**MITICIDE-INSECTICIDE-REPELLENT**

**ACTIVE INGREDIENTS**
- Garlic Oil ........................................................................................................................ 15%

**OTHER INGREDIENTS**
- Potassium Oxide, Water .................................................................................................. 85%

**TOTAL** .......................................................................................................................... 100%

This product has not been registered by the U.S. Environmental Protection Agency (EPA). SEIPASA S.A. represents that this product qualifies for 25(b) exemption from registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

**ALLUMA™** is a broad-spectrum, plant-based essential oil, which acts as an insecticide, insect repellent and miticide. **ALLUMA™** works on contact through interference with the sensing faculties of pests, disguising the odor signal emitted by crops, thus, preventing females from laying eggs. **ALLUMA™** also has a direct effect on the pest, acting through ingestion as a chitin inhibitor. **ALLUMA™’s** trans-laminar effect contributes to the control of mites, thrips, lepidoptera and soft-bodied insects. **ALLUMA™** repels insects from getting on plants.

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

**FIRST AID**

- 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 center or doctor for treatment advice. Seek medical attention if irritation persists.

- IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything 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 center or doctor for treatment advice.

- IF INHALED: Remove person to fresh air immediately. Provide artificial respiration if necessary. Call a poison control center or doctor for treatment advice.

**PRECAUTIONARY STATEMENTS**

**Hazards to Humans and Domestic Animals.**

**Cautions:**
- Harmful if swallowed. Causes moderate eye irritation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with eyes, skin or clothing. Wear eye protection (goggles, face shield or safety glasses) and gloves. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco and using the toilet.

**Environmental Hazards:** For terrestrial use: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash water or rinsate. Do not apply this product while bees or other pollinating insects are visiting the treatment area.

**Physical or Chemical Hazards:** COMBUSTIBLE LIQUID. Do not use or store near heat or open flame.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Applicants and other handlers must wear:
- Long-sleeved shirt and long pants.
- Chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber, neoprene, rubber, polyvinyl chloride (PVC) or Vitron.
- Shoes plus socks.
- Protective eyewear (goggles, face shield or safety glasses).

**APPLICATION:**

For best results, spray coverage should be uniform and complete. Spray droplet size should be adjusted to maximize coverage, minimize drift, and allow direct contact with as many pests (insects, mites, …) as possible. Use lower rates for light to moderate pest pressure and higher rates for heavy infestations.

**ALLUMA™** can be applied to crops at any time up to and including the day of harvest. Begin spraying when pests first appear; do not wait until plants are heavily infested. Repeat as needed (5-day minimum interval) to maintain desired level of control. There are no restrictions on the number of applications per season.

Always follow these directions: Apply in early morning or late afternoon. Spray directly onto pest(s). Apply before noticeable foliar damage occurs. Thorough spray coverage is essential needed (5-day minimum interval) to maintain desired level of control.

**USER SAFETY REQUIREMENTS**

- Follow manufacturer’s instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.
- Discard clothing and other absorbent material that have been drenched or heavily contaminated with the product’s concentrate. Do not reuse them.

**USER SAFETY RECOMMENDATIONS**

Users should:
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- 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.

**AGRICULTURAL USE REQUIREMENTS**

Do not reenter treated areas until spray has dried. PPE required for early entry into treated areas that involves contact with anything that has been treated such as plants, soils, or water, is:
- Coveralls.
- Waterproof gloves.
- Shoes plus socks.

**DIRECTIONS FOR USE**

An innovative formulation that works as a contact repellent and trans-laminar product, as well as a feeding and exudation deterrent. Labeled for use on a wide range of crops for control of mites, thrips, lepidoptera and soft-bodied insects.

**PESTS:** mites and soft bodied, piercing and sucking insect pests such as: aphids, bees, flies, caterpillars (early stages), flies (maggot stage), leafhoppers, leafminers, mites, mealybugs, mites (white crawler stage), thrips, cabbage looper, fruit worms, tomato pin worm, armyworm and whiteflies.

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**Application Rate Table**

For the control of the labelled pests, use ALLUMA™ as indicated in the following table for each listed crop (crops included but not limited to).

