

### BMP 144 (2X)

(Alternate Brand Name: AQUABAC® xt)

**Sublabel A: Commercial Use**  
**Sublabel B: Non-Commercial Use**  
**Optional Label Claims**

**ACTIVE INGREDIENT:**

*Bacillus thuringiensis* subspecies *israelensis* solids, spores and insecticidal toxins\* ..... 8.00%

**OTHER INGREDIENTS:** ..... 92.00%

**TOTAL:** ..... 100.00%

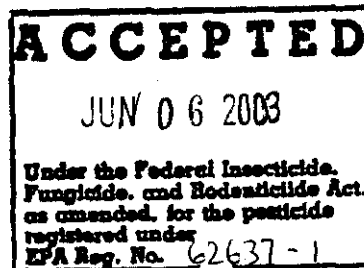
\* Equivalent to 1,200 International Toxic Units (ITU/mg) (4.84 Billion ITU / gallon or 1.2 Billion ITU / liter). Potency units should not be used to adjust rates beyond those specified in the Directions for Use Section. Note: The percent active ingredient does not indicate product performance and potency measurements are not federally standardized.

EPA Reg. No.: 62637-1

EPA Establishment No.: XXXXX-XX-XX

**Manufactured for:**

BECKER MICROBIAL PRODUCTS, INC.  
5786 N.W. 119<sup>th</sup> Drive  
Coral Springs, FL 33076-4025



**Sublabel A: Commercial Use**

**BMP 144 (2X)**

(Alternate Brand Name: AQUABAC® xt)

- A microbial insecticide effective against mosquitoes, blackflies, fungus gnats, nuisance flies (*Psychoda* spp. and *Chironomus* spp.) and nuisance aquatic midges (*Chironomine*) in a variety of habitats.

**ACTIVE INGREDIENT:**

*Bacillus thuringiensis* subspecies *israelensis* solids, spores and insecticidal toxins\*..... 8.00%

**OTHER INGREDIENTS:** ..... 92.00%

**TOTAL:** ..... 100.00%

\* Equivalent to 1,200 International Toxic Units (ITU/mg) (4.84 Billion ITU / gallon or 1.2 Billion ITU / liter). Potency units should not be used to adjust rates beyond those specified in the Directions for Use Section. Note: The percent active ingredient does not indicate product performance and potency measurements are not federally standardized.

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

**FIRST AID**

<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 – 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 – 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

**See back panel for additional precautionary statements and directions for use.**

EPA Reg. No.: 62637-1

Net Contents: XX

EPA Establishment No.: XXXXX-XX-XX

Manufactured for:

BECKER MICROBIAL PRODUCTS, INC.

5786 N.W. 119<sup>th</sup> Drive

Coral Springs, FL 33076-4025

*(Precautionary Statements for uses covered by the Worker Protection Standard)***PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS - CAUTION:** Harmful if inhaled or absorbed through skin. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

**PERSONAL PROTECTIVE EQUIPMENT (PPE):** Applicators and other handlers who handle this pesticide for any use covered by the Worker Protection Standard (40 CFR Part 170) – in general, agricultural plant uses – must wear: long-sleeved shirt and long pants, waterproof gloves, shoes plus socks. Mixers / loaders and applicators must wear a dust / mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization. Follow manufacturer's instructions for cleaning and maintaining PPE. If there are no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**USER SAFETY RECOMMENDATIONS:** Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**ENVIRONMENTAL HAZARDS:** Do not contaminate water when disposing of equipment washwaters. Do not apply to treated, finished drinking water reservoirs or drinking water receptacles.

*(Precautionary Statements for uses not covered by the Worker Protection Standard)***PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS - CAUTION:** Harmful if inhaled or absorbed through skin. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Mixers / loaders and applicators must wear a dust / mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

**USER SAFETY RECOMMENDATIONS:** Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

**ENVIRONMENTAL HAZARDS:** Do not contaminate water when disposing of equipment washwaters. Do not apply to treated, finished drinking water reservoirs or drinking water receptacles.

***(Directions for Use for uses covered by the Worker Protection Standard)*****DIRECTIONS FOR USE**

It is a violation of Federal law to apply this product in a manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

**Agricultural Use Requirements**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry intervals (REI). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water, is coveralls, waterproof gloves and shoes plus socks.

