# **ECOTOXIC HARMFUL**

# KEEP OUT OF REACH OF CHILDREN READ WARNING AND SAFETY DIRECTIONS BEFORE USING



# Aqua K-Othrine®

### INSECTICIDE SPACE-SPRAY CONCENTRATE

ACTIVE CONSTITUENT:

20 g/L DELTAMETHRIN

SOLVENT:

250 g/L HYDROCARBON LIQUID

A pyrethroid based insecticide concentrate for use as a space-spray for the control of adult mosquitoes, flies, cockroaches, spiders and stored product pests and for the suppression of biting midges as per the Directions for Use

Net contents

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Shake well before use.

APPROVED PURSUANT TO THE HSNO ACT 1996, No. HSR100623

See www.epa.govt.nz for approval controls



MPI Approved Type A (All animal product except dairy)









(Label code)

#### FRONT PAGE OF BOOKLET

## **ECOTOXIC HARMFUL**

### READ WARNING AND SAFETY DIRECTIONS BEFORE USING KEEP OUT OF REACH OF CHILDREN

### Aqua K-Othrine® Insecticide Space Spray Concentrate

HSNO CLASSIFICATIONS: 6.1D (AII), 6.1D (O), 6.1E (I), 6.3B , 6.9B (AII), 6.9B (I), 6.9B (O), 9.1A (AII), 9.1A (M), 9.2C , 9.3B , 9.4A.

#### **WARNING:**

Harmful if swallowed. May be harmful if swallowed and enters airways. Causes mild skin irritation. May be harmful if inhaled. Facial skin contact may cause temporary facial numbness. May cause organ damage from repeated oral exposure. Very toxic to aquatic life. Harmful to the soil environment. Toxic to terrestrial vertebrates. Very toxic to terrestrial invertebrates.

#### APPROVED HANDLER

This product must be under the control of an approved handler when:

- a) applied in a wide dispersive manner; or
- b) used by a commercial contractor.

#### STORAGE AND DISPOSAL:

Store locked up in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight. Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and deliver empty packaging to an approved waste management facility. DO NOT burn empty containers or product. Do not re-use container for any other purpose.

#### **FIRST AID**

For advice contact the National Poisons Centre 0800 POISON (0800 764766) or a doctor immediately. Get medical advice if you feel unwell. Refer to booklet for additional information.

FOR 24 HOUR SPECIALIST ADVICE IN AN EMERGENCY ONLY PHONE 0800 734 607

#### IMPORTANT: READ THE BOOKLET BEFORE USE

#### APPROVED PURSUANT TO THE HSNO ACT 1996, No. HSR100623

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MPI Approved Type A (All animal product except dairy)

K-Othrine® is a Registered Trademark of Bayer



Distributed by Garrards (NZ) Ltd. Unit 4/27B Cain Road, Penrose, New Zealand Phone (09) 526 5232 www.garrards.com.au

Batch No.: D.O.M.

**Bayer** 

#### **BOOKLET**

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#### WARNING:

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Causes mild skin irritation.

May be harmful if inhaled.

Facial skin contact may cause temporary facial numbness.

May cause organ damage from repeated oral exposure.

Very toxic to aquatic life.

Harmful to the soil environment.

Toxic to terrestrial vertebrates.

Very toxic to terrestrial invertebrates.

#### APPROVED HANDLER

This product must be under the control of an approved handler when:

- a) applied in a wide dispersive manner; or
- b) used by a commercial contractor.

#### **SAFETY DIRECTIONS:**

If product in eyes wash it out immediately with water.

Do not eat, drink or smoke when using this product.

Do not inhale spray mist.

Ensure adequate ventilation during use.

When opening the container, mixing and loading, preparing spray and using spray wear chemical resistant gloves and face shield of goggles. When using in enclosed areas, wear elbow length chemical resistant gloves and full face-piece respirator.

Avoid re-entry for 4 hours after use in confined spaces. If re-entering wear all protective clothing including respirator.

After each day's use, wash gloves, face shield of goggles, contaminated clothing and respirator and if rubber wash with detergent and warm water.

