

# VILLA TYPHOON 250 SC

# MATERIAL SAFETY DATA SHEET

## 1. PRODUCT & COMPANY IDENTIFICATION

**Product Name:** TYPHOON 250 SC  
 Fungicide  
**UN No.:** 3082  
**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](http://www.villacrop.co.za)

**Emergency telephone numbers:**  
**24 Hr Transport / Spill emergency no:**  
 Envirosure. +27 31 205 4918  
 (Hazcall24) +27 86 044 4411  
 (Client: Villa Crop Protection)  
 Griffon Poison Information Centre +27 82 446 8946  
 (Client: Villa Crop Protection)  
**Poisoning Emergency telephone numbers:**  
 Griffon Poison Information Centre +27 82 446 8946  
 Poisons Information Centre +27 861 555 777  
**Villa Crop Protection Emergency number:**  
**National Safety, Health and Environmental Manager:**  
 +27 63 698 0668

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

**Common name:** procymidone  
**Chemical Name:** *N*-(3,5-dichlorophenyl)-1,2-dimethylcyclopropane-1,2-dicarboximide (IUPAC)  
**CAS No.:** 32809-16-8  
**Chemical Family:** dicarboximide  
**Chemical Formula:** C<sub>13</sub>H<sub>11</sub>Cl<sub>2</sub>NO<sub>2</sub>  
**Molecular weight:** 284.1  
**Use:** Systemic fungicide with protective and curative action for control of diseases in food crops.  
**Formulation:** procymidone 250 g/l  
 Soluble Concentrate

### Hazardous ingredients of toxicological concern:

<u>Inert:</u>	<u>concern:</u>	<u>% present:</u>
procymidone	harmful, reproductive hazard	25 %
mono ethylene glycol	harmful, irritant	± 4 %
polydimethylsiloxane	slight irritant	± 0.35 %
water	non	74 %
other inerts	slight irritants	± 10 %

**Symbol:** Xi, Xn, N  
**Indication of danger:** Irritant, Harmful, Environmentally hazardous substance  
**Risk-Phrases:** R20/21/22, R36/37/38, R51, R60, R61

## 3. HAZARD IDENTIFICATION

No adverse effects on health are expected if the product is handled in accordance with the instructions on the product label or this Safety Data Sheet.

### Likely routes of exposure:

**Skin:** Product may cause irritation and may be harmful if absorbed through the skin.  
**Eye:** Product may cause irritation.  
**Inhalation:** May be harmful if inhaled. Product may cause irritation to mucous membranes and respiratory tract, as well as headache and nausea.  
**Swallowed:** Product may be harmful. When large amounts are ingested symptoms such as nausea, vomiting, weakness and diarrhoea may occur.  
**Other Health Hazard Information:** Long term, or repeated high dose exposure in laboratory animals to procymidone has been shown to cause birth defects and may cause disorders of the liver and reproductive system.

## 4. FIRST AID MEASURES AND PRECAUTIONS

**Inhalation:**  
 If vapours or mists have been inhaled, remove the source of contamination or move victim to fresh air. Keep person calm and at rest. Obtain medical attention.  
**Skin contact:**  
 Remove contaminated clothing, shoes and leather goods. Wash skin gently and thoroughly with copious amounts of water and non-abrasive soap. Wash contaminated clothing before re-use. Obtain medical attention.  
**Eye contact:**  
 Immediately flush eyes with a stream of clean water for at least 20 minutes, holding the eyelid(s) open. Obtain medical attention.  
**Ingestion:**  
 If more than 15 minutes from a hospital, induce vomiting, preferably by using Ipecac syrup. If the person is alert, rinse mouth thoroughly with water. Do not give anything by mouth to an unconscious person. Obtain medical attention immediately.  
**Advice on treatment:**  
 There is no specific antidote available. Treat symptomatically.

## 5. FIRE FIGHTING MEASURES

**Flash point:** None – water based.  
 This material is not flammable.  
**Hazardous products of combustion:**  
 Non-combustible. If aqueous component evaporates, residual material is flammable if ignited. Fire may produce toxic fumes.  
**Extinguishing agents:**

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Extinguish fires with water fog (or fine water spray), foam, carbon dioxide or dry chemical powder. Water spray can be used for cooling of unaffected stock, but avoid water coming in contact with the product. Use as little water as possible. Contain water used for fire fighting for later disposal. Avoid the accumulation of polluted run-off from the site.