**FUNGUS GNATS:**

Apply BMP 144 (2X) to ornamentals, vegetables, or herbs growing in greenhouse, nursery or plantscape areas for control of fungus gnat larvae when larvae are present in the soil or potting mix. Also make applications to areas under benches and greenhouse floors where fungus gnats breed. For light infestations, use 8-16 oz/100 gal. (0.5 -1.0 tsp/gal.); for heavy infestations use 32-64 oz/100 gal. (2-4 tsp/gal.). Apply as a drench to sufficiently wet the surface of the growth medium where larvae are present.

Where heavy infestations (adults, eggs, pupae, and larvae) are present, reapply weekly. Routine use of lower rates will keep populations to a minimum.

Even though BMP 144 (2X) is not known to be phytotoxic to plants, it has not been tested against all plant species. Check on several plants before wide scale usage.

**CHEMIGATION:**

Apply BMP 144 (2X) through drip or overhead irrigation (Chemigation) systems. Apply only through: sprinkler, including solid set, or flood or drip irrigation systems. Do not apply BMP 144 (2X) through any other type of irrigation system. Do not apply when wind speed favors drift beyond the area intended for treatment. Crop injury or lack of effectiveness can result from non-uniform distribution of treated water. If you have questions about calibration, contact State extension service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for a public water system are in place. A person knowledgeable of the Chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Instructions for Use of Public Water Sources:

The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must contain a functional, automatic, quick closing valve to prevent the flow of fluid back toward the injection pump.

The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump; such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Chemigation System Connected to Public Water System:

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top of the overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must contain a functional normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functioning interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where the pesticide distribution is adversely affected.

*(Directions for Use for uses not covered by the Worker Protection Standard)*

**DIRECTIONS FOR USE**

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Apply BMP 144 (2X) to any water sites except treated, finished drinking water reservoirs or drinking water receptacles.

**MOSQUITOES:**

<b>Habitat</b>	<b>Rate Required for Control</b>
Flood water, roadside ditches, irrigation ditches, rice fields, pastures, woodland pools, snowmelt pools, standing pools .....	0.25 – 1.0 pts/A
Tidal water, salt marshes, catch basins, and storm water retention areas .....	0.50 – 1.0 pts/A
Polluted water (sewage lagoons, etc.) water with moderate organic matter, and water with a high concentration of suspended solids .....	1.0 – 2.0 pts/A

**SPECIFIC APPLICATION INSTRUCTIONS:**

**General:** Apply BMP 144 (2X) in conventional aerial and ground application equipment with sufficient water to provide thorough coverage of the target area. The amount of water needed depends on weather, type of spray equipment and mosquito habitat.

Make ground applications in 5-100 gallons per acre in conventional equipment. Use as low as one gallon per acre surface area when the target area is open with light vegetative cover.

Make aerial applications diluted or undiluted. For undiluted applications, apply 0.25 to 2.0 pts/A of BMP 144 (2X) 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 BMP 144 (2X). Maintain agitation during loading and spraying. Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all of these factors when making decisions.

**BLACKFLIES:**

Suggested Concentration Range..... 0.50 – 75 ppm  
(0.50 – 75 mg / liter of stream water)

Maintain the concentration in the stream for 15 minutes.

**SPECIFIC APPLICATION INSTRUCTIONS:** Apply with conventional ground and aerial application equipment or metered release systems from infested sites to achieve larvicidal concentrations. Insecticidal activity will occur within 24 hours. Reapply as needed. Apply BMP 144 (2X) undiluted through appropriate ULV application equipment.

**NUISANCE FLIES:**

For control of the Nuisance Flies *Psychoda* spp. and *Chironomus* spp. in sewage treatment facilities utilizing trickling filter systems.

**APPLICATION DIRECTIONS****Nuisance Fly Habitat** **Suggested Use Rates** <sup>(1)</sup>

Trickling filter system of wastewater treatment plants	10 – 50 mg per liter of wastewater feed to the system per 30 minutes.
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1. Use higher rates for control of *Chironomus* spp. Apply undiluted with a pre-calibrated pump or other device into the wastewater feeding into the filters for a minimum period of 30 minutes. Repeat applications as needed. Control of *Chironomus* spp. can take two weeks.

**NUISANCE AQUATIC MIDGES:**

For control of *Chironomine* midges (*Chironominae: Chironomini*) inhabiting shallow, man-made and natural lakes and ponds.

**APPLICATION DIRECTIONS****Nuisance Midge Habitat** **Suggested Rate Range** <sup>(1)</sup>

Shallow lakes and ponds Per sewage oxidation ponds (less than an acre 6 feet deep)	1.0 gallon / acre (3.80 liters / acre)
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1. Apply diluted with water in a total volume of 5 gallons / acre by pouring or spraying over the surface to be treated with a pre-calibrated device. Repeat applications as necessary. Control of *Chironomini* midges can take up to two weeks.

