2018-5367 2020-04-16

Primary panel



Insecticide

COMMERCIAL

Solution ACTIVE INGREDIENT: *Beauveria bassiana* Strain GHA.....minimum of 2.2×10<sup>9</sup> viable spores/mL

# KEEP OUT OF REACH OF CHILDREN POTENTIAL SENSITIZER READ THE LABEL BEFORE USING REGISTRATION NUMBER 33745 PEST CONTROL PRODUCTS ACT

Net Contents: 250 mL – 1 L

#### Manufactured by:

ConidioTec LLC 2440 Earlystown Road, Suite 600 Centre Hall, PA 16828 1 800 891 8610

### **Secondary panel**

#### PRECAUTIONS

KEEP OUT OF THE REACH OF CHILDREN. May cause sensitization. Avoid contact with skin and clothing. Avoid inhaling/breathing mists. Wear waterproof gloves, long-sleeved shirt, long pants, goggles, socks and shoes, as well as 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. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before re-use.

DO NOT apply when people or pets are present. DO NOT allow people or pets to enter treated areas until sprays have dried. Ventilate treated areas after application either by opening windows and doors or through use of air exchange/ventilation systems confirmed to be operational. Use fans where required to aid in the circulation of air. DO NOT allow spray to drip or allow drift onto non-target surfaces, including furniture or upholstery where prolonged contact with people or pets will occur; any spray residue must be removed by the applicator. DO NOT apply to surfaces that may come into contact with food/feed. Cover or remove all food/feed. Cover all food/feed processing surfaces, equipment and utensils or thoroughly wash following treatment.

Do not apply on hot surfaces (>40 °C). Do not apply to electrical outlets or fittings. Do not apply to bare floors - slipping hazard.

#### ENVIRONMENTAL PRECAUTIONS

This product contains aromatic petroleum distillates which are toxic to aquatic organisms. DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

# FIRST AID

**If swallowed:** Call a poison control centre or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give any liquid to the person. 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.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

# TOXICOLOGICAL INFORMATION

This product contains petroleum distillates. DO NOT INDUCE VOMITING. Vomiting may cause aspiration pneumonia. Treat symptomatically.

# DIRECTIONS FOR USE

Spray in an inconspicuous area to test for possible staining or discoloration. Evaluate test area after drying.

PRODUCT FACTS	
Aprehend®	<ul> <li>Aprehend<sup>®</sup> is a ready-to-use oil formulation containing viable spores (conidia) of the fungus <i>Beauveria bassiana</i> Strain GHA, a naturally-occurring pathogen that is specific to insects. The fungal spores act like a contact insecticide by sticking to the outer cuticle of the insect. Bed bugs are affected whether sprayed directly or by walking on a previously sprayed surface. Following exposure, the fungal spores will germinate and penetrate the cuticle, colonizing the body of the bed bug resulting in death within 4 to 10 days.</li> <li>At room temperatures up to 24°C and under low humidity conditions (&lt; 50% RH), the spray residue will remain effective on surfaces for up to 3 months, providing residual control and protection from bed bugs.</li> </ul>
Aprehend <sup>®</sup> Specifications	<ul> <li>Kills and controls bed bugs through exposure to treated surfaces</li> <li>Up to three months residual effect on bed bug nymphs and adults.</li> <li>Effective against pyrethroid-resistant bed bugs.</li> <li>No odor.</li> <li>Ready-to-use.</li> </ul>
Controls	<ul> <li>Reduces hatching when sprayed directly onto bed bug eggs.</li> <li>Kills bed bug nymph stages through exposure to treated surfaces.</li> <li>Kills bed bug adults through exposure to treated surfaces.</li> </ul>
How to use	<ul> <li>Invert bottle and shake well before using.</li> <li>Do not dilute this product.</li> <li>Do not mix Aprehend<sup>®</sup> with water or other products.</li> </ul>
Where to apply	<ul> <li>For indoor use.</li> <li>See instructions below.</li> <li>In buildings and structures including houses, apartments, hotel and motel rooms, offices, seating areas, institutional facilities and modes of transport etc.</li> </ul>
Spray specifications	<ul> <li>Aprehend<sup>®</sup> must be applied at low volume application rates using a Low Volume Low Pressure spray gun. Contact ConidioTec LLC or your distributor for specific information about spray gun system.</li> <li>DO NOT USE STANDARD (HIGH VOLUME) SPRAY APPLICATION EQUIPMENT TO APPLY THIS PRODUCT.</li> <li>Spray gun should have a working pressure of up to 5 psi and a flow rate of 15 mL/min.</li> </ul>

