2015-0757 2015-03-24

GROUP 11 INSECTICIDE

AQUABAC XT

Biological Larvicide

SUSPENSION

RESTRICTED

SKIN IRRITANT

CAUTION EYE IRRITANT

POTENTIAL SENSITIZER

READ THE LABEL BEFORE USING

GUARANTEE: *Bacillus thuringiensis* subspecies *israelensis* serotype H-14, strain BMP-144, 1200 International Toxic Units (ITU) per milligram (1.28 billion ITU/kg)

REGISTRATION NO.: 26860 PEST CONTROL PRODUCTS ACT

Net Contents: 10.00 Litres

Lot n^O: Date of manufacture:

> AFA ENVIRONNEMENT INC. 9 Des Calcaires Boischatel, QC G0A 1H0 1-877-507-7232

NOTICE TO USER: This pest control product is to be used only in accordance with the directions on the label. It is an offense under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

NATURE OF RESTRICTION: This product is to be used only in the manner authorized; contact local pesticide regulatory authorities about use permits which may be required.

RESTRICTED USE

For use in municipal, provincial or federal control programs against mosquitoes and blackflies. AQUABAC xt Biological Larvicide may be applied to any water sites except treated, finished water reservoirs or drinking receptacles.

DIRECTIONS FOR USE

MOSQUITOES

Habitat	Rate Required for Control
•Flood water, roadside ditches, irrigation ditches, pastures, woodland pools, snow melt pools	
•Tidal water, salt marshes, catch basins, storm water retention areas	600 - 1200 ml/hectare
•Polluted water (sewage lagoons,etc.) Water with moderate organic matter, and water with a high concentration of suspended solids	1200 - 2400 ml/hectare

AQUABAC xt Biological Larvicide may be applied in conventional aerial and ground application equipment with sufficient water to provide thorough coverage of the target area. The amount of water needed will be dependent on weather, type of spray equipment and mosquito habitat.

Ground applications should be made using conventional equipment with 47-935 litres per hectare. As low as 10 litres per hectare surface area can be used when the target is open with light vegetative cover. Aerial applications may be done diluted or undiluted. For undiluted applications, apply 300 - 2400 ml/ha of AQUABAC xt Biological Larvicide through fixed wing aircraft or helicopters equipped with conventional boom and nozzles or rotary mist atomizers. For diluted applications, fill the mix tank or aircraft hopper with the appropriate volume of water and agitate before adding AQUABAC xt Biological Larvicide. Maintain agitation during

loading and spraying.

BLACKFLIES:

•Suggested concentration range......0.5 - 75 mg/litre of stream water

The concentration should be maintained in the stream for 15 minutes. For blackfly control, apply with conventional ground and aerial application equipment or metered release systems from infested sites to achieve larvicidal concentrations. Insecticidal activity should occur within 24 hours. Reapply as needed. AQUABAC xt Biological Larvicide may be applied through appropriate ULV equipment.

DO NOT allow spray mixture to stand in the tank for more than 18 hours. DO NOT apply by any type of irrigation system.

PRECAUTIONS: KEEP OUT OF REACH OF UNAUTHORIZED PERSONNEL. MAY CAUSE SENSITIZATION. CAUTION EYE IRRITANT.

Avoid contact with skin, eyes or clothing. Avoid breathing dust/spray mist. Wear a long-sleeved shirt, long pants, waterproof gloves, shoes and socks, eye goggles and a NIOSH-approved respirator with any N-95, R-95, or P-95 filter for biological products when handling, mixing/loading or applying the product and during all clean-up/repair activities. Applicators may remove gloves, eye goggles and respirators if the design and delivery of the application apparatus reduces exposure to a negligible level (e.g. backpack sprayer with application wands that apply product directly over water surface). Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

DO NOT apply directly to treated, finished drinking water reservoirs or drinking water receptacles when the water is intended for human consumption.

FIRST AID:

If on skin or clothing: Rinse skin immediately with plenty of water. Remove contaminated clothing and wash separately before reuse. If irritation occurs and persists or is severe, seek medical attention.

