## **SECTION 1 - PRODUCT & COMPANY IDENTIFICATION**

Substance: deltamethrin

Product Name: INSECT DESTROYER SC

Product Use: Insecticide Creation Date: April 2024

Registration holder / Registrasiehouer: PROTEK, a division of / a divisie van PE-BEE AGRI (PTY) LTD / (EDMS) BPK

Co. Reg. No./Mpy. Reg. Nr.: 2005/036308/07

P.O. Box/Posbus 72, Heidelberg, 1438

Tel: (011) 812 9800 or/of 0861 PROTEK (0861 77 68 35)

www.protek.co.za

Emergency telephone number 24 HR EMERGENCY NUMBERS

Griffon Poison Information Centre +27 82 446 8946

24 Hr Transport / Spill emergency no: (Hazcall24) +27 86 044 4411

## **SECTION 2 - HAZARD IDENTIFICATION**

## **Hazardous Nature:**

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)



Aquatic Acute 1 H400 Very toxic to aquatic life.



Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

Skin Corrosion/Irritation 2 H315 Causes skin irritation. Serious Eye Damage/Irritation 2A H319 Causes serious eye irritation.

Skin Sensitisation 1 H317 May cause an allergic skin reaction.

# **Signal Word Warning**

**Hazard Statements** 

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H410 Very toxic to aquatic life with long lasting effects.

**Precautionary Statements** 

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

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

P273. Avoid release to the environment.

P264. Wash hands thoroughly after handling.

P272. Contaminated work clothing should not be allowed out of the workplace.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see on this label).

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P302+P352 IF ON SKIN: Wash with plenty of water.

P391 Collect spillage.

## **SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS**

## SUBSTANCE/ MIXTURE: mixture

**Description:** Mixture of substances listed below with nonhazardous additions.

Hazardous Components:		
52918-63-5	deltamethrin (ISO)	2.5%
	Acute Toxicity (Oral) 3, H301; Acute Toxicity (Inhalation) 3, H331; Acute 1, H400; Aquatic Chronic 1, H410	
55965-84-9	Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2Hisothiazol-3-one (3:1)	0.25%
	Acute Toxicity (Oral) 3, H301; Acute Toxicity (Dermal) 3, H311; Acute Toxicity (Inhalation) 3, H331; Skin Corrosion/Irritation 1A, H314; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Sensitisation 1, H317	

## **SECTION 4 - FIRST AID MEASURES**

#### **General Information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

#### Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

#### Skin Contact:

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms occur.

### **Eye Contact:**

In case of eye contact, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention.

# Ingestion:

If swallowed, seek immediate medical attention. Do not give anything by mouth to an unconscious person.

#### **Symptoms Caused by Exposure:**

Inhalation: Excessive exposure to spray mist may be harmful. Symptoms that may occur if this product is mishandled include central nervous system depression, loss of coordination, impaired judgement and unconsciousness. May cause respiratory irritation.

Skin Contact: Causes skin irritation. May cause an allergic skin reaction.

Eye Contact: May cause eye irritation.

Ingestion: Harmful if swallowed. Ingestion of the concentrate may result in headache, nausea.

### **SECTION 5 - FIRE-FIGHTING MEASURES**

Suitable Extinguishing Media: Water spray or fog, foam, dry chemical or carbon dioxide.

# **Specific Hazards Arising from the Chemical:**

Hazardous combustion products include oxides of carbon, hydrogen chloride and other pyrolysis products. Product is combustible.

Containers close to fire should be removed only if safe to do so. Use water spray to cool fire exposed containers.

Prevent run-off from fire fighting entering drains or water courses.

HAZCHEM Code: •3Z

# **Special Protective Equipment and Precautions for Fire Fighters:**

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES (SPILLAGE)

**Personal Precautions**: Avoid contact with eyes and skin. 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 toxic to aquatic organisms with long-term adverse effects in the aquatic environment. Any spillages or uncontrolled 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 lime. **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.

### **SECTION 7 - HANDLING AND STORAGE REQUIREMENTS**

### Handling:

Precautions for safe handling: Avoid contact with eyes and skin. Harmful if swallowed. 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 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. Do not store near heat, open flame, sources of ignition or hot surfaces. Avoid cross contamination with other pesticides and fertilisers. Incompatible substances and mixtures: Product is incompatible with galvanized steel or unlined mild steel. Packaging material: Plastic containers.

# SECTION 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.

#### **Respirator:**

It is usually safe to use the product without a mask or respirator. If the product is used in dusty or confined conditions, a mask or respirator suitable for protection from dusts and mists of pesticides is adequate. Limitations of respirator use specified by the approving agency and the manufacturer must be observed.

# Clothing:

Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance.

# Gloves:

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

## Eve protection:

Wear safety goggles or face shield.

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.

