

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

VectoBac[®] AS

BIOLOGICAL LARVICIDE

ACTIVE CONSTITUENT: *Bacillus thuringiensis* subsp. *israelensis* serotype H14
(Manufactured by Abbott Laboratories in North Chicago) active solids and solubles

GROUP 11B INSECTICIDE

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

GENERAL INSTRUCTIONS

INSECTICIDE RESISTANCE WARNING

GROUP 11B INSECTICIDE

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

Some naturally occurring insect biotypes resistant to VectoBac AS 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 AS or other Group 11B insecticides are used repeatedly. The effectiveness of VectoBac AS 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 AS to control resistant insects.

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

Mixing:

Stir or shake the product thoroughly before using. VectoBac AS may be applied either undiluted or diluted with water. DO NOT mix with alkaline or dirty water.

For Ground Application, VectoBac AS may be applied either undiluted or diluted with water. The volume of application must be sufficient to provide uniform coverage of the target area and will be influenced by weather, application equipment and mosquito habitat.

For diluted applications, half fill the spray vat with water and start agitation. Pour the required amount into the vat, continue filling with water. Apply in a total volume determined by calibration of the application equipment being used (a guide for practical volumes of application range from 2.0 to 150 L/ha).

For undiluted applications, apply 0.3 to 1.2 L/ha of VectoBac AS through airblast, mist blower, etc, spray equipment.

For Aerial Application, VectoBac AS may be applied either undiluted or diluted with water.

For undiluted applications, apply 0.6 to 1.2 L/ha of VectoBac AS through fixed wing or helicopter aircraft equipped with either conventional boom and nozzle systems or rotary atomisers.

For diluted applications, fill the mix tank with the desired quantity of water. Start the mechanical or hydraulic agitation to provide moderate circulation before adding the VectoBac AS. VectoBac AS suspends readily in water and will stay suspended over normal application periods. Brief recirculation may be necessary if the spray mixture has sat for several hours or longer.

Avoid excessive recirculation during application of undiluted VectoBac AS, as this may change physical properties.

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. Do not mix with alkaline or dirty water.

PRECAUTIONS

Keep away from foodstuffs.

STORAGE AND DISPOSAL

Keep out of reach of children.

This product is a biological larvicide containing crystals of protein and bacterial spores. Activity can be impaired unless protected from high temperatures at all times.

VectoBac AS must be kept in its original, properly labelled container, well sealed and stored in a cool, dry and well ventilated place. When transporting, keep shaded. Avoid standing containers in direct sunlight in the field or on airstrips. DO NOT leave in

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