

2023-4376
2024-04-29

[[CONTAINER LABEL]]

GROUP

11A

INSECTICIDE

VectoBac® 1200L
Biological Larvicide
Live Organism
Aqueous Suspension

RESTRICTED

ACTIVE INGREDIENT

Bacillus thuringiensis subsp. *israelensis*, HD-14, strain AM65-52, 1200 International Toxic Units (ITU) per milligram (1.2 Billion ITU/L).

REGISTRATION NO. 21062

PEST CONTROL PRODUCTS ACT

READ THE LABEL AND ATTACHED BROCHURE BEFORE USING

PREVENT ACCESS BY UNAUTHORIZED PERSONNEL

POTENTIAL SENSITIZER

CAUTION: EYE IRRITANT

Lot No.:

Date of Manufacture:

Net Contents:

Registrant:

Valent BioSciences LLC
1910 Innovation Way, Suite 100
Libertyville, Illinois 60048, USA
1-800-323-9597

Canadian Agent:

Valent Canada, Inc.
201-230 Hanlon Creek Blvd
Guelph, Ontario N1C 0A1

2023-4376
2024-04-29

PRECAUTIONS:

PREVENT ACCESS BY UNAUTHORIZED PERSONNEL.
MAY CAUSE SENSITIZATION. CAUTION EYE IRRITANT

Apply only when the potential for drift beyond the area to be treated is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

Avoid contact with skin, eyes, or clothing. Avoid inhaling/breathing spray mist. Wear a long sleeved shirt, long pants, protective eyewear (goggles), waterproof gloves, socks and shoes and a NIOSH-approved particulate filtering facepiece respirator with any N, R, or P filter 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). When handlers/loaders use closed systems to load product onto the aircraft, the handler requirement for protective eyewear (goggles) and a NIOSH-approved particulate filtering respirator with any N, R, or P filter may be waived. When reduced personal protective equipment is worn, the facepiece respirator must be immediately available for use in an emergency such as a spill or equipment breakdown. For application using aerial equipment: Wear a long-sleeved shirt, long pants, water-proof gloves, socks and shoes. Gloves are not required during application within a closed cockpit.

Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

FIRST AID	
If swallowed	Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.
If on skin or clothing	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.
If inhaled	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.
If in eyes	Hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.
General	Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION: Treat symptomatically.

STORAGE

VectoBac 1200L Biological Larvicide should be used within 18 months from the date of manufacture when stored between 0°C and 15°C. To prevent contamination, store this product away from food or feed.

DISPOSAL

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial/territorial regulatory agency. Contact the manufacturer and the provincial/territorial regulatory agency in case of a spill and for clean-up of spills.

2023-4376
2024-04-29

NOTICE TO USER: This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

2023-4376

2024-04-29

[[BROCHURE]]

GROUP

11A

INSECTICIDE

VectoBac® 1200L
Biological Larvicide
Live Organism
Aqueous Suspension

RESTRICTED

ACTIVE INGREDIENT: *Bacillus thuringiensis* subsp. *israelensis*, HD-14, strain AM65-52, 1200 International Toxic Units (ITU) per milligram (1.2 Billion ITU/L).

REGISTRATION NO. 21062

PEST CONTROL PRODUCTS ACT

READ THE LABEL AND ATTACHED BROCHURE BEFORE USING
PREVENT ACCESS BY UNAUTHORIZED PERSONNEL
POTENTIAL SENSITIZER
CAUTION EYE IRRITANT

Net Contents:

Date of Manufacture:

Registrant:
Valent BioSciences LLC
1910 Innovation Way, Suite 100
Libertyville, Illinois 60048, USA
1-800-323-9597

Canadian Agent:
Valent Canada, Inc.
201-230 Hanlon Creek Blvd
Guelph, Ontario N1C 0A1

2023-4376
2024-04-29

PRECAUTIONS:

PREVENT ACCESS BY UNAUTHORIZED PERSONNEL.
MAY CAUSE SENSITIZATION. CAUTION EYE IRRITANT

Apply only when the potential for drift beyond the area to be treated is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

Avoid contact with skin, eyes or clothing. Avoid inhaling/breathing spray mist. Wear a long sleeved shirt, long pants, protective eyewear (goggles), waterproof gloves, socks and shoes and a NIOSH-approved particulate filtering facepiece respirator with any N, R, or P filter 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). When handlers/loaders use closed systems to load product onto the aircraft, the handler requirement for protective eyewear (goggles) and a NIOSH-approved particulate filtering respirator with any N, R, or P filter may be waived. When reduced personal protective equipment is worn, the facepiece respirator must be immediately available for use in an emergency such as a spill or equipment breakdown. For application using aerial equipment: Wear a long-sleeved shirt, long pants, water-proof gloves, socks and shoes. Gloves are not required during application within a closed cockpit.

Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

FIRST AID	
If swallowed	Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.
If on skin or clothing	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.
If inhaled	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.
If in eyes	Hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.
General	Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION: Treat symptomatically.

STORAGE

VectoBac 1200L Biological Larvicide should be used within 18 months from the date of manufacture when stored between 0°C and 15°C. To prevent contamination, store this product away from food or feed.

DISPOSAL

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial/territorial regulatory agency. Contact the manufacturer and the provincial/territorial regulatory agency in case of a spill and for clean-up of spills.

NOTICE TO USER: This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

RESTRICTED USES

For Municipal, Provincial/Territorial and Federal Control Programs

DIRECTIONS FOR USE

USE RESTRICTIONS:

- This product is to be used only in the manner authorized; consult provincial/territorial pesticide regulatory authorities about use permits that may be required.
- This authorization is granted under the *Pest Control Products Act* and does not exempt the user from other legislative requirements such as those under the *Fisheries Act*.
- DO NOT apply directly to treated, finished drinking water reservoirs or drinking water receptacles when the water is intended for human consumption.
- DO NOT allow spray mixture to stand in the tank for more than 18 hours.
- DO NOT apply by any type of irrigation system.

RESTRICTED ENTRY INTERVAL (REI):

DO NOT allow worker entry into treated areas for 4 hours or until sprays have settled unless wearing waterproof gloves, long-sleeved shirt, long pants, socks and shoes.

Mosquitoes: Apply 0.25 to 1.0L/ha.*

Habitat: Temporary pools in pastures and woodlots, irrigation or roadside ditches, natural marshes or estuarine area, catch basins, and sewage lagoons.

*Use higher rates in deep very cold water, and/or polluted water, and when late 3rd and 4th instar larvae predominate.

Apply recommended rate by conventional aerial or ground equipment.

Apply recommended rate in at least equal volume of water. Do not exceed 1:10 dilution. VectoBac 1200L Biological Larvicide mixes readily with water. Stir to assure uniformity.

A 3 to 5 day interval between applications should be employed. Do not mix more VectoBac 1200L Biological Larvicide than can be used in a 24-hour period.

Black Flies (streams only): Meter undiluted VectoBac 1200L Biological Larvicide for 1-15 minutes to attain a concentration of 0.5 to 25 mg (0.0005 to 0.025 ml) of VectoBac 1200L Biological Larvicide per litre (=ppm) stream water.**

**Use higher rates when streams or rivers contain concentrations of organic material, silt and/or very cold water.

AERIAL APPLICATION INSTRUCTIONS:

Apply only by fixed-wing, rotary aircraft or RPAS (Remote Piloted Aircraft Systems) 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/territorial authorities.

RPAS pilots must operate in compliance with Part IX of the *Canadian Aviation Regulations* (SOR/96-433).

Operator Precautions:

DO NOT allow the pilot to mix product to be loaded onto the aircraft. Loading of premixed product with a closed system is permitted. It is desirable that the pilot has 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.

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing aircraft cockpit and vehicle cabs must be decontaminated regularly.

Product Precautions:

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-800-323-9597 or obtain technical advice from the distributor or from your provincial/territorial agricultural or forestry representative. Application of this specific product must meet and/or conform to the aerial uses and rates on this label.

RESISTANCE MANAGEMENT RECOMMENDATIONS:

For resistance management, please note that VectoBac 1200L Biological Larvicide contains a Group 11 insecticide. Any insect population may contain individuals naturally resistant to VectoBac 1200L Biological Larvicide and other Group 11 insecticides. The resistant individuals may dominate the insect population if this group of insecticides are used repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action but are specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance management strategies should be followed. To delay insecticide resistance:

- Where possible, rotate the use of VectoBac 1200L Biological Larvicide or 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 or certified crop advisors for any additional pesticide resistance management and/or integrated pest management recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance, contact Valent BioSciences LLC at 1-800-323-9597.

Volume: Apply the recommended rate in a minimum spray volume of 0.25 to 10 litres per hectare.