

## Biological Larvicide

# Teknar® HP-D

### HIGH POTENCY LARVICIDE FOR MOSQUITOES AND BLACKFLY

#### ACTIVE INGREDIENT:

<i>Bacillus thuringiensis</i> subsp. <i>israelensis</i> , strain SA3A solids, spores and insecticidal toxins	1.6%
OTHER INGREDIENTS	98.4%
TOTAL	100.0%

Potency: 1200 International Toxic Units (ITU) per mg (Equivalent to 1.12 billion potency: ITU per quart of product).

The percent active ingredient does not indicate product performance and potency measurements are not Federally standardized.

EPA Reg. No.73049-404

EPA Est. No. 33762-IA-001

List No. 13800

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### KEEP OUT OF REACH OF CHILDREN CAUTION

1.0	<b>FIRST AID</b>	
	<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>
	<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 mouth-to-mouth if possible.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>
<b>HOT LINE NUMBER</b>		
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-315-9819 (24 hours) for emergency medical treatment and/or transport emergency information. For all other information, call 1-800-323-9597.		

## 2.0 PRECAUTIONARY STATEMENTS

### 2.1 HAZARD TO HUMANS (AND DOMESTIC ANIMALS) CAUTION

Harmful if inhaled or absorbed through skin. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist. Remove and wash contaminated clothing before reuse.

### 2.2 Personal Protective Equipment

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Mixers/loaders and applicators not in enclosed cabs or aircraft must wear a dust/mist 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/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

### 2.3 User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### 2.4 Environmental Hazards

Do not contaminate water when cleaning equipment or disposing of equipment washwaters. Do not apply directly to treated, finished drinking water reservoirs or drinking water receptacles when the water is intended for human consumption.

## 3.0 DIRECTIONS FOR USE

It is a violation of Federal law to use 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.

## 4.0 STORAGE AND DISPOSAL

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

**Storage:** Store in a cool, dry place. Protect from freezing.  
**Pesticide Disposal:** Wastes resulting from use of this product may be disposed of on site or at an approved waste disposal facility.

**Container Disposal: Small containers:** Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact Ag Container Recycling Council at 202-861-3144 or [www.acrecycle.org](http://www.acrecycle.org). If recycling is not available puncture and dispose of the container in a sanitary landfill, or by other procedures approved by state and local authorities.

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#### 4.0 STORAGE AND DISPOSAL (CONT'D)

**Large containers:** Nonrefillable container. Do not reuse or refill this container. Triple rinse as follows: Empty remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closure. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling if available. Offer for reconditioning, if appropriate.

#### 5.0 APPLICATION DIRECTIONS

For Mosquito and Blackfly larval control, TEKNAR HP-D may be applied to any water site except treated, finished drinking water reservoirs or drinking water receptacles. As the active ingredient of TEKNAR HP-D is exempt from the requirement of a tolerance on all raw agricultural commodities, applications to irrigation water are permissible.

Do not apply when wind speed favors drift beyond the area of treatment.

##### 5.1 Chemigation

Apply this product only through flood (basin), furrow or border irrigation systems. Do not apply this product through any other type of irrigation system. Lack of effectiveness can result from non-uniform distribution of treated water. If you have questions about calibration, you should 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 public water systems 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.

##### 5.2 Flood (Basin), Furrow and Border Chemigation

Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from backflow if water flow stops.

Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

- 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 check valve to prevent the flow of fluid back toward the injection pump.

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

A pesticide supply tank is recommended for the application of TEKNAR HP-D by chemigation.

#### 6.0 GENERAL MIXING INSTRUCTIONS

Always shake or stir thoroughly before use. Pour recommended amount of TEKNAR HP-D onto surface of water in a nearly filled spray tank. Maintain agitation. Do not allow diluted product sprays to stand in the tank for more than 24 hours.

#### 7.0 SPECIFIC APPLICATION INSTRUCTIONS FOR MOSQUITO CONTROL

**Application:** Apply TEKNAR HP-D when larvae are in 1st to early 4th instar. Larvicidal action is expected within 24 hours. Reapply as needed. TEKNAR HP-D may be applied either by air or by ground application techniques. When using standard spray equipment, use adequate volume of water to insure good coverage and penetration. As low as 1 gallon per surface acre can be applied undiluted through appropriate ULV equipment.

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 treatment coordinator are responsible for considering all of these factors when making decisions.

## 7.1 Recommendations

Use lowest rate when 1st to 3rd instar larvae are predominant and highest rate when late 3rd to early 4th instar larvae are predominant in the mosquito population. For guidance, rate ranges according to the most common Mosquito habitats are provided below.

<b>Mosquitoes Habitat</b>	<b>Rate Required for Control</b>
Floodwater, rice fields, pastures, standing pools, woodland pools, snow melt pools, tidal water salt marshes, catch basins and storm water retention areas	0.25 - 1.0 pts./a
Water polluted with sewage, water with moderate organic content and water with a high level of mosquito populations	1.0 - 2.0 pts./a

## 8.0 SPECIFIC INSTRUCTIONS FOR BLACKFLY CONTROL

**Application:** For Blackfly control, apply with conventional equipment or with metered release upstream from infested sites to achieve recommended concentrations. Larvicidal action is expected within 24 hours. Reapply as needed. TEKNAR HP-D may be applied undiluted through appropriate ULV equipment.

### 8.1 Recommendations

Maintain a 0.5 to 0.75 ppm concentration in the stream for 15 minutes. If a shorter dosage time is desired, use an equivalent amount of TEKNAR HP-D by increasing the concentration.

## 9.0 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 accompanying directions.

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