

# RAMBA INDOOR 100 SC

# SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** RAMBA INDOOR 100 SC  
**Other identifier:** Bifenthrin 100 SC  
**Recommended use:** Insecticide and Termiticide  
**Restrictions on use:** Agriculture

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

**Telephone:** (011) 3962233  
**Fax:** (011) 3964666  
**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. HAZARDS IDENTIFICATION

UN GHS, Regulation EC 1272/2008 [EU-GHS/CLP] EU & SANS 10234:2008		
Hazard classes	Hazard categories	H-statements
<b>Health</b>		
Oral	Acute Tox. 4	H302
Skin irritation Skin sensitizer	Skin irrit. 3 Skin sens. 1	H316 H317
Eye	Eye Dam. 1	H318
Inhalation	Acute Tox. 4	H332
Carcinogenicity	Carc. 2	H351
Specific Target Organ Toxicity Repeated Exposure	STOT RE 1	H372
<b>Environment</b>		
Aquatic acute	Aquatic acute 1	H400
Aquatic chronic	Aquatic chronic 1	H410

**The most important adverse effects:**  
**Physiochemical effects:**  
 None known.  
**Human health effects:**  
 Suspected of causing cancer.  
 Causes serious eye damage.

Causes damage to organs (nervous system and lungs) through prolonged or repeated exposure (predominantly through inhalation, oral intake, skin or eye contact).

**Label elements:**



**Signal word:** Danger.

**Hazard statements:**  
 H302: Harmful if swallowed.  
 H316: Causes mild skin irritation.  
 H317: May cause an allergic skin reaction.  
 H318: Causes serious eye damage.  
 H332: Harmful if inhaled.  
 H351: Suspected of causing cancer.  
 H372: Causes damage to organs (nervous system and lungs) through prolonged or repeated exposure (predominantly through inhalation).  
 H400: Very toxic to aquatic life.  
 H410: Very toxic to aquatic life with long lasting effects.

**Precautionary statements:**  
 P202: Do not handle until all safety precautions have been read and understood.  
 P264: Wash hands and face thoroughly after handling.  
 P270: Do not eat, drink or smoke when using this product.  
 P271: Use only outdoors or in a well-ventilated area.  
 P273: Avoid release into the environment.  
 P280: Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.  
 P302/352: IF ON SKIN: Wash with plenty of water and non-abrasive soap.  
 P305/351/338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P308/313: If exposed or concerned: Get medical attention.  
 P310: Immediately call a POISON CENTRE.  
 P333/313: If skin irritation or rash occurs: Get medical advice.  
 P391: Collect spillage.  
 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 4.  
 Classification according to WHO: Category II.

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## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture.

### Composition:

Chemical Name	CAS	Conc. (m/v %)	Classification EC 1272/2008
Bifenthrin TC (95% min)	82657-04-3	10 %	Acute Tox. 2 (H300) Skin Sens. 1B (H317) Acute Tox. 3 (H331) Carc. 2 (H351) STOT RE 1 (H372) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
Dispersant	26264-06-2	< 2 %	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 4 (H413)
Wetting agent	9002-92-0	< 10 %	Acute Tox. 4 (H302) Eye Dam. 1 (H318)
Preservative	65-85-0	< 1 %	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) STOT RE 1 (H372)

## 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. If irritation develops 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. **Seek medical attention.**

**Ingestion:** Do not give anything by mouth to an unconscious person. Seek medical attention or call a

poison control centre for treatment advice if the person feels unwell.

**Anticipated acute effects:** Causes serious eye damage. May cause an allergic skin reaction.

**Anticipated delayed effects:** Suspected of causing cancer. Causes damage to organs (nervous system and lungs) through prolonged or repeated exposure (predominantly through inhalation, oral intake, skin or eye contact).

**Most important symptoms/effects:** May occasionally produce skin sensations such as rashes, numbing, burning and tingling. Symptoms of overexposure include bleeding from the nose, tremors and convulsions.

**Advice to physician:** Bifenthrin, the active ingredient in this product, is a pyrethroid. Treatment is otherwise symptomatic and supportive.

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media:** Extinguish fires with foam, CO<sub>2</sub> or dry chemical. Soft stream water fog if no alternative.

**Unsuitable Extinguishing Media:** Water jet.

**Specific hazards:** This product may emit toxic fumes when burned, including carbon monoxide, carbon dioxide, hydrogen chloride, chlorine, fluorine and hydrogen fluoride.

**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.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Avoid contact with eyes and skin. Do not breathe in spray or fumes. Ventilate area of spill or leak, especially in contained 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:** Prevent spilled product from entering sewers, waterways or ground water. This product is classified to be very toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment. Any spillages or uncontrolled

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discharges into water courses should be reported immediately to the police and the Department of Water/Environmental Affairs.

**Methods and Materials for Containment:** Contain spilled product by diking area with sand, earth or cat litter.

**Methods and Materials for Clean-up:** Cover contained spill with an inert absorbent material such as sand, earth or other appropriate non-combustible material. Vacuum, scoop, or sweep up material and place the material into a clean, dry, sealable container. Label containers with the contents and dispose of according to local regulations. Do not place spilled material back in original container. Do not re-use spilled material. Collect washings and add to the drums already collected. Do not flush spilled material or washings into drains or waterways. To decontaminate the spill area, tools and equipment, wash with water and suitable detergent. Add the solution to the drums already collected. Open burning or dumping of this material is prohibited. See section 13 for disposal considerations.

