



## MATERIAL SAFETY DATA SHEET

**SUBJECT:** ANT DUST  
**EFFECTIVE DATE:** June 2019  
**REVISION DATE:**  
**REVISION NO:** 1  
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### 1. PRODUCT AND COMPANY IDENTIFICATION

**SUPPLIER:** **EFEKTO**  
PO Box 652147  
BENMORE  
2010  
**0861 333586 office hours**

#### EMERGENCY TELEPHONE NUMBERS:

**SPILLAGES:** 082 4468946

#### POISONINGS:

**Poisons Information Helpline** 0861 555 777(all hours)  
**Griffon Poison Centre** 082 446 8946

**Product Name:** ANT DUST  
INSECTICIDE

**Use:** Insecticide dust for Home, Garden and Indoor use. A residual contact and stomach poison for insects as listed on the label

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

**Active Ingredient:** Carbaryl 15 g/kg and Deltamethrin 0.75g/kg.

**Common Name:** Carbaryl plus Deltamethrin  
**Chemical Name:** 1-naphthyl methylcarbamate (IUPAC) and

(S)- $\alpha$ -cyano-3-phenoxybenzyl (1R,3R)-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropane carboxylate (IUPAC)

**CAS N<sup>o</sup>:** 63-25-2 and 52918-63-5

**Chemical family:** Carbamate and Pyrethroid.

**EC No.:** 200-555-0 and 258-256-6

**UN No.:** 3077

**Symbols:** Xn ; N

**Risk-Phrases:** R22, R40, R50/53

### 3. HAZARD IDENTIFICATION

Poisoning is unlikely to occur due to the low concentration of the insecticide. However, Carbaryl inhibits cholinesterase. Contact with skin, inhalation of dust, or swallowing may be harmful.

Persons with respiratory disorders should use extra care in handling this product.

#### Main Hazards:

Harmful if swallowed.

May cause eye or skin irritation in high concentrations.

Prolonged inhalation may cause lung injury.

Extremely toxic to aquatic and estuarine invertebrates.

Toxic to bees.

#### Eyes:

May cause mechanical irritation in high concentrations.

#### Skin:

May cause transient, localized parasthesia characterised, by tingling, burning or numbness sensation in some individuals.

#### Ingestion:

Harmful if swallowed.

#### Inhalation:

May cause irritation of the nose, throat and mucus membranes upon inhalation of dust. Prolonged inhalation may cause lung injury.

#### Fire and explosion hazard:

Dust-air mixtures may ignite or explode.

#### Chemical Hazard:

None known.

**Carcinogenicity Mutagenicity, Neurotoxicity; Reproductive /Teratogenicity** See section 11.

### 4. FIRST AID MEASURES

#### Symptoms of Poisoning:

Symptoms may include nausea, vomiting, diarrhoea, abdominal cramps, headache, vertigo, ocular pain, ciliary muscle spasm, blurring or dimness of vision.

#### Inhalation:

If respiratory discomfort or irritation occurs, move the person to fresh air. See a doctor if discomfort or irritation continues.

#### Skin contact:

Wash with plenty of soap and water. Get medical attention if irritation persists. Cold cream or a moisturizing cream has been successful in diminishing the sensations associated with localized paresthesia

#### Eye contact:

Flush eyes immediately with fresh water for at least 15 minutes while holding the eyelids open. Remove contact lenses if worn. No additional first aid should be necessary. However, if irritation persists, see a doctor.

#### Ingestion:

If swallowed, immediately telephone a poison control center, emergency treatment center or a physician for advice. DO NOT make person vomit unless directed to do so by medical



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personnel. If medical advice cannot be obtained, then immediately take person and product container, with label, to an emergency treatment center.

### **Advice to physician:**

If signs of cholinesterase inhibition appear, atropine sulfate is antidotal.

However, the decision as to whether the severity of poisoning requires administration of any antidote and actual dose required should be made by qualified medical personnel.

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## 5. FIRE FIGHTING MEASURES

### **Fire fighting instructions:**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved (or equivalent) and full protective gear.

### **Extinguishing agents:**

Carbon dioxide, dry chemical, foam or water.

### **Special Hazards:**

Dust-air mixtures may ignite or explode.

Fire may produce irritating or poisonous vapours (carbon monoxide and nitrogen oxides), mists or other products of combustion.

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## 6. ACCIDENTAL RELEASE MEASURES

Sweep up or shovel into approved waste disposal container. Dispose of with chemical waste.

