READ SAFETY DIRECTIONS BEFORE OPENING OR USING

VectoBac® WG

BIOLOGICAL LARVICIDE

ACTIVE CONSTITUENT: *Bacillus thuringiensis* subsp. *israelensis* serotype H14
Minimum Potency 3000 ITU/mg

GROUP **11B** INSECTICIDE

For specific control of first to early fourth instar mosquito (Family Culicidae) larvae as per Directions for Use table.

GENERAL INSTRUCTIONS

Larvicidal activity, due to destruction of the midgut epithelium, occurs within 12 hours of ingestion. Because 4th instar larvae do not feed 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 **11B** INSECTICIDE

For insecticide resistance management, VectoBac WG is a Group 11B insecticide.

Some naturally occurring insect biotypes resistant to VectoBac WG and other Group 11B insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if VectoBac WG or other Group 11B insecticides are used repeatedly. The effectiveness of VectoBac 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 VectoBac WG to control resistant insects.

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

Mixing

VectoBac 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 VectoBac WG than can be used in a 72 hour period.

Fill the spray vat, mix tank etc with the desired quantity of water. Start agitation to provide moderate circulation before adding the required quantity of VectoBac WG into the vat. For extended operations check and clean the filters of mix tank regularly.

VectoBac 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 spray equipment.

For Aerial Application
VectoBac WG can be applied through fixed 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.

VectoBac 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).
The 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 and skin. Avoid contact with eyes and skin and open wounds. DO NOT inhale spray mist. When preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow-length PVC gloves and face shield or goggles
If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water After each day's use, wash gloves and face shield or goggles and contaminated clothing.

FIRST AID
If poisoning occurs contact a doctor or Poisons Information Centre (ph: 13 11 26).

MATERIAL SAFETY DATA SHEET
Additional information is listed in the Material Safety Data Sheet (MSDS).

EXCLUSION OF LIABILITY
Unless otherwise expressly stated in writing neither Valent BioSciences, Sumitomo Chemical Australia Pty Ltd ("the Companies") nor the distributor has any knowledge or the particular use to which the buyer proposes to put this product. In purchasing this product the buyer must rely solely upon his own skill and judgement as to its suitability for the particular purpose for which it is required. Except to the extent that exclusion or denial of liability is prohibited under the Trade Practices Act or any relevant state legislation, the Companies and the distributor expressly exclude any warranty as to the quality or fitness of any goods sold for any purpose whatsoever and deny all responsibility in contract tort negligence or otherwise for any harm or damage resulting from the use of such goods or from acting on the advice or recommendations as to such use given in good faith by any representative of the Companies or the distributor. If these conditions are unacceptable to the buyer, the goods should be returned to Sumitomo Chemical Australia Pty Ltd unopened within seven (7) days for refund of purchase price.

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52642/5kg/0504
52642/25kg/0504

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 72 hours.

SITUATION	INSECT PEST	RATE OF TREATMENT	CRITICAL COMMENTS
Stagnant and standing ponds, flood and irrigation water, ditches	eg. *Ochlerotatus notoscriptus* *Culex annulirostris* (common banded mosquito), *Culex australicus*, *Anopheles annulipes* (common Australian anopheline)	125 – 250 g/ha	1. Apply in 2 to 150 L water per hectare in a minimum concentration of 62.5 g/L. 2. Use for control of 1st to early 4th instar. 3. Use lower rate when 1st to 3rd instar larvae predominate; higher rate when late 3rd to early 4th instar larvae predominate. 4. Reapply as needed.
Tidal water and salt marshes, storm water retention areas	eg. *Ochlerotatus vigilax* (saltmarsh mosquito), *Culex sitiens* (saltwatwer culex)	250 – 500 g/ha in	
Water with moderate to high organic content, sewage settling ponds,etc.	eg. *Culex quinquefasciatus* (brown house mosquito)	500 g/ha	

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