SECTION1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product code : ZINC OXIDE
Trades code : 2453
Chemical Name: CAS: 1314-13-2 - EC No: 215-222-5 - Index No: 030-013-00-7 - REACH: 01-2119463881-32-XXXX

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

Substance
Sectors of use:
Professional use[SU22]

Uses advised against
Do not use for purposes other than those listed.

1.3. Details of the supplier of the safety data sheet

FARMALABOR SRL
VIA OBERDAN, 52 ZI 76012 CANOSA DI PUGLIA (BT)
tel. 0039 0883611301
fax. 0039 0883666140
e-mail: info@farmalabor.it

1.4. Emergency telephone number

Emergency number 112(EU)
France +33(0)145425959
Germany +49(0)613119240
Spain +34915620420
Greece 2107793777
Netherlands +31(0)302748888
Croatia +38512348342
Switzerland 145;Latvia +37167042473

SECTION2. Hazards identification

2.1. Classification of the substance or mixture

CAS 1314-13-2 CEE 030-013-00-7 EINECS 215-222-5 REACH 01-2119463881-32-XXXX

2.1.1 Classification according to Regulation (EC) No 1272/2008:

Pictograms:
GHS09

Hazard Class and Category Code(s):
Aquatic Acute 1, Aquatic Chronic 1

Hazard statement Code(s):
H400 - Very toxic to aquatic life. (1)
H410 - Very toxic to aquatic life with long lasting effects. (1)

The product is dangerous for the environment as it is very toxic to aquatic organisms.
The product is dangerous to the environment as it is very toxic to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008:

Pictogram, Signal Word Code(s):
GHS09 - Warning

Hazard statement Code(s):
H400 - Very toxic to aquatic life. (1)
H410 - Very toxic to aquatic life with long lasting effects. (1)

Supplemental Hazard statement Code(s):
not applicable

Precautionary statements:
Prevention
P273 - Avoid release to the environment.
Response
P391 - Collect spillage.
Disposal
P501 - Dispose of contents/container in accordance with local/regional/international regulations.

2.3. Other hazards

Substance/mixture meets the criteria for PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

No information on other hazards.

SECTION3. Composition/information on ingredients

3.1 Substances

Refer to paragraph 16 for full text of hazard statements.

Substance	Concentration	Classification	Index	CAS	EINECS	REACh
ZINC OXIDE	100%	Aquatic Acute 1, H400; Aquatic Chronic 1, H410	030-013-00-7	1314-13-2	215-222-5	01-2119463881-32-XXXX

3.2 Mixtures

Irrilevant.

SECTION4. First aid measures

4.1. Description of first aid measures

Inhalation:
Air the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated area. If you feel unwell seek medical advice.

Direct contact with skin (of the pure product):
Wash thoroughly with soap and running water.

Direct contact with eyes (of the pure product):
Wash immediately and thorougly with running water for at least 10 minutes.

Ingestion:
Not hazardous. It’s possible to give activated charcoal in water or liquid paraffin medicine.

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.

SECTION5. Firefighting measures

5.1. Extinguishing media

Advised extinguishing agents:
Water spray, CO2, foam, dry chemical, depending on the materials involved in the fire.

Extinguishing means to avoid:
Water jets. Use water jets only to cool the surfaces of the containers exposed to fire.

5.2. Special hazards arising from the substance or mixture

No data available.

5.3. Advice for firefighters

Use protection for the breathing apparatus.
Safety helmet and full protective suit.
The spray water can be used to protect the people involved in the extinction.
You may also use selfrespirator, especially when working in confined and poorly ventilated area and if you use halogenated extinguishers (Halon 1211 fluobrene, Solkan 123, NAF, etc...).
Keep containers cool with water spray.

SECTION6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel:
Leave the area surrounding the spill or release. Do not smoke.
Wear gloves and protective clothing.

6.1.2 For emergency responders:
Wear gloves and protective clothing.
Eliminate all unguarded flames and possible sources of ignition. No smoking.
Provision of sufficient ventilation.
Evacuate the danger area and, in case, consult an expert.

6.2. Environmental precautions

Contain spill.
Inform the competent authorities.
Discharge the remains in compliance with the regulations.

6.3. Methods and material for containment and cleaning up

6.3.1 For containment:
Recover the product for reuse, if possible, or the removal.

6.3.2 For cleaning up:
To clean the floor and all objects contaminated by this material use water and soap.
After wiping up, wash with water the area and materials involved.

6.3.3 Other information:
None in particular.

6.4. Reference to other sections

Refer to paragraphs 8 and 13 for more information.

SECTION7. Handling and storage

7.1. Precautions for safe handling

At work do not eat or drink.
See also paragraph 8 below.

7.2. Conditions for safe storage, including any incompatibilities

Keep in original container closed tightly. Do not store in open or unlabeled containers.
Keep containers upright and safe by avoiding the possibility of falls or collisions.
Store in a cool place, away from sources of heat and direct exposure of sunlight.

7.3. Specific end use(s)

Public domain (administration, education, entertainment, services, craftsmen):
No data available.

SECTION8. Exposure controls/personal protection

8.1. Control parameters

DNEL:
Workers, contact with skin: 87 mg/kg long term systemic effects
Workers, inhalation: 5 mg/m3 long-term systemic effects
Consumers, inhalation: 2,5 mg/m3 long-term systemic effects
Consumers, ingestion: 0,83 mg/kg long term systemic effects
Consumers, contact with skin: 87 mg/kg long term systemic effects
PNEC:
fresh water: 0,0206 mg/l
sea water: 0,0061 mg/l
freshwater sediment: 117 mg/kg
sewage treatment plant: 0,052 mg/l
marine sediment: 56,5 mg/kg
soil: 35,6 mg/kg

8.2. Exposure controls

Appropriate engineering controls:
Public domain (administration, education, entertainment, services, craftsmen):
The usual precautionary measures for handling chemicals should be observed.

