

SAFETY DATA SHEET



Publication date: March 1994 Sheet number: BES/SA0062 Revised on: 1 September 2011 Revision number: 7

1) IDENTIFICATION OF THE SUBSTANCE / PREPARATION

Commercial name: **K-OTHRINE[®] WP 50**

Usage: Insecticide

Company identification: Bayer (Pty.) Ltd.
Reg. No. 1968/011192/07
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SOUTH AFRICA

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In case of poisoning emergencies:
Bayer (office hours only): +27 11 921 5429/5471/5639
Tygerberg Poison Centre: +27 21 931 6129
Griffon Poison Information Centre: +27 82 446 8946

2) HAZARD IDENTIFICATION OF THE PRODUCT

Risk advice to man and the environment: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3) COMPOSITION / INFORMATION ON THE INGREDIENTS

Chemical nature: Wettable powder (WP)
Deltamethrin 5 %

Hazardous components:

Chemical Name	CAS-No. / EINECS-No.	Symbol(s)	R-phrases(s)	Concentration [%]
Deltamethrin	52918-63-5 258-256-6	T, N	R23/25, R50/53	5,00
Fatty alcohol ethoxylate		Xi	R38, R41	> 1,00 - < 5,00

For the full text of the R phrases mentioned in this Section, see Section 16.

4) FIRST AID MEASURES

Skin contact: Take off all contaminated clothing immediately. Wash off immediately with soap and plenty of water. After skin contact: Apply Vitamin E cream or simple toilet milks. If symptoms persist or in all cases of doubt seek medical advice.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation develops and persists.

Ingestion: Rinse out mouth and give water in small sips to drink. If symptoms persist, call a physician. Ingest activated charcoal. Induce vomiting only, if: 1. patient is fully conscious, 2. medical aid is not readily available, 3. a significant amount (more than a mouthful) has been ingested and 4. time since ingestion is less than 1 hour. (Vomit should not get into the respiratory tract).

Inhalation: Move the patient to fresh air and keep at rest. If symptoms persist, call a physician.

Note to physician:

Symptoms: Local: Skin and eye paresthesia, which may be severe. Usually transient with resolution within 24 hours. Eye and mucous membrane irritation. Cough.
Systemic: Discomfort in the chest, bronchial hypersecretion, pulmonary oedema, tachycardia, low blood pressure, palpitation, vomiting, diarrhoea, abdominal pain, nausea, salivation, dizziness, blurred vision, headache, apathy, anorexia, somnolence, coma, convulsions, tremors, ataxia, muscular fasciculation.

Risks: This product/preparation contains a pyrethroid.
Must NOT be confused with organophosphorus compounds!

Treatment: Local: Initial treatment should be symptomatic and supportive.
After eye contact: Instillation of local anaesthetic drops e.g. 1 % Amethocaine Hydrochloride eye drops. Give Analgesics as necessary.

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Systemic treatment: Endotracheal intubation should be done and gastric lavage performed, followed by administration of charcoal and sodium sulphate.
 Monitoring of respiratory and cardiac functions.
 Anti-convulsive therapy: Diazepam i.v. is the remedy of choice; barbiturates, e.g. phenobarbital and calcium gluconate, may also be used.
 There is no specific antidote.
 Contraindication: derivatives of adrenaline.
 Contraindication: atropine.
 Spontaneous recovery.

5) FIRE FIGHTING MEASURES

Suitable extinguishing media: Water spray, carbon dioxide (CO₂), dry chemical, alcohol-resistant foam.

Extinguishing media which must not be used for safety reasons: High volume water jet.

Specific hazards during fire fighting: In case of fire the evolution of dangerous gases is possible.

Special protective equipment for fire-fighters: In the event of fire and/or explosion do not breathe fumes.
 Wear self contained breathing apparatus and protective suit for fire fighting.

Further information: 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.
 Keep people away from and upwind of spill/leak.

Environmental precautions: Do not discharge into the drains/surface water/groundwater.

Methods for cleaning up: Use approved industrial vacuum cleaner for removal.
 Transfer collected material to heavy duty plastic drums and keep safe for disposal.
 Clean contaminated floors and objects thoroughly with plenty of water, observing environmental regulations.

Additional advice: Information regarding safe handling, see section 7.
 Information regarding personal protective equipment, see section 8.
 Information regarding waste disposal, see section 13.
 Check also for any local site procedures.

7) HANDLING AND STORAGE

Handling:
 Advice on safe handling: No specific precautions required when handling unopened packs/containers; follow relevant manual handling advice.
 Avoid dust formation.
 Provide good ventilation of working area (local exhaust ventilation if necessary).

Advice on protection against fire and explosion: The product is not combustible.

Storage:
 Requirements for storage areas and containers: Keep container tightly closed in a dry and well-ventilated place.
 Store in a place accessible by authorized persons only.

