

VILLA NEMACUR® 100 GR

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: NEMACUR® 100 GR
Other identifier: Fenamiphos 100 GR
Recommended use: Nematicide, Insecticide
Restrictions on use: Agriculture

Supplier: Villa Crop Protection (Pty) Ltd.
PO Box 10413
Aston Manor, 1630, South Africa

Telephone: (011) 396 2233
Fax: (011) 396 4666
Website: www.villacrop.co.za

Emergency telephone: +27 11 396 2233
(08:00 – 16:30)

24 Hr Emergency Numbers:

Bateleur: +27 83 1233 911 or
(Client: Villa Crop Protection) +27 860 333 911

In case of Poisoning:

Western Cape Poisons Tel. Service +27 861 555 777
Griffon Poison Information Centre +27 82 446 8946
Tygerberg Hospital +27 21 931 6129

2. HAZARDS IDENTIFICATION

| UN GHS, Regulation EC 1272/2008 [EU-GHS/CLP] EU & SANS 10234:2008 | | |
|---|-------------------|--------------|
| Hazard classes | Hazard categories | H-statements |
| Health | | |
| Oral | Acute Tox. 2 | H300 |
| Environment | | |
| Aquatic | Aquatic Acute 1 | H400 |
| | Aquatic Chronic 1 | H410 |

The most important adverse effects:

Physicochemical effects:

None known.

Human health effects:

Fatal if swallowed

Label elements:



Signal word: Danger.

Hazard statements:

H300: Fatal if swallowed.

Precautionary statements:

P264: Wash hands and face thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.
P301/310: IF SWALLOWED: Immediately call a POISON CENTER.

P330: Rinse mouth.

P405: Store locked up.

P501: Dispose of content/container to suitable landfill in accordance with local regulations.

Special labelling of certain mixtures:

None known.

Other hazards:

None known.

Toxicity:

Classification according to GHS: Category 2

Classification according to WHO: Category IB

Classification according to GPIC (Active): IB

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture.

Composition:

| Chemical Name | CAS | Conc. (m/m %) | Classification EC 1272/2008 |
|---------------|------------|---------------|--|
| Fenamiphos | 22224-92-6 | 10 % | Acute Tox. 2 (H300) Acute Tox. 2 (H310) Eye irrit. 2 (H319) Acute Tox. 2 (H330) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) |

4. FIRST AID MEASURES

Remove the victim from the area of exposure. Wash off remaining material with plenty of water. In the event of any complaints or symptoms, avoid further exposure and consult a doctor.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician or poison control center immediately.

Skin: Call a physician or poison control center immediately. Wash off with soap and water. Remove and isolate contaminated clothing and shoes. Wash contaminated clothing before reuse.

Eyes: Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses,

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if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion: Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Never give anything by mouth to a victim who is unconscious or is having convulsions.

Anticipated delayed effects: None known.

Most important symptoms/effects: This is a cholinesterase inhibiting organophosphorous pesticide. May cause weakness, headache, tightness in chest, blurred vision, non-reactive pinpoint pupils, salivation, sweating, nausea, vomiting, diarrhea and abdominal cramps.

Advice to physician:

In the case of cholinergic symptomatology, the specific antagonist is atropine sulfate. If a large amount of product has been ingested, and if there was no vomiting, gastric emptying can be done within 2 hours after ingestion. Precautions should be taken to prevent pulmonary aspiration. Activated carbon can be used. Administer atropine sulfate at a dose of 1 to 2 mg every 15 or 20 minutes until the reversal of the cholinergic symptoms, at which time the maintenance dose should be adapted to maintain a condition free of symptoms of intoxication and with no atropine signals. Atropine should not be administered in the absence of cholinergic symptoms, neither should it be administered by a lay person. Measures such as the correction of electrolyte disorders and of the acid-base balance should be adopted. Maintain the patient under cardiac monitoring and with respiratory support if necessary.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Foam, dry chemical powder and carbon dioxide (CO₂).