<table>
<thead>
<tr>
<th>Crops</th>
<th>PINTS per acre*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pome and Stone Fruits: Apple, Apricot, Cherry, Nectarine, Peach, Pear, Penismonium, Plum, Pomegranate, Prune among others.</td>
<td>1-3</td>
</tr>
<tr>
<td>Tree Nuts: Almond, Cashew, Pecan, Pistachio, Walnut among others.</td>
<td>1.3-2.4</td>
</tr>
<tr>
<td>Citrus and Subtropical Fruits: Banana, Grapefruit, Lemon, Orange, Papaya among others.</td>
<td>1-3</td>
</tr>
<tr>
<td>Small Fruits and Berries: Blackberry, Blueberry, Cranberry, Grapes (raison, table, wine), Raspberry, Strawberry among others.</td>
<td>1.3-2.4</td>
</tr>
<tr>
<td>Root and Tuber Vegetables: Carrot, Potato, Radish, Sweet Potato, Turnip among others.</td>
<td>1-3.5</td>
</tr>
<tr>
<td>Brassica (Cole), Bulb Vegetables: Broccoli, Cabbage, Cauliflower, Garlic, Onion among others.</td>
<td>1-3</td>
</tr>
<tr>
<td>Leafy and Oriental Vegetables: Amaranth, Celery, Lettuce, Radichchio among others.</td>
<td>1-3</td>
</tr>
<tr>
<td>Fruiting and Legume Vegetables: Bean, Eggplant, Lentil, Pea, Pepper, Tomato among others.</td>
<td>1.3-3.5</td>
</tr>
<tr>
<td>Cucurbit Vegetables: Cantaloupe, Cucumber, Melon, Watermelon, Squash among others.</td>
<td>1-3.5</td>
</tr>
<tr>
<td>Herbs and Spices: Arise, Basil, Dill, Mint, Pepper–mint, Spearmint, Thyme, Wintergreen among others.</td>
<td>1.3-2.5</td>
</tr>
<tr>
<td>Cereal Grains: Corn, Sorghum, Soybean, Sweet Corn among others.</td>
<td>1-3</td>
</tr>
<tr>
<td>Grass and Non-Grass Animal Feeds: Alfalfa.</td>
<td>1.3-3.5</td>
</tr>
<tr>
<td>Other Crops: Artichoke, Asparagus, Avocado, Coffee, Cotton, Hops, Jojoba, Mushroom, Siler, Olives, Peanuts, Pineapple, Rice, Safflower, Sesame, Sugar Cane, Sunflower, Tea, Tobacco among others.</td>
<td>1-3.5</td>
</tr>
</tbody>
</table>

*in those crops where water volume applications are up to 100 gallons per acre or more, it is advisable to use a Dilution Rate between 40-55 fl. oz. or per 100 gallons.

**Note to User:** Unintentional consequences such crop injury may result due to environmental or growing conditions, manner of use or application. Because plant tolerance of pesticides varies as conditions vary, treat a few plants under conditions not expected to be encountered and observe for plant damage prior to full-scale application to a large number of plants.

**Storage and Disposal**

- Do not contaminate water, food or feed by storage or disposal.
- **Pesticide Storage:** Store upper at room temperature. Avoid exposure to extreme temperatures. Do not expose to light and keep away from any heat source. Do not mix with oxidizing, strong acidic or basic materials.
- **Pesticide Disposal:** Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**Container Handling:** Nonrefillable container. Do not reuse or refill this container. 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 rinseate into application equipment or a mix tank or store rinseate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling, if available, or 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.

**Warranty and Conditions of Sale**

SELLER OFFERS and the BUYER ACCEPTS THIS PRODUCT UNDER the FOLLOWING AGREED TERMS and CONDITIONS OF SALE and WARRANTY.

The directions for the use of this product are believed to be reliable and should be followed carefully. However, it is impossible to take into account all the variables and to eliminate all risks associated with its use. Injury or damage may result because of conditions that are beyond the control of the SELLER. SELLER warrants that this product conforms to the chemical description on this label and is free of any adulterants that may be injurious to the crop or plant. SELLER makes no warranties of merchantability or fitness for any other express or implied warranty.

To the fullest extent permitted by law, the SELLER shall not be liable for consequential, special or indirect damages resulting from the use or handling of the product. Any variation or exemption from this warranty must be in writing and signed by authorized representative or the seller.

**Ground and Field Use.**

- Botanical insecticide concentrate.
- Effect by contact, repelency and translaminar action.
- Primarily affects larval stages of insects.
- ALLUMA™ has been found to be compatible with other chemicals that are registered for use on specific crops. Do not mix ALLUMA™ or any other active ingredients with oxidizing agents, such as bleach, or strong acids and bases, as they will destabilize the product.

**Aerial and Ground Spraying.**

- Prior to application, check the aircraft/helicopter spray equipment for uniformity of spray pattern, spray width and output. Apply a minimum of 20 gallons per acre of diluted product. Optimum results are obtained when plant foliage is not too dense. COVERAGE IS ESSENTIAL FOR GOOD CONTROL. Use an output that will ensure optimum product penetration and coverage. Make aerial applications when the wind velocity favors on-target product deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 15 mph. Low humidity and high temperature increase the evaporation rate of spray droplets and therefore the likelihood of good coverage. Use the lowest droplet size consistent with good pest control. Forage of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible, and by avoiding excessive spray boom pressure. Spray should be released at the lowest height consistent with pest control and flight safety. Application more than 10 feet above the crop canopy is not recommended.

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- Do not apply to sensitive plants without testing.
- Do not apply near food-handling establishments.
- Not for use in food-handling establishments.

**Ground Application.**

- TANK MIXING: ALLUMA™ must be diluted with water before applying. Shake container well before use. Fill spray tank 1/4 full of intended amount of water (~45°F). Add ALLUMA™ at recommended rate, then other products as desired, and continue filling with water. Addition of a water softener is recommended before adding this product to the spray tank. Maintain agitation while mixing and during application for best results. Do not allow mixture to sit. Use mixture within 12 hours as ALLUMA™ may lose its activity if left in the tank.

- GRIND SPRAY: Spray-to-wet applications of this product may be made with standard field sprayers and backpack or other hand-held spray equipment.

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