## **SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Appearance:

Form: Opaque liquid

Colour: White

Odour: No information available Odour Threshold: No information available

pH-Value: 3-5

Melting point/Melting range:

No information available

Initial Boiling Point/Boiling Range: 100 °C
Flash Point: Not applicable

Flammability: Product is not flammable Auto-ignition Temperature: No information available Decomposition Temperature: No information available

**Explosion Limits:** 

Lower: Not applicable Upper: Not applicable

Vapour Pressure: No information available

Relative Density at 20 °C: 1.016

Vapour Density:

Evaporation Rate:

Solubility in Water:

Partition Coefficient (n-octanol/water) at 25 °C: 4.6 log POW (deltamethrin)

## **SECTION 10 - STABILITY AND REACTIVITY**

Possibility of Hazardous Reactions: Hazardous polymerisation will not occur.

Chemical Stability: Stable at ambient temperature and under normal conditions of storage and use.

Conditions to Avoid: Heat, sparks, open flames, hot surfaces and direct sunlight.

Incompatible Materials: Strong oxidising agents.

Hazardous Decomposition Products: Oxides of carbon, hydrogen chloride and other pyrolysis products.

## **SECTION 11 - TOXICOLOGICAL INFORMATION**

LD <sub>50</sub> /LC <sub>50</sub> Values Relevant for Classification:				
52918-63-5 deltamethrin (ISO)				
Oral	LD50	>15000 mg/kg (rat)		
Dermal	LD50	>10000 mg/kg (rat)		
Inhalation	LC50	>2.3 mg/L/4hr (rat)		

## Acute Health Effects Inhalation:

Vapours may cause respiratory discomfort and may be harmful if inhaled. Inhalation of high vapour concentration may cause chest tightness and pulmonary oedema.

Skin: Causes skin irritation, numbness, stinging or burning sensation

Eye: Causes eye irritation, stinging, reddening and watering.

Ingestion:

May be harmful if swallowed. Ingestion causes nausea, vomiting, diarrhoea, abdominal pain, and salivation. Potential CNS effects are dizziness, blurred vision, headache, listlessness, anorexia, somnolence, seizures, convulsions, tremor and coma. Vapours may cause respiratory discomfort. Inhalation of high vapour concentration may cause similar to that of ingestion.

Skin Corrosion / Irritation: Causes skin irritation.

Serious Eye Damage / Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitisation: May cause an allergic skin reaction.

Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.

Carcinogenicity: This product does NOT contain any IARC listed chemicals.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Single Exposure:

Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:

Based on classification principles, the classification criteria are not met.

Aspiration Hazard: Based on classification principles, the classification criteria are not met.

Chronic Health Effects: No information available

Existing Conditions Aggravated by Exposure: No information available

Additional toxicological information:

The Australian Acceptable Daily Intake (ADI) for deltamethrin for a human is 0.01 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 1 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Comm. Dept. of Health and Ageing Office of Chemical Safety, 'ADI List', June 2014).

# **SECTION 12 - ECOLOGICAL INFORMATION**

Ecotoxicity: Deltamethrin is toxic to bees.

Aquatic toxicity:

Fish toxicity:  $LC_{50}$ =0.001 - 0.01mg/L/96 hr Daphnia toxicity:  $LC_{50}$  = 3.5  $\mu$ g/L/48 hr Toxicity

to algae:  $EC_{50} > 9.1 \text{mg/L/96 hr}$ 

Highly toxic to aquatic life with long lasting effects.

Persistence and Degradability: Deltamethrin is not considered persistent in the environment.

Bioaccumulative Potential: No information available

Mobility in Soil: No information available

Other adverse effects: No information available

## **SECTION 13 - DISPOSAL CONSIDERATION**

### Pesticide disposal:

Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product that 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 10 % of that of the container. Add the rinsings to the 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.

## **SECTION 14 - TRANSPORT INFORMATION**

**UN Number** 

ADG, IMDG, IATA UN3082

**Proper Shipping Name** 

ADG, IMDG, IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

LIQUID, N.O.S. (deltamethrin 25 SC)

**Dangerous Goods Class** 

ADG Class: 9

**Subsidiary Risk:** 

**Packing Group:** 

ADG, IMDG, IATA

Marine pollutant:

EMS Number: F-A,S-F
Hazchem Code: •3Z

**Special Provisions:** 274, 331, 335, 375, AU01

**Transport/Additional information:**Not subject to the ADG Code when transported by road

or rail in packaging's that do not incorporate a receptacle

exceeding 500 kg(L) or IBCs. (refer to SP AU01)

Limited Quantities: 5L

Packagings & IBCs - Packing Instruction: P001, IBC03, LP01

Packagings & IBCs - Special Packing Provisions: PP1
Portable Tanks & Bulk Containers - Instructions: T4

# **SECTION 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

# **SECTION 16 - OTHER INFORMATION**

Packaging and Labelling:

Packed in 50ml, 100ml 500ml 1, 2, 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.