

# SAFETY DATA SHEET



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## 1) IDENTIFICATION OF THE SUBSTANCE / PREPARATION

Trade name: **K-OTHRINE® WG 250**

Usage: Insecticide

Company identification: Bayer (Pty.) Ltd.  
Reg. No. 1968/011192/07  
P.O. Box 143, Isando 1600  
SOUTH AFRICA

Telephone: +27 11 365 8600  
+27 11 921 5429

Fax: +27 11 921 5754

Responsible department: Product Development and Regulatory Affairs  
+27 11 921 5429/5471/5639  
sharika.baijnath@bayer.com

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

Water dispersible granules (WG), contains: Deltamethrin 25 % w/w

Hazardous components:

Chemical name	CAS-No.	Symbol(s)	R-phrases	Concentration [%]
Deltamethrin	52918-63-5	T, N	R50/53 R23/25	25.00
Sulphonated aromatic polymer, sodium salt		Xi	R36/38	>1.00 - <20.00
Anionic tenside		Xi	R36	>1.00 - < 20.00
Citric acid	77-92-9 201-069-1	Xi	R36	>1.00 - < 20.00
Sodium dioctyl sulphosuccinate	577-11-7 209-406-4	Xi	R38, R41	> 1.00 - < 5.00
Kaolin	1332-58-7			>1.00

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

## 4) FIRST AID MEASURES

General advice: Remove contaminated, soaked clothing immediately and dispose of safely.

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

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. When 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. Warm water may increase the subjective severity of the irritation/paresthesia. This is not a sign of systemic poisoning. Apply soothing eye drops, if needed anaesthetic eye drops. Get medical attention if irritation develops and persists.

Ingestion: Rinse out mouth and give water in small sips to drink. Do NOT induce vomiting. If swallowed, seek medical advice immediately and show this container or label.

NOTES TO PHYSICIAN:

Symptoms: Local: Skin and eye paraesthesia which may be severe, usually transient with resolution within 24 hours. Skin, eye and mucous membrane irritation, cough.

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Symptoms: Systemic: Discomfort in the chest, tachycardia, hypotension, nausea, abdominal pain, diarrhoea, vomiting, dizziness, blurred vision, headache, anorexia, somnolence, coma, convulsions, tremors and prostration.

## Risks

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

## Treatment

### Local treatment:

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.

### Systemic treatment:

Initial treatment: Symptomatic.

Monitor: Respiratory and cardiac functions.

In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable.

Keep respiratory tract clear.

Give oxygen or artificial respiration if needed.

In case of convulsions, a benzodiazepine (e.g. diazepam) should be given according to standard regimens.

If not effective, phenobarbital may be used.

Contraindication: Atropine.

Contraindication: Derivatives of adrenaline.

There is no specific antidote.

Recovery is spontaneous and without sequelae.

## 5) FIRE FIGHTING MEASURES

Suitable extinguishing media: Water spray, carbon dioxide (CO<sub>2</sub>), dry chemical, alcohol-resistant foam.

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

Specific hazards during fire fighting: Dangerous gases are evolved in the event of a fire.

Special protective equipment for fire-fighters: Wear self contained breathing apparatus for fire fighting if necessary.

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 dyking area with sand or earth.

## 6) ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid dust formation.  
Avoid contact with spilled product or contaminated surfaces.  
Keep people away from and upwind of spill/leak.  
When dealing with spillage, do not eat, drink or smoke.

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

Methods for cleaning up: Use approved industrial vacuum cleaner for removal.  
Keep in suitable, closed containers for disposal.  
Clean floors and contaminated objects with plenty of water.

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: 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).

Storage: Keep container tightly closed in a dry and well-ventilated place.  
Store in a place accessible by authorized persons only.  
Protect against heat and direct sunlight.  
Protect against moisture.  
Keep away from food, drink and animal feedstuffs.  
Storage temperature: -40 °C – 40 °C

## 8) EXPOSURE CONTROLS AND PERSONAL PROTECTION

Components with workplace control parameters:

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Components	CAS-No.	Control parameters	Update	Basis
Deltamethrin	52918-63-5	0.02 mg/m <sup>3</sup>		OES BCS*
Kaolin (Respirable dust.)	1332-58-7	2 mg/m <sup>3</sup> (TWA)	2007	EH40 WEL

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

Personal protective equipment: During application: Dust mask and face shield, chemical resistant gloves, light protective PVC clothing and PVC boots.  
 During manufacture: Wear respirator with a particle filter mask (protection factor 4), CE marked nitrile rubber gloves, goggle conforming to EN 166 and standard overall and type 5 suite.

Hygiene measures: When using, do not eat, drink or smoke.  
 Remove soiled clothing immediately.  
 Remove soaked clothing immediately.  
 Clean hands and face at work intervals and after work.  
 Work in and adequately ventilated room.

## 9) PHYSICAL AND CHEMICAL PROPERTIES

Form: Dry, free flowing, water dispersible granules.  
 Colour: Beige  
 Odour: Weak, characteristic  
 pH: 2.0 – 4.0 at 100 g/l (23 °C)  
 Bulk density: 630 – 730 kg/m<sup>3</sup> (23 °C)  
 Water solubility: Dispersible

## 10) STABILITY AND REACTIVITY

Conditions to avoid: Extremes of temperature and direct sunlight.  
 Hazardous reactions: No hazardous reactions when stored and handled according to prescribed instructions.  
 Note: stable under normal conditions.

## 11) TOXICOLOGICAL INFORMATION

Acute toxicity:  
 LD<sub>50</sub> oral, rat: > 3,465 mg/kg  
 LD<sub>50</sub> acute dermal, rat: > 2,090 mg/kg  
 LC<sub>50</sub> inhalation (4 hours), rats: > 1,474 - <4,062 mg/l

Skin irritation: Rabbit – slight irritant effect, does not require labelling.

Skin sensitisation: Guinea pig – non-sensitizing (method: OECD 406, Buehler test).

Eye irritation: Rabbit – slight irritant effect, does not require labelling.

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 hrs).

The toxicological data refers to a similar formulation.

## 12) ECOLOGICAL INFORMATION

Bio-accumulation:  
 Bluegill sunfish *Lepomis macrochirus*: Bio-concentration factor (BCF): 1.400

Toxicity to fish:  
 LC<sub>50</sub> = 14.5 mg/l, Rainbow trout, exposure time: 96 h  
 LC<sub>50</sub> = 1.9 mg/l, Bluegill sunfish, exposure time: 96 h

Toxicity to daphnia:  
 EC<sub>50</sub> = 0.00018 mg/l, Water flea (*Daphnia magna*), exposure time: 48 h

Toxicity to algae:  
 EC<sub>50</sub> = 41.7 mg/l, *Selenastrum capricornutum*, exposure time: 96 h

Toxicity to other organisms:

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LD<sub>50</sub> > 2,000 mg/kg, Japanese Quail

The ecotoxicological data refer to a similar formulation.

## 13) DISPOSAL CONSIDERATIONS

Product: In accordance with current regulations may be taken to waste disposal site or incineration plant, after consultation with site operator and/or with the responsible authority.

Contaminated packaging: Completely empty packaging may be treated as household waste.

## 14) TRANSPORT INFORMATION

UN Number: 3077

Class: 9

IMDG: -

Ems: F-A, S-F

MFAG: -

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)

Marine pollutant.

## 15) REGULATORY INFORMATION

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.

R36: Irritating to eyes.

R36/38: Irritating to eyes and skin.

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.

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.

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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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