

MATERIAL SAFETY DATA SHEET

K-O Tab® Insecticide Treatment for Mosquito Bed-nets

Date of Issue: October 22, 2002

1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND SUPPLIER

Product name: K-O Tab® Insecticide Treatment for Mosquito Bed-nets
Other names: None
Product code: AE F032640 00 TB25 A1
Recommended use: A tablet preparation for suspension in water and subsequent treatment of mosquito bed-nets for protection against mosquitoes and sandflies.
Supplier: Bayer Environmental Science – A Business Group of Bayer CropScience Pty Ltd ABN 87 000 226 022
Address: 391 - 393 Tooronga Road, East Hawthorn Victoria 3123, Australia
Telephone: (03) 9248 6888
Facsimile: (03) 9248 6800
Website: www.bayercropscience.com.au
Contact: Technical Manager (03) 9248 6854
Emergency Telephone Number: 1800 033 111 – Orica SH&E Shared Services

2. HAZARDS IDENTIFICATION

HAZARDOUS SUBSTANCE - NON-DANGEROUS GOOD
May irritate eyes. Not irritating to skin. Not flammable.

Hazard designation: Hazardous according to criteria of Worksafe Australia.
Risk phrases: R22 - Harmful if swallowed
Safety phrases: Not applicable
ADG classification: Not “dangerous goods” for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.
SUSDP classification: Schedule 5 (Standard for the Uniform Scheduling of Drugs and Poisons)

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients:	CAS Number:	Concentration (g/kg):
Deltamethrin	[52918-63-5]	250
Other ingredients	(non hazardous)	750

4. FIRST AID MEASURES

If poisoning occurs, immediately contact a doctor or Poisons Information Centre (telephone 13 11 26), and follow the advice given. Show this Material Safety Data Sheet to a doctor.

Inhalation: The presentation as a solid tablet cannot, under normal handling, expose the user to the risk of contamination by inhalation.
Skin contact: If product or prepared dip contacts skin wash area with soap and water.
Eye contact: The presentation as a solid tablet cannot under normal handling expose the user to contact with the eyes. Should dipping solution contact eyes rinse immediately

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with plenty of water for at least 15 minutes, holding eye open. Seek medical advice.

Ingestion: Wash out mouth with water. Seek medical advice. If swallowed do not induce vomiting, give a glass of water and seek medical advice. Ensure airway is clear.

First Aid Facilities: Provide washing facilities in the workplace.

Symptoms: Symptoms of poisoning may include dizziness, headache, listlessness, nausea and vomiting.

Medical attention: Treat symptoms. No specific antidote known.

5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray, carbon dioxide, foam, dry chemical. Do not use a water jet from a fire hose.

Hazards from combustion products: Heating/combustion will generate oxides of carbon and nitrogen, and other irritant and toxic fumes.

Precautions for fire fighters: Fire fighters should wear full protective clothing and self-contained breathing apparatus when dealing with large quantities of product. Do not release contaminated water into the environment. Keep intact containers cool by spraying with water.

6. ACCIDENTAL RELEASE MEASURES

If packaged tablets are spilled return to original container. Avoid damaging packaging. If immediate packaging has been damaged sweep up into a suitable container, store and dispose of at a local authority landfill. If no landfill is available bury below 500mm in a disposal pit specifically designed and set up for this purpose clear of waterways, desirable vegetation and tree roots.

7. HANDLING AND STORAGE

Handling: Prepare treatment solution in a well-ventilated area

Storage: Store product in the closed, original container in a safe, cool, well-ventilated area. Do not store for prolonged periods in direct sunlight.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure standards: No exposure standard has been assigned by the National Occupational Health and Safety Commission (Worksafe Australia). Aventis recommends an Occupational Exposure Standard for deltamethrin of 0.28 mg/m³.

Engineering controls: No special ventilation is required, as this product is not volatile. Control process conditions to avoid contact.

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Personal Protective Equipment:	Eyes:	Avoid contact with eyes.
	Clothing:	Full-length work-clothes should be worn during use.
	Gloves:	Waterproof gloves should be worn during use.
	Respiratory:	Not required.
	Other:	Do not eat, drink or smoke until after washing. Wash thoroughly after handling. After use wash or dispose of gloves and wash contaminated clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	A beige coloured tablet
Odour:	Negligible
Vapour pressure:	Not applicable
Vapour density:	Not applicable
Boiling point:	Not applicable
Freezing/melting point:	Not applicable
Solubility:	Forms a suspension
Suspensibility of 1 tablet:	95 % minimum
Density:	Not applicable
pH:	4.0 – 6.0 (in water)
Flash Point:	Not applicable
Flammability (explosive) limits:	Not applicable
Auto-ignition temperature:	Not applicable
Octanol/water partition coefficient:	Not applicable
Formulation:	Tablet for suspension in water

10. STABILITY AND REACTIVITY

Chemical stability:	Stable under normal conditions of use.
Hazardous polymerisation:	Not known to produce hazardous reactions.
Conditions to avoid:	Extreme heat
Incompatible materials:	Avoid oxidising agents, strong acids and alkalis.
Hazardous decomposition products:	Heating/combustion will generate oxides of carbon and nitrogen, and other irritant and toxic fumes.

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11. TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

Inhalation:	Inhalation of the product is unlikely to occur due to the formulation type.
Skin contact:	The product is considered to be non-irritant and non-sensitising to the skin.
Eye contact:	May irritate the eyes.
Ingestion:	Product is harmful if swallowed. Symptoms of poisoning may include dizziness, headache, listlessness, nausea and vomiting.
Other:	None

ANIMAL TOXICITY DATA – PRODUCT

Acute:

Oral toxicity:	LD ₅₀ rat: 1965 mg/kg
Dermal toxicity:	LD ₅₀ rat: > 2000 mg/kg
Inhalation toxicity:	N/A
Skin irritation:	Not irritating – rabbit
Eye irritation:	Irritating – rabbit
Sensitisation:	Not sensitising - guinea pig

Chronic:

Deltamethrin is not mutagenic, carcinogenic or teratogenic.

12. ECOLOGICAL INFORMATION – ACTIVE INGREDIENT

Deltamethrin is highly toxic to fish and aquatic organisms.
Do not contaminate streams, rivers or waterways with the product or used containers.

Fish toxicity:	LC ₅₀ : 0.001 – 0.01 mg/L (96 h) fish
Daphnia toxicity:	Not available
Toxicity to algae:	Not available
Bird toxicity:	LD ₅₀ : > 5,000 mg/kg duck LD ₅₀ : > 10,000 mg/kg quail
Bee toxicity:	Not available
Other:	None

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Environmental fate, persistence and degradation: Deltamethrin is not persistent in the environment. It is destroyed by soil microorganisms and does not leave residues in the environment or build up in the food chain.

13. DISPOSAL CONSIDERATIONS

Dispose of packaging in the household garbage.
Dispose of spent dip by pouring over bare-soil or around non-food producing plants in the home-garden.
DO NOT contaminate streams, rivers or waterways with the tablet or dip solution.

14. TRANSPORT INFORMATION

UN number: Not applicable
Proper shipping name: Not applicable
Class and Subsidiary Risk: Not "dangerous goods" for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.
Packing Group: Not applicable
EPG: Not applicable
Hazchem code: Not applicable

15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Act 1988

National Registration Authority Approval Number: 53140

16. OTHER INFORMATION

Trademark information: K-O Tab® is a Registered Trademark of Bayer.

Preparation information: Replaces December 20, 2001 edition.
Reason for update: Conversion to 16 heading format.

Data sources: Bayer CropScience Pty Ltd product safety data and published data

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

END OF MSDS