Unsuitable Extinguishing Media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards: During fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

Special Fire Fighting Procedures: Remove spectators from surrounding area. Isolate the fire area and relinquish all personnel downwind of the fire. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Keep upwind. Avoid inhaling hazardous vapours and fumes from burning materials. Remove container from fire area if possible and without risk. Do not use high volume water jet, due to contamination risk. Do not scatter the burning material. Water can be used to cool unaffected containers but must be contained for later disposal. Contain fire control agents for later disposal. Avoid pollution of waterways by run-off from the site.

Personal protective equipment: Wear NIOSH/MSHA approved self-contained breathing apparatus and full bunker gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Keep unnecessary personnel away. Keep out of low areas.

Protective equipment: Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product.

Emergency procedures: Alert firefighting personnel, evacuate unprotected personnel and animals.

Environmental Precautions: Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, watercourses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

Methods and Materials for Containment and Clean-up: Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Shovel the material into waste container. Following product recovery, flush area with water. Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean surface thoroughly to remove residual contamination.

7. HANDLING AND STORAGE

Handling:

Precautions for safe handling: Avoid contact with eyes, skin and clothing. Ensure adequate ventilation during handling and use. Do not handle broken packages without protective equipment. Immediately clean up spills that occur during handling. Keep containers closed when not in use. In the case of contact with the product refer to First Aid Measures – Section 4.

General occupational hygiene: Practice good hygiene when using this material. Wash hands before eating, drinking, chewing gum, smoking, using the toilet or applying cosmetics. Worker should shower at the end of each workday. Launder all clothing before it is re-used again.

Storage:

Conditions for safe storage: Store in its original container in dry, cool, well-ventilated area under lock and key. Avoid excess heat. Not to be stored next to foodstuffs, feed and water supplies. Keep out of reach of children, uninformed persons and animals. Do not contaminate other pesticides and fertilizers.

Incompatible substances and mixtures: Refer to product label.

Packaging material: HDPE packaging in carton box or HDPE packaging in aluminium foil + Kraft bags.

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8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible concentration: No occupational exposure limits has been determined for the significant ingredients in this product.

Engineering Controls:

It is essential to provide adequate ventilation. The measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure. Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs or other specified exposure limits. Local exhaust ventilation is preferred. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.

Personal Protective Equipment:

Respiratory Protection: In case of insufficient ventilation, it is advisable that the employee wears a NIOSH approved air-purifying respirator with cartridges approved for organic vapours.

Hand Protection: The employee must wear appropriate chemically resistant gloves e.g., nitrile rubber gloves to prevent contact with this substance.

Eye Protection: Avoid contact with eyes. A face shield or chemical safety goggles is recommended when handling the concentrate and when applying the product to prevent against eye contact. Contact lenses are not protective eye devices.

Skin and Body Protection: The use of protective (impervious) clothing e.g. coveralls is recommended to prevent skin contact.

Emergency eyewash: Where there is any possibility that an employee's eyes may be exposed to this substance; the employer should provide an eyewash fountain or appropriate alternative within the immediate work area for emergency use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Beige granules.

Odour: Weak characteristic odour.

pH (1% aqueous dilution): Not available.

Melting point: Not available.

Freezing Point: Not available.

Boiling Point: Not available.

Flash Point: Not available

Flammability: Not available

Upper/lower explosion limits: Not available.

Vapour Pressure (mm Hg): Not available.

Relative Vapour Density: Heavier than air.

Density/Relative density: Not available.

Solubility: Practically insoluble in water.

n-octanol/water partition coefficient: Not available.
Auto-ignition temperature: Not available.
Decomposition temperature: Not available.
Viscosity: Not available.

10. STABILITY AND REACTIVITY

Chemical Stability: The product is stable for two years at ambient temperature and pressure, under normal storage and handling conditions. Avoid storage under extreme temperatures and conditions. Store below 50°C, preferably below 30°C, and not for prolonged periods in direct sunlight.

Reactivity: This product is non-reactive under normal conditions of use, storage and transport.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur.

Conditions to Avoid: Contact with incompatible materials.

Incompatible Materials: Alkaline compounds. Strong oxidizing agents.

Hazardous Decomposition Products: Emits hazardous fumes and smoke of sulfur oxides, oxides of phosphorus and other unknown composition when heated to decomposition or burned.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Calculated according to GHS

Oral LD₅₀ rat 30 mg/kg.

Skin Irritation/Corrosion: Product is not irritating to the skin.

