



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

September 11, 2019

Timothy Joseph  
Regulatory Agent  
Arkion Life Sciences, LLC  
c/o Landis International  
3185 Madison Highway  
P.O. Box 5126  
Valdosta, GA 31603-5126

Subject: Label Amendment – Addition of 250-pound and 275-pound packaging sizes, removal of 1 quart and 1 gallon packaging sizes, expression of application rates in lb/acre, and other minor changes  
Product Name: AV-1011 Rice Seed Treatment  
EPA Registration Number: 69969-4  
Application Date: 08/09/2019  
Decision Number: 554228

Dear Mr. Joseph:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false

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or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact Paul Di Salvo by phone at 703-347-0322, or via email at [disalvo.paul@epa.gov](mailto:disalvo.paul@epa.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Gene Benbow".

Gene Benbow, Product Manager 7  
Invertebrate & Vertebrate Branch 3  
Registration Division (7505P)  
Office of Pesticide Programs

# AV-1011<sup>®</sup> Rice Seed Treatment

**For the protection of Rice Seed against consumption by Blackbirds.**

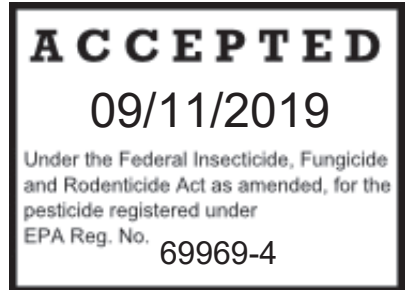
**ACTIVE INGREDIENT**

9,10-Anthraquinone .....50%

**OTHER INGREDIENTS** ..... 50%

**Total 100%**

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**



<b>FIRST AID</b>	
If inhaled:	<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>
If on skin or clothing:	<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>
If in eyes:	<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>
If swallowed:	<ul style="list-style-type: none"><li>• Call 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>

FOR MEDICAL EMERGENCIES INVOLVING THIS PRODUCT, CALL TOLL FREE 1-800-535-5053. HAVE THE PRODUCT CONTAINER OR LABEL AVAILABLE WHEN SEEKING TREATMENT ADVICE.  
See side panel for additional precautionary statements

MANUFACTURED IN THE USA\* FOR:  
ARKION<sup>®</sup> LIFE SCIENCES LLC  
551 Mews Drive Suite J  
New Castle, DE 19720  
Toll Free Phone Number:  
1-800-468-6324

\*with foreign and domestic sourced materials

EPA Establishment No. \_\_\_\_\_

EPA Registration No.: 69969-4

NET CONTENTS: 2.5 Gallon, 250 Gallon Tote and 275 Gallon Tote

LOT CODE: \_\_\_\_\_

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### CAUTION

Harmful if swallowed. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Harmful if inhaled. Avoid breathing vapor or spray mist. Remove contaminated clothing and wash clothing before reuse. Causes moderate eye irritation. Avoid contact with eyes or clothing.

**PERSONAL PROTECTIVE EQUIPMENT:** When handling AV-1011, use long-sleeved shirt and long pants, socks, shoes and chemical resistant gloves (barrier laminate, butyl rubber  $\geq$ 14 mils, nitrile rubber  $\geq$ 14 mils, neoprene rubber  $\geq$ 14mils, polyvinyl chloride (PVC)  $\geq$  14mils, viton  $\geq$  14mils). Wear protective goggles and a NIOSH-approved respirator with an organic vapor (OV) cartridge with a combination N, R or P filter, with NIOSH approval number prefix TC – 84A; or NIOSH approved gas mask with an organic vapor canister with NIOSH approval number prefix TC – 14G; or a NIOSH approved powered air purifying respirator with organic vapor (OV) cartridge and combination HE filter, with NIOSH approval prefix TC – 23C.

**USER SAFETY RECOMMENDATIONS: USER 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. Remove PPE immediately after handling the product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### **ENVIRONMENTAL HAZARDS:**

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA. Do not contaminate water by cleaning of equipment or disposal of waste. Apply this product only as specified on this label.

