MATERIAL SAFETY DATA SHEET

Emergency contact number: +27 11 365-8639



GCPF Code: DP

Publication date: 14 November 2000 Sheet number: BES/SA0023 Revised on: 29 May 2007 Revision number: 4

1) IDENTIFICATION OF THE SUBSTANCE / PREPARATION

COOPEX® DUST Commercial name:

Company identification: Bayer (Pty.) Ltd.

> Reg. No. 1968/011192/07 P.O. Box 143, Isando 1600

SOUTH AFRICA

+27 11 365 8600 Company contact numbers:

+27 11 921 5911

Tygerberg Poison Centre: +27 21 931 6129

2) COMPOSITION / INFORMATION ON THE INGREDIENTS

Cas Reg No: Permethrin: 52645-53-1

Product is chemically a pyrethroid insecticide based on 5 g/kg active permethrin (25/75 cis/trans isomer).

Description:

A ready-to-use dusting powder in the form of a fine, off-white powder.

3) HAZARD IDENTIFICATION OF THE PRODUCT

Hazards: Contains: Permethrin

Nature of hazard: Acute hazard unlikely in normal use.

Contact with substance may cause irritation to eyes and skin. Allergic respiratory symptoms may develop after several hours.

Decomposes in a fire to emit toxic fumes of Cl.

Harmful to aquatic organisms, may cause long-term effects in the aquatic environment.

4) FIRST AID MEASURES

Skin contact: Contact with the dust may cause irritation, redness and discomfort. Remove contaminated clothing,

rinse the affected skin area with plenty of soap and cool water or shower. Apply Vitamin E cream or

simple toilet milks. When symptoms persist or in all cases of doubt seek medical advice.

Contact with the dust may be irritating, causing redness and discomfort. Immediately wash eyes with Eye contact:

copious amounts of clean water for at least 15 minutes and contact a doctor if irritation persists.

Ingestion and overexposure: The toxin affects the central nervous system; may cause numbness of lips and tongue, headache,

nausea, vomiting, diarrhoea, excitement, epigastric pain, convulsions and coma (very high doses). Allergic respiratory symptoms may be delayed for several hours. Keep patient calm and reassured, rinse mouth with clean water. Do not induce vomiting. Never give anything by mouth to an unconscious person. DO NOT apply direct mouth to mouth respiration, use a disposable protective

mouthpiece.

Inhalation: Avoid excessive inhalation of dust; may cause sneezing, headache, nausea and/or respiratory

discomfort. Persons sensitive to pollen are prone to allergic reactions to pyrethroids. Remove patient from source of poisoning to a well-ventilated area and keep him quiet and reassured. If symptoms

persist, call a phycisian.

NOTES TO PHYSICIAN:

Symptomatic treatment and supportive therapy as indicated.

This product contains a pyrethroid and must NOT be confused with organophosphorus compounds!

Local: Initial treatment should be symptomatic and supportive.

After eye contact: Instillation of local anaesthetic drops, e.g. 1 % Amethocaine Hydrocloride eye drops.

Give Analgesics as necessary.

Systemic: Endotracheal intubation should be done and gastric lavage performed, followed by administration of

charcoal.

Monitoring of respiratory and cardiac functions. ECG - monitoring (Electrocardiogram)

Check for pulmonary oedema in event of inhalation.

Keep airway clear, administer artificial respiration if necessary.

Against convulsions: Give diazepam: for adults 5-10 mg, for children 2-5 mg intravenously repeated as

necessary until fully sedated.

There is no antidote.

Contraindication: Atropine

Baver Environmental Science Page 1 of 3

MATERIAL SAFETY DATA SHEET

Emergency contact number: +27 11 365-8639



Contraindication: Derivatives of adrenaline

Recovery: Spontaneous

5) FIRE FIGHTING MEASURES

Personnel involved in a fire situation with this material should wear self-contained breathing apparatus as toxic fumes may be given off. No unprotected person should be allowed in the vicinity.

Decomposes in a fire to emit toxic fumes of Cl⁻.

Fire extinguishing agents to be used: Special dry powder; Carbon dioxide.

Contain run-off with temporary earth barriers. The material is toxic to fish.

Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Whenever possible, contain fire-fighting water by bunding area with sand or earth.

6) ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid dust formation.

Avoid contact with spilled product or contaminated surfaces. When dealing with a spillage do not eat, drink or smoke.

PVC gloves, safety goggles or face shield, effective respiratory protection, full-length protective

clothing and boots should be worn when handling this material in an emergency.

Environmental precautions: Keep people and animals away.

Do not discharge into the drains / surface water / ground water.

Methods for cleaning up: Vacuum up spilled product.

Transfer collected material to heavy duty plastic drums and keep safe for disposal. Clean contaminated floors and objects thoroughly, observing environmental regulations.

Refer to Section 13 regarding waste disposal.

7) HANDLING AND STORAGE

Handling precautions: No specific precautions required when handling unopened pack/containers.

Do not breathe dust excessively and avoid skin contact.

Do not eat, drink or smoke while applying or before washing hands and face.

Wash with soap and water after use.

When cleaning equipment and protective clothing, contamination of all sources of drinking water,

rivers, dams, crops or grazing shall be prevented.

Avoid dust formation.

Storage: Store out of reach of children and pets.

Store in a cool, dry place away from sources of heat or naked flames. Store away from farm feeds, foodstuffs, eating utensils and drinking water.

Protect against moisture. Storage temperature: 0-30 °C.

Keep in original container, tightly closed.

8) EXPOSURE CONTROLS AND PERSONAL PROTECTION

Respiratory protection: Dust mask

Hand protection: Chemical resistant gloves

PVC gloves Nitrile gloves

Eye protection: Chemical resistant goggles or face shield must be worn.

Skin and body protection: Light protective clothing, PVC

PVC boots

Hygiene measures: When using, do not eat, drink or smoke.

Remove soiled clothing immediately.

Clean hands and face at work intervals and after work.

Work in an adequately ventilated room.

9) PHYSICAL AND CHEMICAL PROPERTIES

Description: A fine, off-white powder.

Solubility: Insoluble in water.

Bayer Environmental Science Page 2 of 3

MATERIAL SAFETY DATA SHEET

Emergency contact number: +27 11 365-8639



Partition coefficient: logPow: 5.95 (relates to active ingredient permethrin).

Degradation: For permethrin in soil and water, degradation is rapid.

10) STABILITY AND REACTIVITY

Conditions to avoid: Extremes of temperature and direct sunlight.

No hazardous reactions when stored and handled according to prescribed instructions.

Stable under normal conditions.

11) TOXICOLOGICAL INFORMATION

Toxicity: (product)

For the product an acute hazard is unlikely in normal use.

(active ingredient)

LD $_{50}$ acute oral, rats: 430 to 4 000 mg/kg LD $_{50}$ the acute dermal, rats: > 4 000 mg/kg LD $_{50}$ the acute dermal, rabbits: > 2 000 mg/kg LC $_{50}$ acute inhalation, rats (4 hours): 2,3 mg/l air

12) ECOLOGICAL INFORMATION

Toxicity to fish: (active ingredient) LC_{50} (96 h): Rainbow trout 0,009 mg/l

13) DISPOSAL CONSIDERATIONS

Disposal of residue: Residue may be disposed of as for toxic waste in accordance with local/national regulations.

Disposal of used packaging material: Dispose of empty containers in accordance with local/national regulations. DO NOT re-use for

any other purpose.

14) TRANSPORT INFORMATION

ADNR: Not dangerous goods ADR: Not dangerous goods GGVE: Not dangerous goods Not dangerous goods GGVS: IATA_C: Not dangerous goods IATA_P: Not dangerous goods IMDG: Not dangerous goods RID: Not dangerous goods

15) REGULATORY INFORMATION

Risk phrases: R 10, 20 Safety phrases: S 2, 16

WHO Classification: III (slightly hazardous)

16) OTHER INFORMATION

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

Consult the label for the instructions for use.

THIS INFORMATION CONCERNS ONLY THE PRODUCT AS CONFORMING TO ITS SPECIFICATIONS AND LIMITED TO THE USES HEREIN STATED.

This sheet complements the technical sheet of use but does not replace it. The information contained on this sheet is based on knowledge of the product on the date of publication. It is given in good faith.

If the logo in this document is not in colour, this document is a photocopy and could be out of date.

Bayer Environmental Science Page 3 of 3