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## 7. HANDLING AND STORAGE

### **Handling:**

Proper care should be taken during occupational use to avoid any inhalation of dust and to prevent accidental contamination of food products and water.

Wash hands before eating, drinking, chewing gum, smoking, or using the toilet.

### **Storage:**

The product must be kept under lock and key. Keep out of reach of unauthorised persons, children and animals. Store in its original labelled container in shaded, well-ventilated area. Not to be stored next to foodstuffs and water supplies. Local regulations should be complied with.

## 8. EXPOSURE CONTROL / PERSONAL PROTECTION

### **Occupational exposure limits:**

#### **Carbaryl:**

**ACGIH** 5 mg/m<sup>3</sup> Carbaryl  
10 mg/m<sup>3</sup> Nuisance dust.  
**STEL** 15 mins 10 mg/m<sup>3</sup>  
**TWA** 8 hours 5 mg/m<sup>3</sup>

#### **Deltamethrin:**

Exposure limits not available.

#### **Engineering control measures:**

It is essential to provide adequate ventilation. 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:**

An approved 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 the substance.

#### **Gloves:**

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

#### **Eye protection:**

The use of full face protection 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.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### **Appearance:**

A grey white powder.

### **Odour:**

Odourless.

**Bulk Density:** 0.6162g/kg

### **Flammability:**

Not flammable.

### **Explosive properties:**

Not explosive.

### **Oxidising properties:**

Not oxidative.



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### Solubility in water:

Not soluble in water. Does not wet or suspend in water.

## 10. STABILITY AND REACTIVITY

### Stability:

Stable up to 2 years under normal storage conditions. The rate of decomposition increases at higher temperatures. Avoid extremes of temperature.

### Incompatibility:

Avoid acidic or oxidising materials.

### Hazardous decomposition:

Toxic oxides of nitrogen are released when the product decomposes on heating.

## 11. TOXICOLOGICAL INFORMATION

### Estimated Data for EVERDEATH:

#### Acute oral LD<sub>50</sub> :

>2000 mg/kg

#### Acute dermal LD<sub>50</sub> :

>2000 mg/kg

#### Inhalation LC<sub>50</sub> mg/l/ 1hour:

No data for the dust.

#### Skin irritation:

Not a skin irritant at normal use rate.

#### Eye irritation:

Slight eye irritant

#### Skin sensitization:

May cause transient, localized parasthesia characterised, by tingling, burning or numbness sensation in some individuals.

*All below data is for technical materials.*

#### Carbaryl:

##### Acute oral LD<sub>50</sub> :

850 mg/kg in male rats.

500 mg/kg in female rats.

710 mg/kg in rabbits

##### Acute dermal LD<sub>50</sub> :

> 4000 mg/kg in rats.

##### Acute inhalation LC<sub>50</sub> :

> 206.1 mg/ℓ of air over 4 hours (rats).

#### Carcinogenicity:

There is no evidence that carbaryl or Deltamethrin is carcinogenic in humans.

#### Teratogenicity:

Studies did not detect any teratogenic effects for any of the active ingredients.

#### Mutagenicity:

Studies did not detect any mutagenic effects for any of the active ingredients.

#### Deltamethrin

**Acute Oral LD<sub>50</sub>:** 135 - >5000 mg/kg (rats).

**Acute Dermal LD<sub>50</sub>:** > 2000mg/kg (rats).

**Acute inhalation LC<sub>50</sub>:** 2.2 mg/l air(1h)

## 12. ECOLOGICAL INFORMATION

### Carbaryl

#### Degradability:

In soil, Carbaryl is metabolised to form 1-naphthol. The half life of the product is 7-14 days in sandy loam soils and 14-28 days in clay loam.

#### Mobility:

The product is adsorbed on soil and is unlikely to leach into water sources.

#### Accumulation:

The product adsorbs to soil but shows little or no tendency to bio-accumulate. Carbaryl has very limited persistence in the environment.

### Deltamethrin:

#### Degradability:

Deltamethrin undergoes microbial degradation within 1-2 weeks. There is strong adsorption by soil colloids and no risk of leaching. Deltamethrin is not persistent in the environment.

## ECOTOXICOLOGY:

### Carbaryl:

All data is for technical material.

#### Birds:

Minimally toxic to birds.

Acute oral LD<sub>50</sub>: > 2179 mg/kg (young mallard ducks).