#### **Re-entry Period**

DO NOT allow re-entry into treated areas for 4 hours after use in enclosed spaces, unless wearing chemical resistant gloves, goggles and respirator. Clothing must be laundered after each days use. It is recommended that appropriate signage is utilised or adequate communication takes place with onsite staff and/or bystanders to ensure that these periods are adhered to.

#### STORAGE AND DISPOSAL:

Store locked up in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight. Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and deliver empty packaging to an approved waste management facility. DO NOT burn empty containers or product. Do not re-use container for any other purpose.

When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture. Contact your supplier for further information about the use of product which is older than this.

#### **ENVIRONMENTAL PROTECTION:**

Dangerous to fish and aquatic invertebrates. DO NOT use over or immediately adjacent to any water body or water course. DO NOT contaminate streams, rivers or waterways with the chemical or used container.

#### **EMERGENCY RESPONSE:**

For specialist advice in an emergency call 0800 734 607 (24 hours). Collect spillage.

#### **FIRST AID**

For advice contact the National Poisons Centre 0800 POISON (0800 764766) or a doctor immediately. Get medical advice if you feel unwell. If medical advice is needed, have product container or label at hand. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do not induce vomiting. IF INHALED: Call a POISON CENTER or doctor if you feel unwell. If skin irritation occurs: Get medical attention.

It is an offence to use this product on animals.

#### DIRECTIONS FOR USE SPRAY DRIFT RESTRAINTS (FOR OUTDOOR USE)

Users of this product **MUST** make an accurate written record of the details of each spray application within 24 hours following application and **KEEP** this record for a minimum of 2 years. The spray application details that must be recorded are: 1. date and start and finish times of application; 2. location address and areas sprayed; 3. full name of this product; 4. amount used per hectare and number of hectares applied to; 5. situation and pest; 6. wind speed and direction during application; 7.air temperature; 8.nozzle brand, model and type and spray system pressure measured during application; 9.name and address of person applying this product.

SITUATION	PEST	RATE	CRITICAL COMMENTS
Outdoor and indoor situations where flies and/or mosquitoes are a problem (including but not limited to abattoirs, refuse tips, picnic areas, sports grounds, recreation areas, factories, industrial buildings, domestic residences and areas associated with animal production).	Adult flies, mosquitoes and biting midges (sand flies)	Outdoors 50 mL/ha Indoors 2.5 mL/ 1000 m <sup>3</sup>	Dilute with a suitable volume of water (further details provided in the table below) and apply using equipment capable of generating a mist or thermal or cold fog.  Avoid application outdoors if wind speed is in excess of 10 km/h as spray will be dispersed too quickly.
Domestic, commercial, industrial and public buildings, including food processing establishments, shops, factories, farm buildings, warehouses, ships, offices, schools, storerooms, hospitals, barracks, private houses	Spiders, American and German cockroaches, Stored product pests	Indoors 2.5 mL/ 1000 m <sup>3</sup>	Dilute with a suitable volume of water (further details provided in the table below) and apply using equipment capable of generating a mist or thermal or cold fog.

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.

NO WITHHOLDING PERIOD IS REQUIRED WHEN USED AS DIRECTED BUT THIS PRODUCT SHOULD NOT BE APPLIED OVER WATER INTENDED FOR HUMAN CONSUMPTION

#### **GENERAL INSTRUCTIONS**

Aqua K-Othrine is a water-based space spray concentrate (oil in water emulsion) specifically designed for dilution in water ONLY, which can be applied by ultra low volume (ULV; vehicle mounted application techniques), thermal fogging or misting machines. Aqua K-Othrine Insecticide Space-Spray Concentrate may only be applied via ground-based methods.

Aqua K-Othrine incorporates anti-evaporant Film Forming Aqueous Suspension Technology (FFAST); which allows dilution with water yet spray droplet size is maintained as if diluted in oil.

**Mixing:** Dilute Aqua K-Othrine with the suitable volume of water according to the equipment manufacturer's recommendations for the output rates required. As standard practice, application equipment should be calibrated to determine output rates and actual volumes required in order to reach the target application rates of product referred to in the directions for use above.

As a guide only, some dilution and application rates are provided in the table below.

