

14078 Meridian Parkway, Riverside, CA. 92518

SAFETY DATA SHEET

Version: v1

Revision Date: 2024-01-21

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

1.1 Product identifiers

Product name : Zinc oxide
Product Number : Z299297
Brand : aladdin
CAS-No. : 1314-13-2

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

Identified uses : Laboratory chemicals, Manufacture of substances.

1.3 Company

Company : ALADDIN SCIENTIFIC CORPORATION

Address : 14078 Meridian Parkway,

Riverside, CA. 92518

Telephone : +1 (833) 552-7181 Fax : no data available

1.4 Emergency telephone number

CHEMTREC®, Inside the USA : 1-800-424-9300

CHEMTREC®, Outside the USA :

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Reproductive toxicity Category 2

Specific target organ toxicity - Single exposure [Category 1] Respiratory system

Acute aquatic hazard Category 1

Long-term aquatic hazard Category 1

2.2 GHS Label elements, including precautionary statements

Pictogram





Signal word

Hazard statement(s)

Danger



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H361 Suspected of damaging fertility or the unborn child

H370 Causes damage to organs

H410 Very toxic to aquatic life with long lasting effects

Precautionary statement(s)

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P264 Wash hands [and ...] thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P391 Collect spillage.

P308+P311 IF exposed or concerned: Call a POISON CENTER/doctor/...

P405 Store locked up.

P501 Dispose of contents/container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms : no data available

Formula : ZnO

Molecular weight : 81.39

CAS No. : 1314-13-2

EC-NO. : 215-222-5

Component	Classification	Concentration
Zinc oxide		
	no data available	nanoparticles,≤50nm,20 wt. % in H2O

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this material safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact



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Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

no data available

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Dry powder, foam, fog water, carbon dioxide
Unsuitable extinguishing media
no data available

5.2 Special hazards arising from the substance or mixture

no data available

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Keep away from spills / leaks and upwind. Ensure adequate ventilation

6.2 Environmental precautions

The leakage area should be enclosed with safety belts to control the entry of non relevant personnel.

6.3 Methods and materials for containment and cleaning up

Keep chemicals in suitable and closed containers for disposal. Remove all ignition sources. Use fireproof tools and explosion-proof equipment. Materials adhered or collected shall be disposed of in time according to appropriate laws and regulations.

6.4 Reference to other sections



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For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handle in a well ventilated place. Wear appropriate protective clothing. Avoid contact with skin and eyes. Avoid the formation of dust and aerosols. Use non sparking tools. Prevent fire caused by electrostatic discharge steam.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool place. Keep the container closed and store in a dry and ventilated place.

7.3 Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166(EU).

Skin protection

Gloves must be checked before use. Please use proper methods to remove the gloves (do not touch the outer surface of the gloves), and avoid any skin parts contacting the product. After use, please handle the contaminated gloves carefully according to relevant laws and regulations and effective laboratory rules and procedures. Please clean and blow dry the protective gloves selected for your hands must meet the specifications given in regulation (EU) 2016 / 425 and the en 374 standard derived from it.

Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Control of environmental exposure



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Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance form: Dispersion color: Off-White to Tan

b) Odour no data available c) Odour Threshold no data available d) pH no data available

e) Melting point/freezing point 1975°C

f) Initial boiling point and boiling range no data available g) Flash point no data available h) Evaporation rate no data available i) Flammability (solid, gas) no data available

j) Upper/lower flammability or

no data available explosive limits k) Vapour pressure no data available I) Vapour density no data available m) Relative density no data available n) Water solubility no data available o) Partition coefficient: n-octanol/water no data available p) Auto-ignition temperature no data available q) Decomposition temperature no data available r) Viscosity no data available s) Explosive properties N no data available no data available t) Oxidizing properties N

9.2 Other safety information

no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

no data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

no data available



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10.5 Incompatible materials

no data available

10.6 Hazardous decomposition products

no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

SECTION 12: Ecological information

12.1 Toxicity

no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available



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12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

no data available

SECTION 13:

13.1 **Disposal considerations**

Product

Recycle to process, if possible. Consult your local regional authorities and an expert of disposal. You may be able to dissolve or mix material with a combustible solvent and little by little burn in a chemical incinerator equipped with an afterburner and scrubber system. If a large amount of the substance is burned at a time, an explosion may occur.

Observe all federal, state and local regulations when disposing of the substance.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

DOT (US)

UN number: 3077 Packing group: III Class: 9

Proper shipping name: Environmentally Reportable Quantity(RQ): no data Poison Inhalation Hazard: no data

hazardous substance, solid, n.o.s. available

available

Environmental Hazards: yes

IMDG

UN number: 3077 EMS-No: no data available Packing group: III

Proper shipping name: Environmentally hazardous substance, solid, n.o.s.

IATA

UN number: 3077 Packing group: III Class: 9

Proper shipping name: Environmentally hazardous substance, solid, n.o.s.

SECTION 15: Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

SECTION 16: Other information

Regulatory Affairs

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