Eye Damage/Irritation: Non-irritating.

Skin Sensitization: Not sensitizing.

Respiratory Sensitization: Not a respiratory sensitizer.

Reproductive cell mutagenicity: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity: This product is not considered a carcinogen by IARC, ACGIH, NTP, or OSHA.

Reproductive toxicity: This product has not shown any reproductive effects in laboratory animals.

Specific target organ toxicity – single exposure: Not classified.

Specific target organ toxicity – repeated exposure: Not classified.

Aspiration hazard: Not an aspiration hazard.

Chronic Effects: Prolonged inhalation may be harmful.

POTENTIAL ADVERSE EFFECTS:

Inhalation: Not expected to be inhaled in the granule form.

Skin contact: No adverse effects due to skin contact are expected.

Eye contact: Not an eye irritant.

Ingestion: Fatal if swallowed.

Other information: Symptoms related to the

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physical, chemical and toxicological characteristics:

Acute cholinesterase depression may be evidenced by headache, nausea, vomiting, diarrhoea, abdominal cramps, excessive sweating, salivation and tearing, constricted pupils, blurred vision, tightness in chest, weakness, muscle twitching and confusion; in extreme cases, unconsciousness, convulsions, severe respiratory depression and death may occur.

12. ECOLOGICAL INFORMATION

This product is very toxic to aquatic life with long lasting effects.

ECOTOXICITY DATA: Nemacur® 100 GR

Fish:

LC₅₀ Bluegill (*Lepomis macrochirus*) 0.0093 mg/l (a.i)

Crustacea:

EC₅₀ Daphnia magna 0.0019 mg/l (a.i)

ENVIRONMENTAL EFFECTS:

Persistence and degradability: No data is available on the degradability of this product.

Bio-accumulative Potential:

Partition coefficient n-octanol / water (log Kow)
Fenamiphos 3.23

Mobility in soil: No data available.

Other adverse effects: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. DISPOSAL CONSIDERATIONS

Waste: Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product cannot be reused or re-processed. Never pour untreated waste or surplus product into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.

Container: Emptied containers retain dust and product residues. Do not re-use the empty container for any other purpose. Triple rinse empty containers by inverting the empty container where it is used. Thereafter, rinse the container three times with a volume of water equal to a minimum of one third of that of the container. Empty the rinsings in the area where the pesticide is being used before recycling or destroying the container in the prescribed manner. Destroy the container by perforating and flattening and dispose of through an approved incineration plant or recycling company. Observe all labelled safeguards until container is destroyed.

14. TRANSPORT INFORMATION

UN NUMBER: 2783
Road Transport ADR/RID:
Class: 6.1
Packaging group: II
UN proper Shipping name: Organophosphorus pesticides, solid toxic, (**Fenamiphos**), MARINE POLLUTANT

Maritime Transport IMDG/IMO:

Class: 6.1
Packing group: II
UN proper Shipping name: Organophosphorus pesticides, solid toxic, (**Fenamiphos**), MARINE POLLUTANT

Marine Pollutant (Y/N): Yes, Considered a marine pollutant.

Air Transport IATA/ICAO:

Class: 6.1
Packing group: II
UN proper Shipping name: Organophosphorus pesticides, solid toxic, (**Fenamiphos**), MARINE POLLUTANT

Special/Environmental Precautions: Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk (according to MARPOL 73/78, Annex II and the IBC code): Not applicable.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture:
OHS 1993 Regulations for Hazardous Chemical Substances.

Relevant information regarding restrictions: None.

EU regulation: Regulation EC1272/2008 (EU-GHS/CLP)

Other national regulations: None.

Chemical Safety Assessment carried out? No

16. OTHER INFORMATION

Packaging: 1, 5, 10, 20 & 25kg HDPE packaging in carton box or HDPE packaging in aluminium foil + Kraft bags and labelled according to South African regulations and guidelines.

Additional H statements (formulants): H310: Fatal in contact with skin.

H319: Causes serious eye irritation.

H330: Fatal if inhaled.

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Disclaimer: The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product nor where instructions or recommendations are not followed. All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.

END OF DOCUMENT

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For detailed information on revisions, contact the Registration holder.