Further information on storage conditions: Protect against heat and direct sunlight.
 Protect against moisture.

Advice on common storage: Keep away from food, drink and animal feedstuffs.

Storage temperature: Between -10 °C and 40 °C

Suitable materials: Keep in original packaging, tightly closed.

8) EXPOSURE CONTROLS AND PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Control parameters	Basis
Deltamethrin	52918-63-5	0,02 mg/m ³	OES BCS*

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*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

Protective clothing during normal use/application: Wear protective clothing when handling the powder or diluted spray mixture. Wear a face shield when applying the diluted washes to surfaces or when working in spray mist. Wear gloves and dust mask.

Protective clothing during manufacture:

Respiratory protection: Wear respirator with a particle filter mask (protection factor 4) conforming to European norm EN149FFP1 or equivalent. Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.

Hand protection: Wear CE Marked (or equivalent) nitrile rubber gloves (minimum thickness 0,40 mm). Wash when contaminated. Dispose of when contaminated inside, when perforated or when contamination outside cannot be removed. Wash hands always before eating, drinking, smoking or using the toilet.

Eye protection: Wear goggles conforming to EN166 (Field of Use 5 or equivalent).

Skin and body protection: Wear standard coverall and type 5 suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.

Hygiene measures: When using, do not eat, drink or smoke.
Remove soiled clothing immediately and clean thoroughly before using again.
Wash hands immediately after work, if necessary take a shower.

9) PHYSICAL AND CHEMICAL PROPERTIES

Description: A white to cream-coloured, free-flowing wetttable powder with a characteristic smell.

Water solubility: Miscible.

10) STABILITY AND REACTIVITY

Conditions to avoid: Extremes of temperature and direct sunlight.

Materials to avoid: None

Hazardous reactions: No hazardous reactions when stored and handled according to prescribed instructions.
Stable under normal conditions.

11) TOXICOLOGICAL INFORMATION

Acute toxicity:
LD₅₀ oral, rat: > 5000 mg/kg
LD₅₀ dermal, rat: > 2000 mg/kg
LC₅₀ inhalation, rat: > 7.75 mg/ℓ
Exposure time: 4 h

Skin irritation, rabbit: Not a skin irritant

Eye irritation, rabbit: Slight irritant effect – does not require labeling

Sensitizing, guinea pig: Not a skin sensitizer

Cutaneous sensations may occur, such as burning or stinging on the face and mucosae. However, these sensations cause no lesions and are of a transitory nature (max. 24 hours).

12) ECOLOGICAL INFORMATION

Elimination information (persistence and degradability):
Bioaccumulation: Bluegill sunfish
Bioconcentration factor (BCF): 1.400
Test substance: The value mentioned relates to the active ingredient deltamethrin.

Ecotoxicity effects:
Toxicity to fish:
LC₅₀: 34 mg/ℓ, Rainbow trout (*Oncorhynchus mykiss*)
Exposure time: 96 h

Toxicity to daphnia:

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EC₅₀: 0,0024 mg/l, Water flea (*Daphnia magna*)
Exposure time: 48 h

Toxicity to algae:

EC₅₀: > 30 mg/l, *Selenastrum capricornutum*
Exposure time: 96 h

Toxicity to other organisms:

LD₅₀: > 2.250 mg/kg, Bobwhite quail
Test substance: The value mentioned relates to the active ingredient deltamethrin.

Toxicity to other organisms:

LD₅₀: > 4.640 mg/kg, Mallard duck
Test substance: The value mentioned relates to the active ingredient deltamethrin.

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: Triple rinse containers.
Do not re-use empty containers.
Not completely emptied packaging should be disposed of as hazardous waste.

14) TRANSPORT INFORMATION

UN Number: 3077

Class: 9

Ems: F-A, S-F

Subsidiary risk: •

Packing group: III

Declaration for land shipment: 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(deltamethrin mixture)

Declaration for sea shipment: 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(deltamethrin mixture)

Declaration for shipment by air: 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(deltamethrin mixture)

15) REGULATORY INFORMATION

Classification and labelling in accordance with the EC Directive on dangerous preparations 1999/45/EC as amended.

Classification: Hazard warning labelling compulsory.

Hazardous components which must be listed on the label: Deltamethrin.

Symbol(s):

N: Dangerous for the environment.

R-phrases(s):

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

S-phrases(s):

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

S57: Use appropriate container to avoid environmental contamination.

Exceptional labelling: To avoid risks to man and the environment, comply with the instructions for use.

WHO Classification: III (Slightly hazardous).

16) OTHER INFORMATION

Text of R phrases mentioned in Section 3:

R23/25: Toxic by inhalation and if swallowed.

R38: Irritating to skin.

R41: Risk of serious damage to eyes.

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

SAFETY DATA SHEET



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 directions 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.

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