> 2230 mg/kg (Japanese quail).

> 2000 mg/kg (young pheasants).

1000-3000 mg/kg (pigeons).

#### Fish:

Toxic to fish.

LC<sub>50</sub> (96 hr): 1.3 mg/ℓ (rainbow trout).

10.0 mg/ℓ (bluegill sunfish).

2.2 mg/ℓ (blue gill sunfish)

#### Bees.

LD<sub>50</sub> (contact): 1.0 µg/bee.

#### Daphnia:

Very toxic to Daphnia.

#### Daphnia:



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The 48-hour EC<sub>50</sub> was 0.006 mg /ℓ.

### Earthworms:

Toxic for earthworms.

### Beneficial insects:

Toxic for beneficial insects.

### Soil micro-organisms:

No data available.

### Deltamethrin:

#### Avian Toxicity

Material is harmful to birds on an acute basis.

Mallard ducks LD<sub>50</sub> > 4640 mg/kg

#### Aquatic Toxicity

Bluegill sunfish LD<sub>50</sub>: 1,4 µg/l

#### Daphnia:

Toxic to *Daphnia magna*.

LC<sub>50</sub> (48 h): 0.35 µg /ℓ.

#### Bees:

Toxic to bees. LD<sub>50</sub> :79 ng/bee (oral)

## 13. DISPOSAL CONSIDERATIONS

### Pesticide disposal:

Try and use unwanted product as per label instructions on the crops as is indicated on the label..

Never pour untreated waste or surplus products into public sewers or where there is any danger of run-off or seepage into water systems. Comply with local legislation applying to waste disposal.

### Package product wastes:

If container is broken, handle with rubber gloves. Emptied containers retain product residues. Observe all labelled safeguards until container is destroyed. Non-combustible containers must be punctured and disposed of in a landfill.

## 14. TRANSPORT INFORMATION

**UN NUMBER** 3077

### ADR/IRD

**Shipping name:** Environmentally hazardous substances, solid n.o.s.  
(Carbaryl and Deltamethrin ).

Classification Code: M7

Class: 9

Label: 9

Packaging group: III

Hazard ID No.: 90

## IMDG/IMO

**Shipping name:** Environmentally hazardous substances, solid n.o.s.  
(Carbaryl and Deltamethrin).

Packaging group: III

Label of class: 9 **Marine pollutant**

## AIR/IATA

**Shipping name:** Environmentally hazardous substances, solid n.o.s.  
(Carbaryl and Deltamethrin).

Class: 9

Hazard Label: Miscellaneous.

Packaging Group: III

Passenger Aircraft: Y911 (max 30 kg G)  
911 (No limit).

Cargo Aircraft: 911 (No limit)

**Tremcard No:** 90GM7-III

## 15. REGULATORY INFORMATION

**Symbol:** Xn; N

**Indication of danger:** Harmful; Dangerous to the environment.

### Risk phrases:

**R 22** Harmful if swallowed.

**R40** Limited evidence of carcinogenic effect.

**R50/53** Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### Safety phrases

**S 2** Keep out of reach of children

**S13** Keep away from food, drink and animal feeding stuffs.

**S20/21** When using do not eat, drink or smoke.

**S22** Do not breathe dust.

**S24** Avoid skin contact.

**S35** This material and its container must be disposed of in a safe way.

**S57** Use appropriate containment to avoid environmental contamination.

### National Legislation:

In accordance with the South African National Road Traffic Act, 1996 (Act 93 of 1996), the Fire Brigade Act, 1987 (Act 99



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of 1987) and the Occupational Health and Safety Act, 1993  
(Act No. 85 of 1993)

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### 16. OTHER INFORMATION

**Prepared by:** Danie Fourie

All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct. This information applies to the PRODUCT AS SUCH. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear.

It is the responsibility of persons in receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produces formulations(s) containing this product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.

### REFERENCES

- *The Pesticide Manual*; Thirteenth Edition; Editor Clive Tomlin; Crop Protection Publications, 2003.
- *NRA Review of Carbaryl*; January 2007. Review series 4.
- *Dangerous Goods Regulations*; IATA; International Air Transport Association, 49<sup>th</sup> Edition, Effective 1 January 2008.
- *ADR, Vol.1* , 2005.
- *IMDG Code, Vol. 2*, 2005
- SABS 0265:1999

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**END OF MSDS.**