**STORAGE AND DISPOSAL**

Do not contaminate water, food, or feed by storage or disposal.

**Storage:** Store in a cool (59 – 86° F; 15 – 30° C), dry place.

**Pesticide Disposal:** Wastes resulting from use of this product may be disposed of on site or at an approved waste disposal facility.

**Container Disposal:** Triple rinse (or equivalent) then puncture and dispose of in a sanitary landfill, or by incineration or if allowed by state and local authorities, by burning. If burned, stay out of smoke. Do not reuse container.

**NOTICE TO USER**

Seller makes no warranty express or implied, of merchantability, fitness or otherwise concerning the use of this product other than as indicated on the label. User assumes all risks of use, storage or handling not in strict accordance with label instructions.

In case of emergency endangering life and property involving this product, call collect, day or night, (800) 759-1602.



**Sublabel B: Non-Commercial Use**

**BMP 144 (2X)**

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**OTHER INGREDIENTS:** ..... 92.00%

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**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

See (back panel) (side panel) (insert label) for additional precautionary statements and directions for use.

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Coral Springs, FL 33076-4025

<b>FIRST AID</b>	
<b>If inhaled</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
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**PRECAUTIONARY STATEMENTS**

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**USER SAFETY RECOMMENDATIONS:** Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

**ENVIRONMENTAL HAZARDS:** Do not apply to treated, finished drinking water reservoirs or drinking water receptacles.

## DIRECTIONS FOR USE

It is a violation of Federal law to apply this product in a manner inconsistent with its labeling.

**General Information:** BMP 144 (2X) is a highly selective microbial insecticide effective against mosquitoes in a variety of habitats. Apply BMP 144 (2X) to containerized standing water or any private water sites except treated, finished drinking water reservoirs, drinking water receptacles or state waters. BMP 144 (2X) can be applied to areas that contain aquatic life, fish and plants. BMP 144 (2X) can be applied to areas used by or in contact with humans, animals, horses, livestock, pets, birds or wildlife.

### Treatment Areas (For Use In):

Bird baths	Drains	Buckets
Statuary	Stock tanks	Plastic covers
Old tires	Pool covers	Plant trays
Flower pots	Abandoned swimming pools	Planters
Tree holes	Unused swimming pools or spas	Garbage cans
Water gardens (features)	Other water holding receptacles	Wheelbarrows
Ornamental fountains	Standing water	Hollow trees
Urns	Ponds	Flood water
Rain barrels	Lagoons	
Roof gutters	Lakes	

Any location where water collects and remains for periods of time. Other areas where standing water accumulates.

### How to Apply:

***Directions for ½ oz. (15 ml) package size – package is a squeeze bottle with a control tip dripper that dispenses one 1 ml drop at a time:***

- For birdbaths and statuary.
- Treats the average birdbath (1½ gallons).
- One bottle treats the average birdbath weekly for up to two years.

Use BMP 144 (2X) to prevent mosquitoes from breeding in your birdbath or in statuary. Apply (Use) 1 drop per birdbath per week. The average birdbath is 3" deep by 12" round, and contains 1.5 gallons of water.

***Directions for 2 oz. (60 ml) package size – package is a squeeze bottle with a control tip dripper that dispenses one 1 ml drop at a time:***

- For (insert use site from listed Treatment Areas).
- Treats up to 500 gallons (small ponds).
- Use for (small) ponds up to 500 gallons.
- One bottle treats a 250-gallon pond weekly for up to 22 months.
- Treats:
  - 250 gallon pond weekly for up to 22 months.
  - 400-gallon pond weekly for up to 16 months.
  - 500-gallon pond weekly for up to 7 months.

Use BMP 144 (2X) to prevent mosquitoes from breeding in (insert use sites from listed Treatment Areas) and other areas where standing water accumulates. Apply (Use) 6 drops per 100 gallons of water.

**Directions for 6 oz. (180 ml) package size – package is a plastic bottle with measuring cup:**

- For (insert use site from listed Treatment Areas).
- Measuring cup included. (Dosage cup enclosed.)
- Treats up to 2,500 gallons (medium ponds, 750 – 2,500 gallon).
- For medium ponds - up to 2,500 gallons
- One bottle treats a 750-gallon pond every other week for up to 22 months.
- Treats: 750 gallon pond every other week for up to 22 months.  
1,000-gallon pond every other week for up to 16 months.  
2,500-gallon pond every other week for up to 7 months.

