



Sophix Natural

And Agro Products Ltd

RC-1615742

Material Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product identifier:

Product Name: Zinc pyriithione suspension

Details of Supplier of the Safety data Sheet

SOPHIX NATURAL & AGRO PRODUCTS, LTD

Plot 9, Zone A, Liguori street, Oke Omi, National bus stop, along Ife Road Ibadan

Tel: 0706-1111-838

2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 5

Serious eye damage : Category 1

Acute aquatic toxicity : Category 1

GHS label elements**Hazard pictograms****Signal word Danger Hazard statement(s)**

Danger

H302 Harmful if swallowed.

H333 May be harmful if inhaled.

H318 Causes serious eye damage. H400 Very toxic to aquatic life.

Precautionary statement(s) Prevention:

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P273 Avoid release to the environment.

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

Response:

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P370 + P378 In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.

Storage:

P402 + P404 Store in a dry place. Store in a closed container.

P410 + P403 Protect from sunlight. Store in a well-ventilated place.



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Disposal:

P501 Dispose of contents/container in accordance with local regulation.

Other hazards which do not result in classification Not applicable.

No information available.

3. COMPOSITION, INFORMATION ON INGREDIENTS

Ingredient	CAS#	%Range
Zinc Pyrithione	13463-41-7	46-48%
Zinc oxide	1314-13-2	10-15%
Polycarboxylic acid, sodium salt	62601-60-9	1.2%
Water	7732-18-5	35.8-42.8%

4. FIRST AID MEASURES

General advice:

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

Skin contact:

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

Inhalation:

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

Eye contact:

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

Swallowed:

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE FIGHTING MEASURES

Extinguishing media:

Suitable extinguishing media. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture :

Carbon oxides, nitrogen oxides (NO_x), Sulphur oxides, Zinc/Zinc oxides.

Advice for firefighters:

Wear self contained breathing apparatus for fire fighting if necessary



6.ACCIDENTAL RELEASE MEASURES

Personal precautions:

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided

Methods for cleaning up:

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal

7.HANDLING AND STORGE

Handling:

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Storage:

Store in tightly-closed containers at a cool and dry place.

8.EXPOSURE CONTROLS/PERSONAL PROTECTION

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

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 EN 166(EU).

Skin protection:

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry hands:

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body protection:

Complete suit protecting against chemicals, 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 full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air



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respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid

Form: Suspension, Latex

Color: White **Odor:** Almost odorless

pH: 9.0~11.0

Particle size: D50: $\leq 1.0\mu\text{m}$; **D90:** $\leq 2.0\mu\text{m}$

Flash Point: Not applicable

10. CHEMICAL STABILITY AND REACTIVITY INFORMATION

Stability:

Stable under normal conditions. Not sensitive to mechanical shock. Not sensitive to static discharge.

Incompatibilities:

Strong oxidizing agents, ferrous metals.

Conditions to Avoid:

Ultraviolet light

Hazardous Decomposition Products :

Carbon monoxide, Carbon dioxide, Oxides of sulfur, Oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology

Oral LD₅₀ value:

Zinc pyrithione LD₅₀: Rat = 269mg/kg Zinc oxide (ZnO)

LD₅₀: Rat > 8,437mg/kg

Dermal LD₅₀ value:

Zinc pyrithione LD₅₀: Rabbit > 2g/kg Zinc oxide (ZnO)

LD₅₀: Rabbit > 5,000mg/kg

Inhalation LC₅₀ value:

Zinc pyrithione:

LC₅₀ (4h) Nose Only Rat = 0.61mg/L(aerosol dust); (1h) Nose Only Rat = 2.4mg/L(aerosol dust)

Toxicity to fish LC₅₀ - Pimephales promelas (fathead minnow) - 0.003 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates EC₅₀ - Daphnia magna (Water flea) -

0.008 mg/l - 48 h

Zinc oxide (ZnO) No data

Product Animal Toxicity



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Oral LD50 value: LD50: Rat > 500mg/kg, LD50: Rat < 650mg/kg

Dermal LD50 value: LD50: Rabbit Believed to be > 2g/kg

Inhalation LC50 value:

Inhalation LC50 4 h Believed to be, (Nose Only), (aerosol) 1.62mg/L Rat

Inhalation LC50 1 h Believed to be, (Nose Only), (aerosol) 6.5mg/L Rat

Skin Irritation:

Expected to be slightly irritating.