### Fire fighting:

Remove spectators from surrounding area. Isolate the fire area and evacuate downwind. Use a recommended extinguishing agent for the type of surrounding fire.

Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Contain fire control agents for later disposal. Avoid inhaling hazardous vapours and fumes from burning materials. Keep upwind.

Remove container from fire area if possible and without risk. Water can be used to cool unaffected containers but must be contained for later disposal.

Dyke fire control water for later disposal. Do not scatter the material. Avoid pollution of waterways.

Do not use high volume water jet, due to contamination risk. Avoid the accumulation of polluted run-off from the site.

### Personal protective equipment:

Fire may produce toxic fumes. Fire fighters and others that may be exposed should wear full protective clothing and self-contained breathing apparatus.

## 6. ACCIDENTAL RELEASE MEASURES (SPILLAGE)

### Personal precautions:

Avoid contact with skin and eyes. Do not breathe spray or fumes. For personal protection see Section 8.

### Environmental precautions:

Do not allow entering of drains or watercourses. Spillage or uncontrolled discharges into water courses (or public waters) to be reported immediately to the Police and to the Department of Water/Environmental Affairs. Considered a Marine Pollutant.

### Occupational spill:

Do not touch spilled material; stop leak if you can do it without risk. Keep out unprotected persons and animals.

**For spills:** Soak up with absorptive material such as damp earth or sand or other suitable non-combustible absorbent material. Place the material into a clean, dry container and cover for subsequent disposal. In situations where product comes in contact with water, contain contaminated water for later disposal. Prevent material from spreading by damming in with absorptive material. Do not flush spilled material into drains. Keep spectators away and upwind.

To decontaminate spill area, tools and equipment, wash with a suitable solution (i.e. organic solvent, detergent bleach or caustic). Add the solution to the drums already

collected. Label drums with its content and dispose of it in accordance with local regulations.

Open burning or dumping of this material is prohibited.

## 7. HANDLING AND STORAGE REQUIREMENTS

### Handling:

Product may be irritating to eyes and skin. Avoid contact with eyes and skin, and inhalation of spray and vapour. Avoid prolonged or repeated exposure. Use with adequate ventilation. Wash hands before eating, drinking, chewing gum, smoking, or using the toilet. Operators should change and wash clothing daily. Remove clothing immediately if the pesticide gets inside. Then wash skin thoroughly using water and a non-abrasive soap and put on clean clothing. It is recommended that women of child-bearing age avoid contact with procymidone. Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination.

### Storage:

Keep under lock and key and out of reach of unauthorised persons, children and animals. Store in its original labelled container in isolated, dry, cool and well-ventilated area, out of direct sunlight. Not to be stored next to foodstuffs and water supplies. Local regulations should be complied with.

## 8. EXPOSURE CONTROL / PERSONAL PROTECTION

It is essential to provide adequate ventilation. The measures appropriate for a particular work site depend on how this material is used and on the extent of exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire and other applicable regulations.

### PERSONAL PROTECTIVE EQUIPMENT:

If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable personal protective equipment including approved respiratory protection.

### Disposable paper mask:

An approved disposable mask suitable for protection from mists of pesticides is adequate. Limitations of mask use specified by the approved agency and the manufacturer must be observed.

### Clothing:

Employee must wear completely covering, appropriate protective (impervious) clothing and equipment to avoid skin contact with this substance.

### Gloves:

Employee must wear appropriate synthetic protective gloves to prevent contact with this substance.

### Eye protection:

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The use of a face shield is recommended.

**Emergency eye wash:** Where there is any possibility that an employee's eyes may be exposed to this substance 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:**

White to off-white liquid suspension with chemical odour.

**Flammability:**

Not Flammable.

**Flash point:**

Not determined – water based product.

**Explosion properties:**

Not explosive.

**pH:**

7.8

**pH of 1% aqueous solution:**

7.3

**Solubility:**

Negligible solubility, but dispersible in water.

**Density:**

1,1 ± 0.1 g/ml

### 10. STABILITY AND REACTIVITY

**Stability:**

Chemically and thermally stable.

**Storage stability:**

Stable for a period of 2 years under normal warehouse conditions.

**Conditions and Materials to Avoid:**

Keep the product tightly closed in a cool, dry place. Protect from sunlight, open flame and sources of heat. Avoid contact with strong acids, strong bases and strong oxidising agents.