Use BMP 144 (2X) to prevent mosquitoes from breeding in (insert use sites from listed Treatment Areas) and other areas where standing water accumulates. Use the measuring cup (dosage cup) provided. Add BMP 144 (2X) directly to the water to be treated. Apply (Use) 2.5 ml per 1000 gallons of water (5 ml per 200 gallons of water) every other week. Treat weekly if necessary.

**Directions for 12 oz. (360 ml) package size – package is a plastic bottle with measuring cup:**

- For (insert use site from listed Treatment Areas).
- Measuring cup included. (Dosage cup enclosed.)
- Treats up to 5,000 gallons (large ponds, 2,500 – 5,000 gallon).
- For large ponds – up to 5,000 gallons.
- One bottle treats a 2,500-gallon pond every other week for up to 13 months.
- Treats: 2,500 gallon pond every other week for up to 13 months.  
3,500-gallon pond every other week for up to 9 months.  
5,000-gallon pond every other week for up to 6.5 months.

Use BMP 144 (2X) to prevent mosquitoes from breeding in (insert use sites from listed Treatment Areas) and other areas where standing water accumulates. Use the measuring cup (dosage cup) provided. Add BMP 144 (2X) directly to the water to be treated. Apply (Use) 5 ml per every 2000 gallons every other week. Treat weekly if necessary.

**Directions for 16 oz. (472 ml) package size – package is a plastic bottle with measuring cup:**

- For (insert use site from listed Treatment Areas).
- Measuring cup included. (Dosage cup enclosed.)
- Treats up to 10,000 gallons (extra-large ponds, 5,000 – 10,000 gallon).
- For extra-large ponds – up to 10,000 gallons.
- One bottle treats a 5,000-gallon pond every other week for up to 9 months.
- Treats: 5,000 gallon pond every other week for up to 9 months.  
7,500-gallon pond every other week for up to 6 months.  
10,000-gallon pond every other week for up to 4.5 months.

Use BMP 144 (2X) to prevent mosquitoes from breeding in (insert use sites from listed Treatment Areas) and other areas where standing water accumulates. Use the measuring cup (dosage cup) provided. Add BMP 144 (2X) directly to the water to be treated. Apply (Use) 5 ml per every 2000 gallons of water every other week. Treat weekly if necessary.

**STORAGE AND DISPOSAL**

Do not contaminate water, food, or feed by storage or disposal.

**Storage:** Store in a cool, dry place.

**If empty:** Do not reuse container. Place in trash and offer for recycling if available.

**If partially filled:** Call your local solid waste agency or (800) 858-7378 (National Pesticide Information Center) for disposal instructions. Never place unused product down any indoor or outdoor drain.

**NOTICE TO USER**

Seller makes no warranty express or implied, of merchantability, fitness or otherwise concerning the use of this product other than as indicated on the label. User assumes all risks of use, storage or handling not in strict accordance with label instructions.

## OPTIONAL LABEL CLAIMS

- Biolarvicide
- Biological Larvicide Aqueous Suspension.
- Concentrated Formula.
- Biological Mosquito Control.
- A microbial insecticide effective against mosquitoes in a variety of habitats.
- Easy to use.
- Use in standing water (where mosquitoes may breed); see label for specific use sites.
- Use in containerized water (where mosquitoes may breed); see label for specific use sites.
- Effective year-round when mosquito larvae are present.
- Controls mosquitoes.
- Controls mosquito larvae (in standing water) (within 24 hours).
- Quickly controls mosquito larvae in (within) 24 hours.
- When ingested by mosquito larvae, (product name) prevents mosquitoes from becoming (developing into) breeding, biting adults.
- When ingested by mosquito larvae, (product name) prevents the development of adults.
- When ingested by mosquito larvae, (product name) prevents emergence of breeding, biting adults.
- Kills mosquito larvae upon ingestion of Bt toxins.
- Kills mosquito larvae upon ingestion by destroying the cellular lining of the insect digestive tract.
- Kills mosquitoes (mosquito larvae) before they hatch including those which may (can) transmit (carry) West Nile virus (and encephalitis) (and equine encephalitis).
- Kills developing mosquitoes (mosquito larvae) before they become breeding, biting adults, including those which may (can) transmit (carry) West Nile Virus (and encephalitis) (and equine encephalitis).
- Kills mosquitoes (mosquito larvae) before they hatch including those which may (can) transmit heartworm disease to dogs and cats.