Eye Irritation:

This material is expected to cause irreversible effects to the cornea with impairment of vision or corrosion to the eyes.

Skin Sensitization:

Negative skin sensitizer, guinea pig - Buehler Method

Acute Toxicity:

The Oral LD50 in monkeys was found to be > 1,000 mg/kg, based upon an acute toxicity study in which Zinc Omadine powder was administered orally in a gelatin capsule to two male cynomolgus monkeys.

Subchronic / Chronic Toxicity:

Skeletal muscle atrophy has been observed from oral and dermal exposure in rats to pyrethrin compounds. Exposure to monkeys at several times the dose given to rats gave no indication of either muscle or nerve damage. Although these effects are possible with human exposure, the evaluation of the animals toxicological data makes the above effects unlikely from industrial product use. Zinc oxide Not known or reported to cause subchronic or chronic toxicity. Reproductive and This product is not considered to be a reproductive or developmental

Developmental Toxicity:

hazard. However, this material when tested in laboratory animals at maternally toxic doses only was found to cause developmental and/or reproductive toxicity.

Zinc pyrethrin

This chemical is not considered to be a reproductive or developmental hazard. However, this material when tested in laboratory animals at maternally toxic doses only was found to cause developmental and/or reproductive toxicity.

Zinc oxide

Reproductive and/or developmental toxicity was observed in laboratory animals only at high doses that were maternally toxic.

Mutagenicity:

This chemical has been shown to be non-mutagenic based on a battery of assays.

Zinc pyrethrin This chemical has been shown to be non-mutagenic based on a battery of assays.

Zinc oxide This product has been tested for mutagenicity. Tests revealed both positive and negative results.

Based on the weight of evidence, we judge this product NOT to be a mutagenic hazard.

Carcinogenicity:

This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA.

Zinc pyrethrin This material did not cause cancer in long-term animal studies.

Zinc oxide The carcinogenicity has been evaluated through animal study and it was found not to be carcinogenic.



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12. ECOLOGICAL INFORMATION

Overview:

Highly/very toxic to fish and other aquatic organisms. Toxic to wildlife and domestic animals.

Ecological Toxicity Values for: Zinc pyrithione:

Bluegill sunfish - (nominal, flow-through) 96 h LC₅₀ = 0.021 mg/l (48% zinc pyrithione) Channel Catfish (*Ictalurus punctatus rafinesque*)- (nominal, flow-through) 96h LC₅₀ = 0.034 mg/l (48% zinc pyrithione)

Brook trout (*Salvelinus fontinalis*) - (nominal, flow-through) 96h LC₅₀ = 0.008 mg/l (48% zinc pyrithione)

Fathead minnow (*Pimephales promelas*) - (nominal, flow-through) 96h LC₅₀ = 0.0040 mg/l (48% zinc pyrithione)

Golden Shiner, - (nominal, flow-through) 96h LC₅₀ = 0.020 mg/l (48% zinc pyrithione).

Ecological Toxicity Values for: Zinc oxide (ZnO)

Fathead minnow (*Pimephales promelas*) - (nominal, static). 96h LC₅₀ = 2,246 mg/l

Daphnia magna - (nominal, static). 48h LC₅₀ = 24.6 mg/l

Daphnia magna - (measured, static) 48h LC₅₀ = 0.098 mg/l

Bobwhite quail - Oral LD₅₀ 606 mg/kg

Bobwhite quail - Dietary LC₅₀ > 5,000 ppm

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues should not be allowed to enter drains, water courses or the soil. Dispose of as hazardous waste in compliance with local and national regulations.

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.

Contaminated packaging : Dispose of as unused product. Do not re-use empty containers.

14. TRANSPORTATION INFORMATION

Land (US DOT): No data available

Water (IMDG): No data available

Air (IATA): No data available

15. REGULATORY INFORMATION

This safety data sheet complies with the requirements of GB/T 16483-2008 and GB/T 17519-2013.

16. OTHER INFORMATION

This information is based on our present state of knowledge. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirement. The data does not signify any warranty with regard to the product's properties.