Individual protection measures:

(a) Eye/face protection
Not needed for normal use.

(b) Skin protection

(i) Hand protection
In case of prolonged and repeated contact, use gloves.

(ii) Other
Wear normal work clothing.

(c) Respiratory protection
Not needed for normal use.

(d) Thermal hazards
No hazard to report.

Environmental exposure controls:
Use according to good working practices to avoid pollution into the environment.

SECTION9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Appearance	white solid	
Odour	odorless	
Odour threshold	not determined	
pH	not determined	
Melting point/freezing point	not determined	
Initial boiling point and boiling range	not determined	
Flash point	not determined	
Evaporation rate	irrelevant	
Flammability (solid, gas)	not determined	
Upper/lower flammability or explosive limits	not determined	
Vapour pressure	not determined	
Vapour density	not determined	
Relative density	5,61 g/cm3 (20-23°C)	
Solubility	insoluble in water	
Water solubility	insoluble	
Partition coefficient: n-octanol/water	not determined	
Auto-ignition temperature	not determined	
Decomposition temperature	not determined	
Viscosity	not determined	
Explosive properties	not determined	
Oxidising properties	not determined	

9.2. Other information

No data available.

SECTION10. Stability and reactivity

10.1. Reactivity

No reactivity hazards.

10.2. Chemical stability

No hazardous reaction when handled and stored according to provisions.

10.3. Possibility of hazardous reactions

There are no hazardous reactions.

10.4. Conditions to avoid

Nothing to report.

10.5. Incompatible materials

Acids and bases.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION11. Toxicological information

11.1. Information on toxicological effects

(a) acute toxicity: based on available data, the classification criteria are not met.
(b) skin corrosion/irritationbased on available data, the classification criteria are not met.
(c) serious eye damage/irritation: based on available data, the classification criteria are not met.
(d) respiratory or skin sensitization: based on available data, the classification criteria are not met.
(e) germ cell mutagenicity: based on available data, the classification criteria are not met.
(f) carcinogenicity: based on available data, the classification criteria are not met.
(g) reproductive toxicity: based on available data, the classification criteria are not met.
(h) specific target organ toxicity (STOT) single exposure: based on available data, the classification criteria are not met.
(i) specific target organ toxicity (STOT) repeated exposure:based on available data, the classification criteria are not met.
(j) aspiration hazard: based on available data, the classification criteria are not met.

LD50 (oral, rat): > 5000 mg/kg
LC50 (inhalation, rat): > 5,7 mg/l - 4 h
LD50 (dermal, rat): > 2000 mg/kg

SECTION12. Ecological information

12.1. Toxicity

LC50 Lepomis macrochirus: 320 mg/l - 96 h
EC50 Pseudokirchneriella subspicata: 0,17 mg/l - 72 h
NOEC Pseudokirchneriella subspicata: 0,017 mg/l - 72 h

The product is dangerous for the environment as it is very toxic to aquatic organisms following acute exposure.

Use according to good working practices to avoid pollution into the environment.

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 and vPvB assessment

Substance/mixture meets the criteria for PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

12.6. Other adverse effects

No adverse effects.

SECTION13. Disposal considerations

13.1. Waste treatment methods

Do not reuse empty containers. Dispose of them in accordance with the regulations in force. Any remaining product should be disposed of according to applicable regulations by addressing to authorized companies.

Recover if possible. Send to authorized discharge plants or for incineration under controlled conditions. Operate according to local and national rules in force.

SECTION14. Transport information

14.1. UN number


3077
If subject to the following characteristics is ADR exempt:
Combination packagings: per inner packaging 5 kg per package 30 Kg
Inner packagings placed in skrink-wrapped or stretch-wrapped trays: per inner packaging.5 kg per package 20 Kg

14.2. UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC OXIDE)

14.3. Transport hazard class(es)

Class : 9
Label : 9
Tunnel restriction code : E
Limited quantities : 5 kg
EmS : F-A, S-F

14.4. Packing group

III

14.5. Environmental hazards

Product is environmentally hazardous.
Marine polluting agent : Yes

14.6. Special precautions for user

The transport must be carried out by authorised vehicles carrying dangerous goods in accordance with the requirements of the current edition of the agreement and the provisions A.D.R national regulations.

The transport must be carried out in the original packaging and in packages that are made from materials resistant to the content and not likely to generate with this dangerous reactions. Employees to the loading and unloading of dangerous goods have received proper training on the risks presented by prepared and on possible procedures to be taken in the event of emergency situations

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

It is not intended to carry bulk.

SECTION15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

No data available.

15.2. Chemical safety assessment

No chemical safety assessment was carried out by the supplier.

SECTION16. Other information

16.1. Other information

Points modified compared to previous release: 1.1. Product identifier, 1.2. Relevant identified uses of the substance or mixture and uses advised against, 2.1. Classification of the substance or mixture, 2.2. Label elements, 2.3. Other hazards, 7.3. Specific end use(s), 8.1. Control parameters, 8.2. Exposure controls, 10.5. Incompatible materials, 11.1. Information on toxicological effects, 12.1. Toxicity, 12.5. Results of PBT and vPvB assessment, 14.2. UN proper shipping name, 14.6. Special precautions for user

Description of the hazard statements exposed to point 3.
H400 = Very toxic to aquatic life.
H410 = Very toxic to aquatic life with long lasting effects.

Main normative references:
Directive 1999/45/EC
Directive 2001/60/EC
Regulation 1272/2008/EC
Regulation 2010/453/EC

*** This Board cancels and replaces any previous edition.