APPLICATION METHOD	SITUATION	DILUTION RATE	APPLICATION RATE OF DILUTION
ULV (Cold fogging)	Indoors	1 – 2 mL + 50 mL water	50 mL/1000 m <sup>3</sup>
	Outdoors	50 mL + 450 mL water	500 mL/ha
Thermal Fogging	Indoors	1- 2 mL/500 mL water	100 – 200 mL/house or 500 mL/1000 m <sup>3</sup>
	Outdoors	50 mL + 4950 mL water	5 L / Ha

Prepare only the amount required for immediate usage. Do not store diluted material.

The maximum application rate permitted is 0.05 L product/ha (1 g deltamethrin/ha) with a maximum of five applications per year and a minimum application interval of two days.

#### **Equipment:**

Apply by means of appropriate specialist equipment capable of producing and distributing droplets of a volume mean diameter (VMD) value below 50 microns. This equipment may be thermal fogging equipment, cold aerosol generating ULV equipment and hand-held or knapsack sprayers which are designed for space spraying.

Note that generally speaking motorised knapsack/backpack sprayers or mist blowers produce a mist with a droplet size spectrum of 0 to 200  $\mu$ m with Volume Median Diameters greater than 50  $\mu$ m. These larger droplets are less efficient for flying insect control.

#### **Application Timing**

Fly and mosquito control campaigns should begin early in the breeding season. Spray rounds should initially be every other day for 7 to 10 days to kill newly emerging adults and then a maintenance phase of weekly sprays may be used. Application should be timed correctly to achieve optimum results; for fly control; application should take place in the morning when flies are at ground level and have not had a chance to disperse. Application should be targeted to resting and breeding areas.

For mosquito control the optimum application time is generally in the evening when most species are active however the peak activity time should be identified to optimise effect against the particular target species.

For suppression of biting midges, the optimum timing is generally at dawn or dusk when adult midges are most active.

For optimum results when applying indoors close windows and doors before application and do not open for at least 30 minutes after treatment.

#### **PRECAUTIONS**

DO NOT apply in areas where food is prepared or eaten or where spray may come into direct contact with food.

<u>Before use</u>, remove or cover all exposed foodstuffs. Cover all dishes and utensils and other food preparation equipment.

<u>After use</u>, thoroughly ventilate treated area. Clean up thoroughly before processing/serving resumes. Fish bowls/aguaria should be removed or covered during indoor treatment.

#### **Re-entry Period**

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#### **Insecticide Resistance Warning**

GROUP 3A INSECTICIDE

For insecticide resistance management, Aqua K-Othrine is a Group 3A insecticide.

Some naturally occurring insect biotypes resistant to Aqua K-Othrine and other Group 3A insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if Aqua K-Othrine or other Group 3A insecticides are used repeatedly. The effectiveness of Aqua K-Othrine on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, Bayer CropScience Pty Ltd accepts no liability for any losses that may result from the failure of Aqua K-Othrine to control resistant insects.

Aqua K-Othrine may be subject to specific resistance management strategies. For further information contact your local supplier or Bayer representative.

#### PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Dangerous to fish and aquatic invertebrates. DO NOT use over or immediately adjacent to any water body or water course. DO NOT contaminate streams, rivers or waterways with the chemical or used container.

#### PROTECTION OF LIVESTOCK

Dangerous to bees. Will kill bees foraging in the area during application or in hives which are oversprayed or reached by spray drift.

#### **SAFETY DATA SHEET**

Additional information is listed in the Safety Data Sheet.

#### **CONDITIONS OF SUPPLY:**

## READ THESE CONDITIONS OF SUPPLY BEFORE BUYING AND USING. IF THESE CONDITIONS ARE UNACCEPTABLE RETURN AT ONCE UNOPENED.

To the extent permitted by law Bayer does not accept any liability or responsibility whatsoever for any loss, damage or injury whether direct, indirect or consequential howsoever arising in connection with these goods, including without limitation their storage, application, handling or use. Bayer does not make any warranties (express or implied) with respect to fitness for purpose, merchantable quality or any other matter. To the extent only that Bayer is prevented by law from contracting out of the Consumer Guarantees Act then these conditions apply subject to that Act. The Act shall not apply where these goods are acquired for business purposes.

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#### **BOOKLET BASE LABEL**

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