If in eyes: Hold eye open and rinse slowly and gently with water. Remove contact lenses, if present, then continue rinsing eye. If irritation occurs and persists or is severe, seek medical attention.

If inhaled: Move to fresh air, apply respiration if needed and seek medical attention.

If swallowed: Rinse mouth and throat with copious amounts of water. DO NOT induce vomiting. Promptly contact a physician or poison control centre. DO NOT give anything by mouth to an unconscious person.

General: Seek medical attention if irritation or signs of toxicity occur and persist or is severe. Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION: Treat symptomatically.

STORAGE AND SHELF LIFE: In order to ensure microbial purity and potency AQUABAC xt Biological Larvicide should be stored in the original container at temperatures between 0 and 25^oC and used within 24 months of the date of manufacture.

DISPOSAL: Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site: Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank. Make the empty, rinsed container unsuitable for further use. If there is no container collection site in your area, dispose of the container in accordance with provincial requirements. For information on the disposal of unused, unwanted product, contact the provincial regulatory agency or the manufacturer. Contact the provincial regulatory agency and the manufacturer in case of a spill, and for clean-up of spills.

RESISTANCE-MANAGEMENT RECOMMENDATIONS:

For resistance management, please note that AQUABAC xt Biological Larvicide contains a Group 11 insecticide. Any insect population may contain individuals naturally resistant to AQUABAC xt Biological Larvicide and other Group 11 insecticides. The resistant individuals may dominate the insect population if this group of insecticides is used repeatedly in the same site. Other resistance mechanisms that are not linked to site of action but specific for individual chemicals, such as enhanced metabolism, may also exist. The following appropriate resistance management strategies should be followed to delay insecticide resistance:

• Where possible, rotate the use of AQUABAC xt Biological Larvicide and other Group 11 insecticides with different groups that control the same pests in a site.

• Insecticide use should be based on an Integrated Pest Management program that includes scouting, record keeping, and considers cultural, biological and other chemical control practices.

• Monitor treated pest populations for resistance development.

• Contact your local extension specialist for any additional pesticide resistance management and/or integrated pest management recommendation for specific site and pest problems in your area.

• For further information or to report suspected resistance, contact AFA ENVIRONNEMENT INC. at 9 Des Calcaires, Boischate (Québec) G0A 1H0 Telephone: 1-877-507-7232.

AERIAL APPLICATION INSTRUCTIONS

Apply only by fixed-wing or rotary aircraft equipment that has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label.

Label rates, conditions and precautions are product-specific. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment. Ensure uniform application by using appropriate marking devices and/or electronic guidance equipment.

Use Precautions:

Apply only when meteorological conditions at the treatment site allow for complete and even coverage. Apply only when meteorological conditions are in compliance with local and/or provincial authorities.

Operator Precautions:

DO NOT allow the pilot to mix product to be loaded onto the aircraft. However, loading of premixed product with a closed system is permitted. It is desirable that the pilot have communication capabilities at each treatment site at the time of application.

The field crew and the mixer/loaders must wear the personal protective equipment described in the PRECAUTIONS section of this label. When handlers/loaders use closed systems to load the product onto the aircraft, the handler requirement for eye goggles and a NIOSH-approved respirator/mask with any N-95, R-95, or P-95 filter for biological products may be waived. When reduced personal protective equipment is worn, the respirator/mask and eye goggles must be immediately available for use in an emergency such as a spill or equipment breakdown.

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing must be washed before reuse. Decontaminate aircraft cockpits and vehicle cabs if contamination occurs.

Product Precautions:

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-877-507-7232 or obtain technical advice from the distributor or from your provincial agricultural or forestry representative. Application of this specific product must meet and/or conform to the aerial uses and rates on this label.

This label transcript service is offered by the Pest Management Regulatory Agency to provide efficient searching for label information. This service and this information do not replace the official hard-copy label. The PMRA does not provide any guarantee or assurance that the information obtained through this service is accurate, current or correct, and is therefore not liable for any loss resulting, directly or indirectly, from reliance upon this service.