

VILLA THIATOX DIRECT 250

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: THIATOX DIRECT 250
Other identifier: Thiamethoxam 250 WDG
Recommended use: Insecticide
Restrictions on use: Public Health, Home and Garden.

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 numbers:
24 Hr Transport / Spill emergency no:
 Bateleur: +27 86 199 9071
 (Client: Villa Crop Protection)

Poisoning:
 Griffon Poison Information Centre +27 82 446 8946
 Western Cape Poisons +27 861 555 777
 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		
Dermal	Acute Tox. 5	H313
Inhalation	Acute Tox. 4	H332
Environment		
Aquatic acute	Aquatic acute 1	H400
Aquatic chronic	Aquatic chronic 1	H410

The most important adverse effects:

Physicochemical effects:

None known.

Human health effects:

Harmful if inhaled.

Label elements:



Signal word: Warning.

Hazard statements:

H313: May be harmful in contact with skin.

H332: Harmful if inhaled.

H400: Very toxic to aquatic life.

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

Precautionary statements:

P271: Use only outdoors or in a well-ventilated area.

P273: Avoid release into the environment.

P391: Collect spillage.

P501: Dispose of contents/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 4.

Classification according to WHO: Unclassified.

Classification according to active: III.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture.

Composition:

Chemical Name	CAS	Conc. (m/v %)	Classification EC 1272/2008
Thiamethoxam	153719-23-4	25 %	Acute Tox. 4 (H302) 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. Immediately consult a doctor.

Inhalation: If vapours or mists have been inhaled, move victim to fresh air and remove source of contamination if safe to do so. The patient should be kept under observation. Obtain medical attention if irritation develops.

Skin: Remove contaminated clothing, shoes and leather goods. Wash skin gently and thoroughly with cold water and non-abrasive soap. Obtain medical attention if irritation persists.

Eyes: Flush eyes with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Obtain medical attention if irritation persists.

Ingestion: Do not induce vomiting unless told to do so by a poison control centre. Do not give anything by mouth. Obtain medical attention if the person feels unwell. If the person is alert, give water to sip.

Anticipated acute effects: Not available.

Anticipated delayed effects: Not available.

Most important symptoms/effects: Not available.

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Advice to physician: There is no specific antidote available. Treat symptomatically and supportively. In cases of ingestion, call on doctor to advise on the need of gastric lavage.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Extinguish fires with dry powder/dry chemical extinguisher, water fog, foam, carbon dioxide.

Unsuitable Extinguishing Media: Water jet.

Specific hazards: Product is not explosive, but dust/air mixture may be explosive in the presence of an ignition source. Fire may produce irritating and/or toxic vapours, mists or other products of combustion.

Special Fire Fighting Procedures: Remove spectators from surrounding area. Isolate the fire area and evacuate 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.

Methods and Materials for Containment: Contain spilled product.

Methods and Materials for Clean-up: Contain spilled product by picking up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal. Do not create a powder cloud by using a brush or compressed air.

7. HANDLING AND STORAGE

Handling:

Precautions for safe handling: Avoid contact with eyes and skin. Ensure adequate ventilation during handling and use. Do not handle broken containers without protective equipment. Immediately clean up spills that occur during handling. Keep containers tightly 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.

Storage:

Conditions for safe storage: Keep under lock and key and out of reach of unauthorised persons, children and animals. Store in its original labelled container tightly

closed, in an isolated, dry, cool and well-ventilated area. Avoid excessive heat. Avoid cross contamination with other pesticides and fertilisers.

Incompatible substances and mixtures: Refer to product label.

Packaging material: Plastic bottles or foil bags.

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: Wear an organic cartridge respirator suitable for protection from mists/ vapours of pesticides if inhalation is likely to occur.

Hand Protection: Employee must wear appropriate chemically resistant gloves e.g. nitrile rubber gloves to prevent contact with this mixture.

Eye Protection: Wear a face shield when handling the concentrate and when applying the product. The use of safety goggles is recommended if a face shield is not used.

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

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Off-white to beige-brown granules.

Odour: Musty odour.

pH (1% aqueous dilution): 7.0 to 11.0

Melting point: 139.1°C (based on a i).

Freezing Point: Not available.

Boiling Point: Not available.

Flash Point: Not available.

Flammability: Non-flammable.

Upper/lower explosion limits: Not available.

Vapour Pressure (mm Hg): Not available.

Relative Vapour Density: Not available.

