

# Armor®

GROUP 17 INSECTICIDE

## Insect Growth Regulator

For sciarid fly control in mushrooms

ACTIVE INGREDIENT:	% BY WT.
Cyromazine (CAS No. 66215-27-8) .....	5.0%
<b>OTHER INGREDIENTS:</b> .....	<u>95.0%</u>
<b>TOTAL:</b> .....	100.0%

Armor® is a soluble liquid formulation containing 0.42 lb ai per gallon.

EPA Reg. No. 66222-273

EPA Est. No. 67545-AZ-001

## KEEP OUT OF REACH OF CHILDREN CAUTION / PRECAUCIÓN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.

(If you do not understand the label, find someone to explain it to you in detail.)

### PRECAUTIONARY STATEMENTS

**Hazards to Humans and Domestic Animals**

#### CAUTION

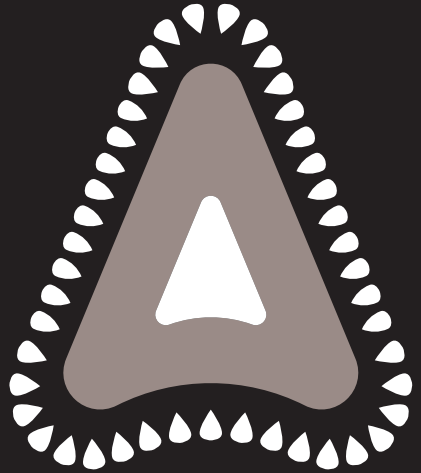
Causes moderate eye irritation. Harmful if absorbed through the skin or inhaled. Avoid contact with eyes, skin, or clothing. Avoid breathing vapors or spray mist.

See additional precautionary statements and directions for use in booklet.

**How can we help? 1-866-406-6262**

Net Contents

**2.5 gallons**



**INSECTICIDE**

**ADAMA**

## FIRST AID

<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>
<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 further treatment advice.</li></ul>
<b>If swallowed</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
For emergency medical treatment information call ProPharma 24 hours a day at 1-877-250-9291.	

**In case of spills, fire, leaks or accidents call 1-800-535-5053.**

## PRECAUTIONARY STATEMENTS

### Hazards to Humans and Domestic Animals

#### CAUTION

Causes moderate eye irritation. Harmful if absorbed through the skin or inhaled. Avoid contact with eyes, skin, or clothing. Avoid breathing vapors or spray mist.

### Personal Protective Equipment

#### Applicators and other handlers must wear:

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

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.

### Engineering Control Statements

When handlers use closed systems in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

## User Safety Recommendations

### Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

## Environmental Hazards

Do not contaminate water by cleaning of equipment or disposal of wastes. Do not apply directly to lakes, streams, or ponds.

## Physical or Chemical Hazards

Corrosive to tin.

## CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of ADAMA or Seller. To the extent permitted by applicable law, Buyer and User agree to hold ADAMA and Seller harmless for any claims relating to such factors.

ADAMA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or ADAMA, and (2) Buyer and User assume the risk of any such use. To the extent permitted by applicable law, ADAMA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall ADAMA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ADAMA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF ADAMA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

ADAMA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of ADAMA.

## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. 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. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### 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 interval. 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 12 hours.** Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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
- Shoes plus socks

**FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR INSECT CONTROL, AND/OR ILLEGAL RESIDUES.**

### INFORMATION

Armor insecticide contains the active ingredient cyromazine, which is an insect growth regulator (IGR). When incorporated into mushroom compost or casing, Armor stops the development of sciarid fly larvae and prevents damage to the mushrooms and the mycelium growth.

Armor has no useful contact activity to sciarid fly larvae or adults. If large numbers of adult flies are initially present in the facility, use of a conventional contact insecticide is recommended around ventilators and other areas where flies congregate (refer to that product's label for further directions, precautions, and limitations).

## RESISTANCE MANAGEMENT

Some insect pests are known to develop resistance to products after repeated use. Because resistance development cannot be predicted, the use of this product should conform to sound resistance management strategies established for the crop and use area. ADAMA encourages responsible product stewardship to ensure effective long-term control of the insects on this label.

Armor contains a Group 17 insecticide (cyromazine). Insect biotypes with acquired or inherent resistance to Group 17 insecticides may eventually dominate the insect population if Group 17 insecticides are used repeatedly as the predominant method of control for targeted species. This may result in partial or total loss of control of those species by Armor or other Group 17 insecticides.