How to apply	a Shaka bottle therewashy before use to support contents
	<ul> <li>Shake bottle thoroughly before use to suspend contents.</li> </ul>
	<ul> <li>Pour approximately 118 mL into the sprayer bottle/reservoir.</li> </ul>
	<ul> <li>Attach the sprayer bottle to the spray gun</li> </ul>
	<ul> <li>Hold the gun approximately 10 cm from the surface to be sprayed and spray at a speed of approximately 3-4 seconds per metre making a 5 cm linear spray swath (barrier).</li> </ul>
	<ul> <li>Resulting volume application will be approximately 15 mL/15 m</li> </ul>
	<ul> <li>Do not allow excessive dripping or run-off to occur on surfaces.</li> </ul>
Use information	<ul> <li>Do not apply on wet surfaces.</li> </ul>
	<ul> <li>Do not apply on fresh painted surfaces.</li> </ul>
	<ul> <li>Do not use steam on surfaces that will be treated with Aprehend<sup>®</sup></li> </ul>
	<ul> <li>To ensure residual control, do not clean or wipe spray residue from surfaces.</li> </ul>
	<ul> <li>Before application to fabrics, always spray a small inconspicuous area to check for staining.</li> </ul>
	<ul> <li>Follow-up inspection 30 days after treatment is recommended. If live bed bugs are still present, Aprehend® may be re-applied.</li> </ul>
	<ul> <li>Aprehend<sup>®</sup> will be deactivated by exposure to water or any aqueous product.</li> </ul>

# **Bed Bug Treatments**

This product kills and controls bed bugs through exposure to treated surfaces. Aprehend<sup>®</sup> is intended as a barrier treatment. The first line of defense is around the furniture where people reside such as beds, chairs, recliners and sofas etc. The second line of defense is close to the suspected harborages, ensuring that bed bugs emerging from the harborage must cross a barrier when looking for a blood meal. For best results, hold the tip of the spray gun approximately 10 cm from the surface to be treated and move the sprayer at a rate of approximately 0.3 m per second (3-4 seconds per metre). Create a continuous 5 cm spray swath (barrier), in locations where bed bugs are likely to walk when emerging from their harborages in search of a blood meal. On drying, the barrier will be invisible, but will remain effective for up to 3 months. Bed bugs crossing the barrier become infected and die within 4 to 10 days. Follow-up inspection 30 days after treatment is recommended. If live bed bugs are still present, Aprehend® may be re-applied.

# Directions for use to control existing bed bug infestations:

**Beds and Bedrooms** – Remove all bedding including sheets, pillows, blankets, comforters and other linen, such as a box spring skirt. These items should be bagged and then laundered in hot water at 49°C minimum and/or placed in a clothes drier at highest temperature for one hour.

The key to effective application of Aprehend<sup>®</sup> is to ensure that the barrier is continuous around the perimeter of each item being treated. Apply a continuous 5 cm barrier around all potential harborage sites including tables and wall mounted lamps, wall crevices, mirrors, picture frames and backs, door jambs, moldings and hinges, window ledges, sills, drapery rods, curtains, blinds and mounting hardware, closet shelving and hardware, picture frame moldings etc. and around the perimeter of the room. DO NOT TREAT INSIDE ELECTRICAL OUTLETS OR FITTINGS.

Treat items as follows:

- <u>Bed frame</u> Once the mattress and/or box spring have been removed from the frame, treat the frame with Aprehend<sup>®</sup>. It is not necessary to spray the entire surface of the bed frame. Simply ensure that a complete 5 cm barrier has been applied around the outside of the frame, and the inside the frame close to the base where the slats or mattress support board meet the frame. Make sure that all cracks, crevices, joints, screw-holes and channels are also treated.
- <u>Headboard</u> Treat the rear surface of the headboard that faces away from the mattress with Aprehend<sup>®</sup>. Create a continuous 5 cm barrier around the entire perimeter of the back of the headboard. Make sure that all cracks, crevices, joints, screw holes and channels are also treated. Allow the treatment to dry.
- <u>Box spring</u> Apply Aprehend<sup>®</sup> as a 5 cm barrier around the perimeter of the box spring. For high infestations, remove dustcover and spray the inside of the box spring, paying particular attention to the side-walls. Make sure that all areas where the frame surfaces meet are treated. For low-level infestations, it is not necessary to remove the dust cover, but ensure that the spray is applied around edge of the frame where the dust cover is fixed. Finally, apply a 5 cm barrier around the perimeter of the top surface of the box spring. Allow the treatment to dry.
- <u>Bedroom</u> Spray around the perimeter of the room where the baseboard meets the wall and floor. Ensure all furniture is moved away from the walls to permit treatment of all areas.
- Do not treat mattresses, sheets, pillows, blankets, comforters and other linen directly with Aprehend<sup>®</sup>.
- Do not apply product to wallpaper.