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Density/Relative density: 1.57 g/cm³.
Solubility: Dispersible.
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: Product is stable at ambient temperature and pressure, under normal storage and handling conditions. Incompatible with alkaline materials. Oxides of carbon and nitrogen may be given off when exposed to extreme heat or fire.
Reactivity: None known.
Possibility of Hazardous Reactions: None known.
Conditions to Avoid: Open flames, sparks, ignition sources, and dampness.
Incompatible Materials: Strong acids, oxidizers, dampness (in storage).
Hazardous Decomposition Products: Can decompose at high temperatures and form toxic gases.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:
Based on experimental data.
Oral LD₅₀ (24 h) rat >5000 mg/kg.
Dermal LD₅₀ (24 h) rat >2000 mg/kg.
Inhalation LC₅₀ (4 h) rat >2.72 mg/l.
Skin Irritation/Corrosion: Slightly irritating to skin.
Eye Damage/Irritation: Slightly to moderately irritating to eyes.
Skin Sensitization: Non-sensitizing.
Respiratory Sensitization: Not available.
Reproductive cell mutagenicity: Not available.
Carcinogenicity: Not available.
Reproductive toxicity: Not available.
Specific target organ toxicity – single exposure: Not available.
Specific target organ toxicity – repeated exposure: Not available.
Aspiration hazard: Not available.
Chronic Effects: Not available.
POTENTIAL ADVERSE EFFECTS:
Inhalation: May be a slight respiratory irritant.
Skin contact: May irritate skin. The dermal toxicity of this product is low. However, skin contact should be avoided. This product is not a skin sensitizer.
Eye contact: This product may be slightly to moderately irritating to eyes. However, it is unlikely to cause any more than mild transient discomfort. It is also unlikely to cause any lasting effects.
Ingestion: The acute toxicity of this product is low, but it may be harmful if ingested in large amounts.

12. ECOLOGICAL INFORMATION

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

ECOTOXICITY DATA:

Fish:		
LC ₅₀ (96 h)	Rainbow trout	>100,
	Bluegill sunfish	>114,
	Sheepshead minnows	>111 mg/l.
Daphnia:		
EC ₅₀ (48 h)		>100 mg/l.
Algae:		
EC ₅₀ (96 h)	Green algae	>100 mg/l.
Birds:		
Acute oral LD ₅₀	Bobwhite quail	1552,
	Mallard ducks	576 mg/kg.
Dietary LC ₅₀	Bobwhite quail & Mallard ducks	>5200 mg/kg.
Bees:		
(LD ₅₀ , mg/bee)	(contact)	0.024,
	(oral)	0.005 mg/bee.
Worms:		
LC ₅₀ (14 d)	<i>Eisenia foetida</i>	>1000 mg/kg Soil.

Plants:
 Degradation /metabolism has been studied in 6 different crops with soil, foliar and seed treatment application. The qualitative metabolic pattern was similar for all types of applications and for all studied crops.

ENVIRONMENTAL EFFECTS:

Persistence and degradability: Soil DT₅₀ 7-109 d (field, 37 soils, median 32.3 d). K_{oc} 32.5-237 ml/g o.c. (25 soils, mean 68.4 ml/g o.c). Photolysis accelerates degradation in soil. Stable in water under acid conditions, hydrolysed under alkaline conditions. DT₅₀ in surface water 7.9-39.5 d (lab., darkness, 7 water-sediment systems, mean 21.5 d). Aqueous photolysis occurs rapidly. No bioaccumulation. No significant volatilisation, efficiently degraded in air by photochemical oxidative degradation.
Bio-accumulative Potential: Not determined.
Mobility in soil: Not determined.
Other adverse effects: Not determined.

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. The product may be taken to a registered waste disposal site or incineration plant. Where possible, recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.

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Container: Emptied containers retain vapour and product residues. Do not re-use the empty container for any other purpose. Triple rinse empty containers by inverting the empty container over the spray or mixing tank and allow draining for at least 30 seconds after the flow has slowed down to a drip. Thereafter, rinse the container three times with a volume of water equal to a minimum of one third of that of the container. Add the rinsing's to the contents of the spray tank before recycling or destroying the container in the prescribed manner. Destroy the container by perforating and flattening and dispose of through an approved waste dump site, incineration plant or recycling company. Observe all labelled safeguards until container is destroyed.

14. TRANSPORT INFORMATION

UN Number: 3077
Road Transport ADR/IRD:
 Class: 9
 Packaging group: III
 UN Proper Shipping Name: Environmentally Hazardous Substance, Solid, N.O.S (Thiamethoxam 25 %)

Maritime Transport IMDG/IMO:
 Class: 9
 Packaging group: III
 UN Proper Shipping Name: Environmentally Hazardous Substance, Solid, N.O.S (Thiamethoxam 25 %)

Marine Pollutant (Y/N): Yes

Air transport IATA/ICAO:
 Class: 9
 Packaging group: III
 UN Proper Shipping Name: Environmentally Hazardous Substance, Solid, N.O.S (Thiamethoxam 25 %)

Special/Environmental Precautions: None known.

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

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture:
 OSHA 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: Packed in 500 g, 1, 2, 5 & 10 kg Plastic bottles / Foil bag. Labelled according to South African regulations and guidelines.

Additional H-statement (s) (formulants)

H302: Harmful if swallowed.

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.