Hazard statements

H271 May cause fire or explosion; strong oxidiser

H315 Causes skin irritation

H319 Causes serious eye irritation

H410 Very toxic to aquatic life with long lasting effects

SECTION 3: Composition/information on ingredients

Substance

Product name	: Zinc peroxide
Synonyms	: Zinc Peroxide,Zinc dioxide
CAS	: 1314-22-3
EC number	: 215-226-7
MF	: O2Zn
MW	: 97.39

SECTION 4: First aid measures

First Aid Measures

General advice

Consult a physician if necessary. Remove to fresh air.

Eye contact

Wash with plenty of water.

Skin Contact

Wash skin with soap and water.

Inhalation

Remove to fresh air If breathing is difficult, give oxygen If not breathing, give artificial respiration

Ingestion

Never give anything by mouth to an unconscious person. Clean mouth with water.

Most important symptoms and effects, both acute and delayed

Symptoms

No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians

Treat symptomatically.

SECTION 5: Firefighting measures

Suitable Extinguishing Media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

None.

Specific hazards arising from the chemical

Specific hazards arising from the chemical

May cause fire or explosion; strong oxidizer.

Hazardous combustion products

No information available.

Explosion data

Sensitivity to Mechanical Impact

No information available.

Sensitivity to Static Discharge

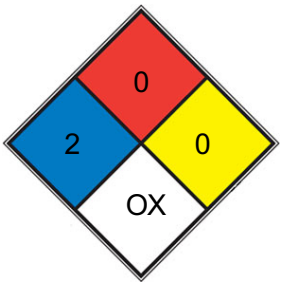
No information available.

Protective equipment and precautions for firefighters

Protective equipment and precautions for firefighters

As in any fire, wear self contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA 704



■	HEALTH	2	Intense or continued but not chronic exposure could cause temporary incapacitation or possible residual injury (e.g. diethyl ether, ammonium phosphate, iodine)
■	FIRE	0	Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand. Materials that will not burn in air when exposed to a temperature of 820 °C (1,500 °F) for a period of 5 minutes.(e.g. Carbon tetrachloride)
■	REACT	0	Normally stable, even under fire exposure conditions, and is not reactive with water (e.g. helium,N2)
□	SPEC. HAZ.	OX	

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions

Use personal protective equipment as required.

Environmental precautions

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not allow into any sewer, on the ground or into any body of water. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Clean contaminated surface thoroughly. Use personal protective equipment as required.

Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.

Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust.

SECTION 7: Handling and storage

Precautions for safe handling

Advice on safe handling

Use personal protective equipment as required. Ensure adequate ventilation, especially in confined areas. Heating may cause a fire or explosion.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature.

Incompatible materials

None known based on information supplied.

SECTION 8: Exposure controls/personal protection

Control parameters

Exposure Guidelines

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Other Information

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Zinc oxide 1314-13-2	STEL: 10 mg/m3 respirable fraction TWA: 2 mg/m3 respirable fraction	TWA: 5 mg/m3 fume TWA: 15 mg/m3 total dust TWA: 5 mg/m3 respirable fraction (vacated) TWA: 5 mg/m3 fume (vacated) TWA: 10 mg/m3 total dust (vacated) TWA: 5 mg/m3 respirable fraction (vacated) STEL: 10 mg/m3 fume	IDLH: 500 mg/m3 Ceiling: 15 mg/m3 dust TWA: 5 mg/m3 dust and fume STEL: 10 mg/m3 fume

NIOSH IDLH Immediately Dangerous to Life or Health

Appropriate engineering controls

Engineering Controls

Showers

Eyewash stations

Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin and Body Protection

Wear protective gloves and protective clothing.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations

When using do not eat, drink or smoke. Wash contaminated clothing before reuse.

