

Revision: 1.1

Revision date:

16 April 2021

Date printed:

12 August 2023

Section 1. Identification

1.1 Product Identifier 1524

Product Name ZINC OXIDE pure

CAS Number 1314-13-2
REACH Registration No 01-2119463881-32-XXXX

Molecular Formula ZnO =81.38

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

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier

Vickers Laboratories Ltd



Grangefield Industrial Estate
Richardshaw Road
Pudsey
West Yorkshire
LS28 6QW
UNITED KINGDOM

Phone 44 0113 2362811
Fax +44(0)113 2362703
Email safety@viclabs.co.uk
Website www.viclabs.co.uk

1.4 Emergency Telephone

(08:00-16:30) +44(0) 113 2362811
(24hr) 112
(Have this document to hand)

Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Hazard to aquatic environment, category 1
Hazard to aquatic environment, category 1

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Signal word Warning

Hazard Pictograms



Hazard Statements Very toxic to aquatic life with long lasting effects.

Precautionary Statements Avoid release to the environment. Collect spillage. Dispose of contents / container to an approved waste disposal plant

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Zinc oxide	1314-13-2	215-222-5	01-2119463881-32-XXXX	>99%	Aquatic Acute 1, Aquatic Chronic 1

Section 4. First Aid

4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. If discomfort persists OBTAIN MEDICAL ATTENTION.
Skin	Wash off skin thoroughly with water.
Inhalation	Remove from exposure.
Ingestion	Wash out the patients mouth thoroughly with water. In severe cases or if exposure has been great, OBTAIN MEDICAL ATTENTION.
Personal protection for first aiders	Wear protective gloves / eye protection.

4.2 Most important symptoms and effects, both acute & delayed.

No further relevant information available.

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

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media	Consider what other flammable materials are present and act accordingly.
Unsuitable Media	Nothing specified.

5.2 Special hazards arising from the substance or mixture

Hazards	May evolve toxic fumes if involved in a fire.
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5.3 Advice for firefighters

Advice for firefighters	Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus.
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Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	Presents no major hazards.
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6.2 Environmental precautions

Environmental	Very toxic to aquatic life with long lasting effects.
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6.3 Methods and material for containment and cleaning up

Major Spillage	Shovel/sweep up into container for removal Wash area down with copious amounts of water.
Minor Spillage	Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath dust. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains dust concentrations below the recommended limits.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage .

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits	
			Long Term (8hr TWA)	Short Term 15min period
Zinc oxide	1314-13-2	>99%	-	-

Exposure data source(s) No occupational exposure data currently available.

8.2 Exposure controls

Respiratory Protection	If process creates significant amounts of dust use L.E.V. or wear suitable dust mask.
Hand Protection	Wear gloves.
Eye Protection	Use tightly fitting chemical splash proof glasses or goggles.
Skin Protection	Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.
Special Hazards	No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	White powder.
Odour	No specific odour.
pH	Not applicable
Boiling Point	Not available
Melting Point	1975°C
Flash Point	Not applicable
Upper Flammable Limit	Not applicable
Lower Flammable Limit	Not applicable
Auto Ignition	Not applicable
Explosive Properties	No.
Oxidising Properties	No.
Vapour Pressure	Not applicable
Relative Density	5.6700
Water Solubility	Insoluble in water.

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1 Reactivity	No data available.
10.2 Chemical Stability	Stable under normal conditions
10.3 Possibility of hazardous reactions	No data available.
10.4 Conditions to Avoid	No specific conditions.

- 10.5** Incompatible Materials No specific materials to avoid.
- 10.6** Hazardous Decomposition Products May produce hazardous fumes if involved in a fire.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	Contact with the solid or dust may be irritating to the eyes.
Skin	Contact with the solid or dust may be irritating to the skin.
LD50 Skin	Not available
Ingestion	Presents no significant hazard by ingestion.
LD50 Oral	7950mg/kg Mouse
Inhalation	Presents no significant health hazard by inhalation.
LD50 Inhalation	2500mg/m3 Mouse
TCLo	Not available
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.

Section 12. Ecological

- 12.1** Toxicity Very toxic to aquatic life with long lasting effects.
- LC50 Algal Not available
- LC50 Crustacea 0.098mg/l Daphnia magna (48 hours)
- LC50 Fish 1.1mg/l Rainbow Trout (96 hours)
- 12.2** Persistence and degradability No data available.
- 12.3** Bioaccumulative potential No data available.
- 12.4** Mobility in soil No data available.
- 12.5** Results of PBT & vPvB assessment Assessment not required.
- 12.6** Other adverse effects None known at present.

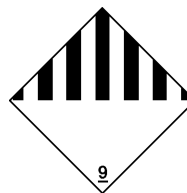
Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods	Dispose of via an authorised waste disposal contractor to an approved waste disposal site, observing all local and national regulations.
Contaminated Packaging	Wash out containers with water.

Section 14. Transport Information

14.1 UN Number	3077
14.2 Proper Shipping Name	Environmentally hazardous substance, solid, N.O.S. (Zinc Oxide)
14.3 Transport classes	
UN classification	9
Subsidiary hazard(s)	None
Transport category	3
ADR Hazard ID	90
Tunnel Restriction Code	E
Single packs and combination packages containing inner packs of up to 5L or 5Kg are excluded from regulation (ADR 2.2.9.1.10, IMDG code 2.10.3).	
14.4 Packing Group	III
14.5 Environment hazards	Marine pollutant.
14.6 Special precautions for user	No special precautions required.
14.7 Transport in bulk	Not transported in bulk.



Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for substance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Hazard to aquatic environment, category 1; Hazard to aquatic environment, category 1

Signal word Warning

Hazard Pictograms



Hazard Statements H410
Very toxic to aquatic life with long lasting effects.

Precautionary Statements P273, P391, P501
Avoid release to the environment. Collect spillage. Dispose of contents / container to an approved waste disposal plant

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

Revision number: 1.1 (Supercedes revision 1.0)

Revision date: 16 April 2021

Reviewed by chemist: 16 April 2021

Printed date: 12 August 2023

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