## 7. HANDLING AND STORAGE

### Handling:

**Precautions for safe handling:** Avoid contact with eyes. 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 containers.

## 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:** Grey liquid suspension concentrate.

**Odour:** Mild soap like odour.

**pH (1% aqueous dilution):** 6.1 - 7.6 at 20°C.

**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):**

**Relative Vapour Density:** Not available.

**Density/Relative density:** 1.02 g/ml at 20°C.

**Solubility:** Completely soluble in water.

**n-octanol/water partition coefficient:** Not available.

**Auto-ignition temperature:** Not applicable - does not burn.

**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.

**Reactivity:** This product is unlikely to react or decompose under normal storage conditions.

**Possibility of Hazardous Reactions:** None known.

**Conditions to Avoid:** Avoid extreme heat or exposure to direct sunlight.

**Incompatible Materials:** No particular incompatibilities.

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**Hazardous Decomposition Products:** This product may emit toxic fumes when burned, including carbon monoxide, carbon dioxide, hydrogen chloride, chlorine, fluorine and hydrogen fluoride.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY:

**Calculated according to GHS.**

**Oral LD<sub>50</sub>** (24 h) rat > 500 mg/kg.

**Dermal LD<sub>50</sub>** (24 h) rat > 18 000 mg/kg.

**Inhalation LC<sub>50</sub>** (4 h) rat 4.0 mg/ℓ.

**Skin Irritation/Corrosion:** Causes mild skin irritation.

**Eye Damage/Irritation:** Causes serious eye damage.

**Skin Sensitization:** May cause an allergic skin reaction.

**Respiratory Sensitization:** Not available.

**Reproductive cell mutagenicity:** Not available.

**Carcinogenicity:** Suspected of causing cancer.

**Reproductive toxicity:** Not available.

**Specific target organ toxicity – single exposure:** Not available.

**Specific target organ toxicity – repeated exposure:** Suspected of causing cancer. Causes damage to organs (nervous system and lungs) through prolonged or repeated exposure (predominantly through inhalation, oral intake, skin or eye contact). **Aspiration hazard:** Not available.

**Chronic Effects:** Not available.

### POTENTIAL ADVERSE EFFECTS:

**Inhalation:** Harmful if inhaled, product may be mildly irritating, although unlikely to cause anything more than mild temporary discomfort.

**Skin contact:** This product may cause skin numbness. In addition, this product may be irritating to skin but unlikely to cause anything more than mild temporary discomfort.

**Eye contact:** This product causes serious eye damage.

**Ingestion:** Harmful if swallowed.

## 12. ECOLOGICAL INFORMATION

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

### ECOTOXICITY DATA:

#### Fish:

LC <sub>50</sub> (96 h)	Bluegill sunfish	0.000269 mg/ℓ.
	Rainbow trout	0.00015 mg/ℓ.

#### Daphnia:

LC <sub>50</sub> (48 h)	Daphnia	0.00016 mg/ℓ.
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Low solubility in water & high affinity for soil contribute to produce little impact in aquatic systems under field conditions.

#### Algae:

EC <sub>50</sub> and ErC <sub>50</sub>	> 8 mg/ℓ.
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#### Birds:

Acute oral LD <sub>50</sub>	Bobwhite quail	> 1800 mg/kg
	Mallard ducks	> 2150 mg/kg.
Dietary LC <sub>50</sub> (8 d)	Bobwhite quail	4450 mg/kg diet

Mallard ducks 1280 mg/kg diet.

#### Bees:

LD <sub>50</sub> (oral)	0.1 µg/bee
(contact)	0.01462 µg/bee

#### Worms:

LC <sub>50</sub>	>16 mg/kg dry soil.
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#### Plants:

Extensively metabolized, with 50 - 80 % hydrolysis. The most important metabolite is 4' – hydroxybifenthrin.

## ENVIRONMENTAL EFFECTS:

**Persistence and degradability:** Soil DT<sub>50</sub> (lab.) 53 – 192 d (mean 106 d). K<sub>oc</sub> 1.31 – 3.02 x10<sup>5</sup>.

**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.

**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 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:** 3082

**Road Transport ADR/RID:**

Class: 9

Packaging group: III

Shipping name: Environmentally Hazardous Substance, Liquid, N.O.S. (Bifenthrin 100 g/ℓ)

**Maritime Transport IMDG/IMO:**

Class: 9

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Packaging group: III  
 Shipping name: Environmentally Hazardous  
 Substance, Liquid, N.O.S.  
 (Bifenthrin 100 g/l)

**Marine Pollutant (Y/N):** Yes

**Air transport IATA/ICAO:**

Class: 9  
 Packaging group: III  
 Shipping name: Environmentally Hazardous  
 Substance, Liquid, N.O.S.  
 (Bifenthrin 100 g/l)

**Special/Environmental Precautions:** None known.

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

**END OF DOCUMENT**

**Compiled:** August 2016  
**Reviewed:** September 2019  
**Revision no.:** (2)  
**Next revision date:** September 2024

For detailed information on revisions, contact the Registration holder.

**15. REGULATORY INFORMATION**

**Safety, health and environmental regulations/legislation for the mixture:**

OHSA 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 50, 100, 200, 250 and 500 ml, 1, 5, 10, 20 and 25 litres plastic containers, labelled according to South African regulations and guidelines.

**Additional H-statement (s) (formulants)**

**H300:** Fatal if swallowed.  
**H315:** Causes skin irritation.  
**H331:** Toxic if inhaled.  
**H413:** May cause long lasting harmful effects to aquatic life.

**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.