SECTION 9: Physical and chemical properties

Information on basic physicochemical properties

Physical State	Solid
Appearance	powder
Odor	No information available
pH	No information available
Melting point/freezing point	212 °C
Boiling point	No information available
Flash point	No information available
Density	1.57 g/mL
Evaporation rate	No information available
Upper flammability limits	No information available
Lower flammability limit	No information available
Vapor pressure	No information available
Vapor density	No information available
Specific gravity	No information available
Water solubility	Insoluble in water.
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	212 ° C

Kinematic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available
Solubility	insoluble in H2O; reacts with acid solutions,ethanol, acetone
Colour	yellow-white

SECTION 10: Stability and reactivity

Reactivity

Not applicable

Chemical stability

Heating may cause a fire or explosion.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization

No information available.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials

Strong oxidizing agents.

Hazardous Decomposition Products

None known based on information supplied.

SECTION 11: Toxicological information

Information on likely routes of exposure

Inhalation

Classified based on available data. For more details, see section 2.

Eye contact

Classified based on available data. For more details, see section 2.

Skin Contact

Classified based on available data. For more details, see section 2.

Ingestion

Classified based on available data. For more details, see section 2.

Information on toxicological effects

Symptoms

Classified based on available data. For more details, see section 2.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity

Classified based on available data. For more details, see section 2. Target Organ Effects Respiratory system.

Chemical Name ACGIH IARC NTP OSHA

Zinc oxide - - Reasonably Anticipated X 1314-13-2

Numerical measures of toxicity - Product Information

Unknown acute toxicity

50% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)

5000 mg/kg

SECTION 12: Ecological information

Ecotoxicity

May cause long lasting harmful effects to aquatic life

50% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility

No information available.

SECTION 13: Disposal considerations

Disposal of wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Do not reuse container.

Other Information

Waste codes should be assigned by the user based on the application for which the product was used.

US EPA Waste Number

D001

California Hazardous Waste Status

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Zinc peroxide 1314-22-3	Toxic Ignitable Reactive
Zinc oxide 1314-13-2	Toxic

Zinc peroxide

Toxic

SECTION 14: Transport information

DOT

UN/ID no

UN1516

Hazard Class

5.1

Packing Group

II

Proper shipping name

Zinc peroxide

Description

UN1516, Zinc peroxide, 5.1, II

Emergency Response Guide Number

143

IMDG

UN/ID no

UN1516

Hazard Class

5.1

Packing Group

II

Proper shipping name

Zinc peroxide

Description

UN1516, Zinc peroxide, 5.1, II

EmS-No

F-G, S-Q

IATA

UN/ID no

UN1516

Hazard Class

5.1

Packing Group

II

Proper shipping name

Zinc peroxide

Description

UN1516, Zinc peroxide, 5.1, II

SECTION 15: Regulatory information

International Inventories

All of the components in the product are on the following Inventory lists

TSCA (United States): Canada (DSL/NDSL) Europe (EINECS/ELINCS/NLP) Australia (AICS) South Korea (KECL): China (IECSC)

ENCS (Japan): Philippines (PICCS)

X - Listed

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

Chemical name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Zinc peroxide	X	X	-	X	-	X	X	X	X	X
Zinc oxide	X	X	-	X	-	X	X	X	X	X

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute health hazard

No

Chronic Health Hazard

No

Fire hazard

No

Sudden release of pressure hazard

No

Reactive hazard

Yes

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Zinc peroxide 1314-22-3		X		
Zinc oxide 1314-13-2		X		

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Zinc oxide 1314-13-2	X	X	X
Zinc peroxide 1314-22-3	X	Not Listed	X

SECTION 16: Other information

Abbreviations and acronyms

CAS: Chemical Abstracts Service

TWA: Time-Weighted Average

STEL: Short-Term Exposure Limit

LD50: Lethal Dose 50%

LC50: Lethal Concentration 50%

EC50: Effective Concentration 50%

PEL: Permissible Exposure Limit

TLV: Threshold Limit Value

IMDG: International Maritime Dangerous Goods Code

IATA: International Air Transport Association

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

DOT: US Department of Transportation

NFPA: National Fire Protection Association

NIOSH: National Institute for Occupational Safety and Health

OSHA: Occupational Safety and Health Administration

Disclaimer:

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.