**Hazardous decomposition products:**

Fire may produce harmful combustion products, such as carbon dioxide, carbon monoxide and smoke. Nitrogen and sulphur oxides may also be produced.

### 11. TOXICOLOGICAL INFORMATION

**Acute oral LD<sub>50</sub> rats:**

*Procymidone Technical:* 6800 mg/kg

Formulation calculated: > 2000 mg/kg

**Acute dermal LD<sub>50</sub> rats:**

*Procymidone Technical:* > 2500 mg/kg

Formulation calculated: > 2000 mg/kg

**Acute skin irritation:**

*Procymidone Technical:* non-irritant

Formulation: mild irritant

**Acute eye irritation:**

*Procymidone Technical:* non-irritant

Formulation: mild irritant

**Dermal sensitisation:**

Not expected to be a skin sensitizer. Individuals may develop an allergic response.

**Inhalation:**

May be harmful if inhaled and may cause irritation to mucous membranes and respiratory tract, headache and nausea.

*Technical:* LC<sub>50</sub> (4hours) for rat: > 1500 mg/m<sup>3</sup>

**Mutagenicity:**

Procymidone has no mutagenic effects.

**Reproductivity:**

Procymidone caused birth defects in laboratory animals and may cause reproductive effects. It is recommended that women of child-bearing age avoid contact with procymidone.

**Carcinogenicity:**

Procymidone has no carcinogenic effects.

### 12. ECOLOGICAL INFORMATION

**Mobility, Degradability & Accumulation:**

Procymidone persists in soil for approximately 4-12 weeks, depending on the soil humus content.

Animals rapidly and completely eliminate procymidone.

**ECOTOXICOLOGY:**

**Fish:** Toxic to fish.

LC<sub>50</sub> (96 hours): Bluegill sunfish: 10,3 mg/l

Rainbow trout: 7,2 mg/l

**Bees:** Not toxic to bees.

### 13. DISPOSAL CONSIDERATION

**Pesticide disposal:**

Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product cannot be reused or reprocessed. Never pour untreated waste or surplus products 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.

Comply with local legislation applying to waste disposal.

**Container disposal:**

Emptied containers retain vapour and product residues. Observe all labelled safeguards until container is destroyed.

**TRIPLE RINSE** empty containers in the following manner: Invert the empty container over the spray or mixing tank and allow to drain 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 a third of that of the container. Add the rinsing to the

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contents of the spray tank before destroying the container in the prescribed manner.

Do not re-use the empty container for any other purpose, but destroy it by perforation and flattening and bury in an approved dump site. Prevent contamination of food, feedstuffs, drinking water and eating utensils.

Comply with local legislation applying to waste disposal.

Packed in 1, 5, 10, 20 and 25 ℓ fluorinated plastic containers and labelled according to South African regulations and guidelines.

**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 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.

## 14. TRANSPORT INFORMATION

**UN NUMBER: 3082**

**Road Transport ADR/RID:**

Class: 9  
 Packaging group: III  
 Shipping name: Environmentally Hazardous Substance, N.O.S.  
 (procymidone 250 g/ℓ)

**Maritime Transport IMDG/IMO:**

Class: 9  
 Packaging group: III  
 Shipping name: Environmentally Hazardous Substance, N.O.S.  
 (procymidone 250 g/ℓ)

**Considered a marine pollutant.**

## END OF DOCUMENT

**Compiled:** August 2009

**Reviewed:** March 2019

**Revision no.:** (2)

**Next revision date:** March 2024

For detailed information on revisions, contact the Registration holder.

## 15. REGULATORY INFORMATION

**Symbol :** Xi, Xn, N  
**Indication of danger :** Irritant, Harmful, Environmentally Hazardous substance.

**Risk phrase(s):**

**R 20/2122** Harmful by inhalation, in contact with skin and if swallowed.  
**R 36/37/38** Irritating to eyes, respiratory system and skin.  
**R 51** Toxic to aquatic organisms.  
**R 60** May impair fertility.  
**R 61** May cause harm to the unborn child.

**Safety phrases:**

**S 2** Keep out of reach children.  
**S 13** Keep away from food, drink and animal feeding stuffs.  
**S 23** Do not breathe vapour/spray.  
**S 24/25** Avoid contact with skin and eyes.  
**S 60** This material and its container must be disposed of as hazardous waste.  
**S 61** Avoid release to the environment. Refer to special instructions/safety data sheets.

## 16. OTHER INFORMATION

**Packaging:**