If resistance to this product develops in your area, this product, or other products with a similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or other extreme conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of control for your area.

### **In order to maintain susceptibility to these classes of chemistry:**

- Avoid using Group 17 insecticides exclusively for season-long control of insect species with more than one generation per crop season.
- For insect species with successive or overlapping generations, apply Armor or other Group 17 insecticides using a “treatment window” approach. A treatment window is a period of time as defined by the stage of crop development and/or the biology of the pests of concern. Within the treatment window, depending on the length of residual activity, there may either be single or consecutive applications (compost, casing) unless otherwise stated in the Directions for Use of the Group 17 insecticides. Do not exceed the maximum Armor allowed per year.
- Following a treatment window of Group 17 insecticides, rotate to a treatment window of effective products with a different mode of action before making additional applications of Group 17 insecticides.
- A treatment window rotation, along with other IPM practices for the crop and use area, is considered an effective strategy for preventing or delaying a pest’s ability to develop resistance to these classes of chemistry.
- If resistance is suspected, do not reapply Armor or other Group 17 insecticides.

### **Other Insect Resistance Management (IRM) practices include:**

- Incorporating IPM techniques into your insect control program.
- Monitoring treated insect populations for loss of efficacy.
- Using tank-mixtures or premixes with insecticides from a different target site of action group as long as the involved products are all registered for the same crop outlet and effective rates are applied.

### **For additional information on Insect Resistance Management:**

- Contact your local extension specialist, certified crop advisor and/or product manufacturer for additional insect resistance management recommendations.
- Visit the Insecticide Resistance Action Committee (IRAC) on the web at: <http://www.irc-online.org/>.

## CROP USE DIRECTIONS

### APPLICATION INSTRUCTIONS

#### Application to Compost

Apply Armor when preparing the mushroom compost using a coarse drenching spray with low pressure to minimize the formation of mists. Apply in sufficient water to ensure thorough and uniform incorporation into the compost according to the rates in the following table. Additional incorporation may be accomplished using a spawning machine or similar equipment.

These rates result in a concentration of 5 parts per million (ppm) of active ingredient in the compost on a wet weight basis (equal to 15 ppm on a dry weight basis).

Compost Wet Weight (67% moisture) lb/sq ft	Compost Dry Weight lb/sq ft	Rate of Armor fl oz/1,000 sq ft
12	4	19
14	4.5	22
15	5	24
17	5.5	26
18	6	28
20	6.5	31
21	7	33
23	7.5	35
24	8	38
26	8.5	40
27	9	43

**Example:** If applying Armor to a wet compost bed weighing 15 lb/sq ft, use 24 fl oz of Armor per 1,000 sq ft. Rates can also be figured on a compost dry weight basis (assuming 67% moisture) using the dry weight adjusted rate of 15 ppm.

#### Application to Casing

Armor can be applied as a single low-volume drench spray to the casing material. Apply at 14 or more days after the compost application at a rate of 5 ppm (3.0 fl oz/ton) to the casing material.

**Do not make more than two applications of Armor during a mushroom production cycle (one to the compost followed by one to the casing).**

**Do not apply to the casing within 14 days of harvest.**

#### Chemigation

Do not apply this product through any type of irrigation system.

## **STORAGE AND DISPOSAL**

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

### **Pesticide Storage**

Do not use in animal feeds. Store at temperatures above 32°F. Crystals may form at lower temperatures. If this occurs, place the product in a warm room (72°F or above) and shake the container at frequent intervals until all crystals are dissolved. Since this formulation contains water, it can also freeze solid at temperatures below 32°F. However, when reconstituted and crystals redissolve, product performance is not affected.

### **Pesticide Disposal**

Improper disposal of unused pesticide, spray mixture, or rinsate is a violation of Federal law. Pesticide, spray mixture, or rinsate that cannot be used according to label instructions, must be disposed of according to Federal, state, or local procedures. For guidance in proper disposal methods, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office.

### **Container Handling [less than or equal to 5 gallons]**

Non-refillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. 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 and 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.

### **Container Handling [greater than 5 gallons – mini-bulk]**

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. 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 the 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes.

### **CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER!**

Armor is a registered trademark of an ADAMA Group Company.

Manufactured for:

Makhteshim Agan of North America, Inc. (d/b/a ADAMA)

8601 Six Forks Road, Suite 300

Raleigh, NC 27615

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**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 center or doctor for further treatment advice.

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