**Chairs or couches** – Treat under cushions and underneath chair or couch. Ensure that the barrier is continuous around the entire perimeter of the chair or couch. Make sure that all cracks, crevices, joints, screw holes and channels are also treated. For high infestations, remove the dust cover on the bottom of the chair or couch and treat the inside structure with Aprehend<sup>®</sup>. Ensure that the barrier is continuous around the entire perimeter of the frame. Make sure that all cracks, crevices, joints, screw holes and channels are also treated. For low-level infestations, apply a 5 cm barrier around the perimeter of the dust cover where it is attached to the frame. **Do not treat where people may come into direct contact with the treated area**. Avoid treating silk fabrics and leather.

**Offices** – Before treating, remove all clutter. Treat the underside of chairs where bed bugs have been observed or expected to occur by applying a 5 cm barrier around the perimeter of the underside of the chair. Treat cracks and crevices underneath desk where bed bugs have been observed or expected to occur. If treating shelves, treat underneath the bottom shelf. Spray around the perimeter of the room where the baseboard meets the wall. Ensure all furniture is moved away from the walls to permit treatment of all areas. Allow treatment to dry. **Do not treat where people may come into direct contact with the treated area.** 

# Directions for use as a preventive treatment:

This treatment is intended for sites that are at risk of developing infestations from introduced bed bugs (e.g. hotels and motels). Reapply every 3 months to ensure continuous protection against bed bug establishment.

**Beds and Bedrooms** – Remove all bedding including sheets, pillows, blankets, comforters and other linen. These items should be removed from the area and replaced after treatment. Items should be laundered and dried at high heat before using again.

- <u>Bed frame</u> remove the mattress and place it away from the area to be treated. Spray the bed frame and box spring. Apply Aprehend<sup>®</sup> as a 5 cm barrier around the perimeter of the box spring. It is not necessary to remove the dust cover but ensure that the spray is applied around edge of the frame where the dust cover is fixed. If no dustcover is present, spray the inside of the box spring, paying particular attention to the side-walls. Make sure that all areas where the frame surfaces meet are treated. Treat the perimeter of the top surface of the box spring with Aprehend<sup>®</sup>. Allow the treatment to dry.
- <u>Headboard</u> Treat the rear surface of the headboard that faces away from the mattress with Aprehend<sup>®</sup>. Create a continuous 5 cm barrier around the entire perimeter of the back of the headboard. Make sure that all cracks, crevices, joints, screw holes and channels are also treated. Allow the treatment to dry. Re-attach the headboard to the frame/wall. If the headboard is permanently fixed to the wall, spray around the perimeter of the headboard at the wall interface paying particular attention to the gap between the headboard and the wall.
- <u>Room</u> Spray around the perimeter of the room where the baseboard meets the wall and floor. Ensure all furniture is moved away from the walls to permit treatment of all areas.
- Apply a continuous 5 cm barrier around other potential harborage sites including, luggage racks, outlet and switch plate covers, mirrors, picture frames, window ledges, closet shelving, and other cracks and crevices.
- Do not treat mattresses, sheets, pillows, blankets, comforters and other linen directly with Aprehend<sup>®</sup>.
- Do not apply product to wallpaper.

**Chairs or couches** – Remove cushions and apply as a 5 cm barrier around the inside perimeter of the chair/couch. Treat under cushions and underneath chair or couch. **Do not treat where people may come into direct contact with the treated area**. Avoid treating silk fabrics.

**Offices** – Before treating, remove all clutter. Treat the underside of chairs. Treat cracks and crevices underneath desk. If treating shelves, treat underneath the bottom shelf. Spray around the perimeter of the room where flooring meets the baseboard. Ensure all furniture is moved away from the walls to permit treatment of all areas. Allow treatment to dry. **Do not treat where people may come into direct contact with the treated area.** 

# STORAGE:

Store in a cool, dry place, out of direct sunlight. This product should be used within 12 months of the date of manufacture when stored at temperatures up to 25°C. Do not temporarily store this product in warm areas such as vehicles. A cooler box with an ice pack is recommended at temperatures above 27°C. To prevent contamination store this product away from food or feed.

# DISPOSAL:

1. Follow provincial instruction for any required additional cleaning of the container prior to its disposal.

- 2. Make the empty container unsuitable for further use.
- 3. Dispose of the container in accordance with provincial requirements.

4. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial 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 this label. It is an offence under the PEST CONTROL PRODUCTS ACT to use a control product in a way that is inconsistent with the directions on the label.

# **Optional Label Claims:**

- Insecticide
- Biological Insecticide
- Kills bedbugs (within 10 days)
- Provides control for up to 3 months
- Ready-to-Use (RTU)
  - No mixing or dilution required
  - Low odor
  - Non-repellent
  - Ready-to-Use biological mycoinsecticide to kill and control bed bugs
  - Prevents the establishment of bed bug populations when applied (quarterly) (every 3 months)