

VectoLex® WG

BIOLOGICAL LARVICIDE WATER DISPERSIBLE GRANULE

ACTIVE CONSTITUENT: *Bacillus sphaericus* 2362,
Strain ABTS-1743 fermentation solids and soluble

GROUP 11 INSECTICIDE

**For specific control of certain first to early fourth instar mosquito larvae
as per the Directions for Use table.**

GENERAL INSTRUCTIONS

Larvicidal activity, due to destruction of the midgut epithelium, occurs within 12 to 48 hours of ingestion. Applications shall be made during the active larval feeding stages (1st to early 4th instar) because late 4th instar larvae do not feed immediately prior to pupation, application has to be made in the early stages of the life cycle. When more than 50% of the larval population is in the late 4th instar stage, the use of this product is not recommended.

INSECTICIDE RESISTANCE WARNING

GROUP 11 INSECTICIDE

For insecticide resistance management, VectoLex WG is a Group 11 insecticide.

Some naturally occurring insect biotypes resistant to VectoLex WG and other Group 11 insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if VectoLex WG or other Group 11 insecticides are used repeatedly. The effectiveness of VectoLex WG on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, Valent BioSciences accepts no liability for any losses that may result from the failure of VectoLex WG to control resistant insects.

VectoLex WG may be subject to specific resistant management strategies. For further information contact your local supplier, Sumitomo Chemical Australia Pty Ltd representative or local agricultural department agronomist.

RESISTANCE MANAGEMENT

Repeated use of VectoLex WG (applications to 20 successive generations) may lead to a level of resistance in some mosquito populations reducing the effectiveness of products containing *Bacillus sphaericus*. We recommend the use of an appropriate resistance management strategy which incorporates VectoBac (*Bacillus thuringiensis* var. israelensis) or other larvicides into the mosquito management programme.

Mosquito (larvae) populations should be monitored

regularly using the larval dipping method. This determines the life-cycle stage and population level of the mosquito larvae. The likelihood of the mosquito population becoming a threat to humans should be considered before a spray programme is implemented.

Mixing

VectoLex WG may be applied in conventional ground or aerial application equipment with quantities of water sufficient to provide uniform coverage of the target area. The amount of water will depend on weather, spray equipment and mosquito habitat characteristics. **DO NOT** mix more VectoLex WG than can be used in a 12 hour period.

In situations where Venturi type mixers are NOT used, fill the spray vat, mix tank etc with two thirds of the desired quantity of water. Start agitation to provide moderate circulation before adding the required quantity of VectoLex WG into the vat. Add remaining one third water during agitation to achieve final spray volume. For extended operations check and clean the filters of mix tank regularly.

VectoLex WG suspends readily with water and will stay suspended over normal application periods. Recirculation may be necessary if the spray mixture has sat for several hours or longer.

AVOID CONTINUOUS AGITATION OF THE SPRAY MIXTURE DURING SPRAYING.

DO NOT mix with alkaline or dirty water.

For Ground Application

For most ground spraying apply in 2 to 150 L water per hectare using hand pump, air blast, mist blower etc or other appropriate spray equipment.

For Aerial Application

VectoLex WG can be applied through fixed or rotary wing or helicopter aircraft equipped with either conventional boom or nozzle systems or rotary atomisers at a convenient dilution.

Rinse and flush spray equipment thoroughly following each use.

PROTECTION OF LIVESTOCK, WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT:

Apart from labelled use according to the Directions for Use table, **DO NOT** contaminate streams, rivers or waterways with the chemical or used containers.

STORAGE AND DISPOSAL

Keep out of reach of children.

VectoLex WG must be kept in its closed, original, properly labelled container, well sealed and stored in a cool, dry and well ventilated place.

STORE BELOW 25°C (AIR CONDITIONING).

This product is stable for 2 years if stored as indicated.

Triple rinse containers before disposal. Add rinsings to tank mix or dispose of rinsate in a disposal pit. This pit must be away from aquatic areas and in a suitable area specifically marked and set up for the purpose.

DO NOT dispose of undiluted chemicals on-site. Destroy empty containers by breaking, crushing or puncturing them. Dispose of the containers at a local authority landfill that does not burn its refuse. If there is no local authority landfill readily available in your area, bury the containers at a depth of 500 mm or more at an approved disposal site. **DO NOT** burn empty containers or product.

SAFETY DIRECTIONS

Will irritate the eyes. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin and open wounds. When opening the container and preparing spray wear cotton overalls buttoned to the neck and wrist and washable hat and elbow-length PVC gloves and disposable mist mask. When using the prepared spray wear cotton overalls buttoned to the neck and wrist and washable hat and elbow-length PVC gloves. Wash hands after use. After each day's use, wash gloves and contaminated clothing.

FIRST AID

If poisoning occurs contact a doctor or Poisons Information Centre. Phone Australia 13 11 26.

SAFETY DATA SHEET

Additional information is listed in the Safety Data Sheet (SDS).

IMPORTANT NOTICE

These goods are to be used only for the purpose and as specified on the label, and are not suitable for any other purpose. To the fullest extent permitted by law, we do not accept or bear any liability on any basis for any loss, damage, cost or expense, arising in any way, directly or indirectly, in connection with the goods.

- ® Registered Trademark of Valent BioSciences Corporation, Libertyville, Illinois, USA
- © Valent BioSciences 2013

APVMA Approval No.: 55919/61163

THIS PRODUCT IS NOT CONSIDERED TO BE A DANGEROUS GOOD UNDER THE AUSTRALIAN CODE FOR THE TRANSPORT OF DANGEROUS GOODS BY ROAD OR RAIL	
In a Transport Emergency Dial 000 Police or Fire Brigade	SPECIALIST ADVICE IN EMERGENCY ONLY ALL HOURS - AUSTRALIA WIDE 1800 024 973

DIRECTIONS FOR USE

DO NOT allow diluted spray to remain in the tank for more than 12 hours.

SITUATION	INSECT PEST	RATE OF TREATMENT	CRITICAL COMMENTS
Stagnant and standing ponds, flood and irrigation water, ditches, storm water retention areas, tidal water and salt marshes, water with moderate to high organic content, sewage settling ponds.	<i>Culex</i> spp. <i>Anopheles</i> spp.	0.5 to 1.5 kg/ha	<ol style="list-style-type: none"> 1. Apply in 2 to 150 L water per hectare to achieve even coverage within the capacity of chosen equipment and spray equipment. Adjust spray concentration to achieved desired rate selected from stated rate range. 2. Use for control of 1st to early 4th instar. 3. Use lower rates (0.5 to 1.0 kg/ha) in habitats and conditions where local experience indicates that satisfactory initial and residual control will be achieved. Typical conditions include low to moderately polluted waters, stable or declining water levels, and moderate vegetative cover. 4. Use higher rates (>1.0 kg/ha) in habitats with high organic load such as sewage settling ponds or where there is water movement or exchange in the habitat, or dense border vegetation, or where local experience indicates that acceptable initial and residual control are not achieved with lower rates. 5. Reapply at 14 to 21 day intervals when the appearance of late 3 and 4 instar larvae reach locally prescribed treatment threshold, and ensure that a resistance management strategy is in place (see additional information below).

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