**Failure to follow the directions for use and precautions on this label may result in crop injury, or illegal residues.**

**Treatment of highly mechanically damaged seed, or seed of known low vigor and poor quality, may result in reduced germination and / or reduction of seed and seedling vigor. Treat and conduct germination test on a small portion of seed before committing the total seed lot to a select chemical treatment. Due to seed quality conditions beyond the control of Arkion Life Sciences LLC, no claims are made to guarantee germination of carry over seed.**

## **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Reformulation or repackaging of this product is prohibited. 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 agency responsible for pesticide regulation.

### **AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and 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 4 hours. "Exception: if the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated areas 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 Production Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- coveralls
- waterproof chemical resistant gloves (barrier laminate, butyl rubber  $\geq 14$  mils, nitrile rubber  $\geq 14$  mils, neoprene rubber  $\geq 14$  mils, polyvinyl chloride (PVC)  $\geq 14$  mils, viton  $\geq 14$  mils)
- shoes plus socks
- protective eyewear

### **USE RESTRICTIONS:**

AV-1011 may be applied to rice seed including conventional and hybrid seed varieties for use in drilled, water seeded or broadcast applications.

When applied properly **AV-1011** forms a bird repellent coating on rice seed. Birds may sample treated seeds but they will avoid additional consumption. **Thorough, uniform and consistent coverage** is essential for full protection from bird depredation. Use only at labeled rate. Lower amounts may not give desired control.

- Use this product only in commercial seed treatment equipment.
- Treated seed must not be used for or mixed with food or animal feed, or processed for other uses.
- Once the rice fields have been water-seeded with AQ - treated seeds, do not allow workers to enter the rice paddy for 48 hours. After the REI has expired, workers must, at a minimum, wear knee-high water resistant boots in order to enter the paddy.

- Do not drain water from AQ -Treated rice fields to irrigate other crops, use for livestock or discharge into potable water sources.
- Prolonged or frequently repeated skin contact may cause an allergic reaction in some individuals.
- A maximum of one (1) application may be made per acre per season.

### APPLICATION

**RATE:** AV-1011 may be applied as a water-based slurry alone, or with other compatible seed treatment materials, or sequentially with other registered, crop protection products. Apply water based slurry through a standard slurry, mist-type or batch commercial treater. Prior to mixing, potential tank mix partners which include pesticides, colorants, dyes and polymers should be tested for physical compatibility with AV-1011 .

Application rate is 18.3 fluid ounces (1.4 pounds) of AV-1011 per 100 pounds of rough rice seed. For application rate ranges, refer to the AV-1011 application rate table.

**AV-1011 Application Rate Table**

Pounds of Rough Rice Seed	Fluid Ounces (Pounds) AV-1011	Gallons AV-1011
100	18.3 (1.4)	0.14
200	36.6 (2.8)	0.28
300	54.9 (4.2)	0.43
400	73.2 (5.6)	0.57
500	91.5 (7.0)	0.71
700	128.0 (9.8)	1.00
1000	183.0 (14.0)	1.43

### **MIXING INSTRUCTIONS**

1. Application equipment must be clean and free of previously used pesticide residues before applying AV-1011.
2. Shake AV-1011 well or agitate prior to use.
3. Mixing AV-1011 or AV-1011 with tank - mix partners: add ½ of the required water and add AV-1011 or AV-1011 and tank mix - partners to the mix tank. Start and maintain constant mechanical and by pass agitation throughout the entire mixing and treating process.
4. Accurate calibration of the application equipment and frequent checks of this calibration is recommended to insure proper seed coverage.
5. Uniform coating of the seed is necessary to insure proper efficacy.
6. Depending on the type of seed treating equipment a small amount of water can be added to the product to facilitate product flow through the spray nozzles. Do not exceed five (5) fluid ounces of water per one gallon of AV-1011.
7. Environmental conditions such as temperature and humidity could have an effect on handling and during the drying of seed just after treatment.

**After treatment seed must be dry before storage or rebagging.**

**Note:** Federal law requires that bags of treated seeds shall be labeled with the following information. "This seed has been treated with 9,10-Anthraquinone bird repellent. Do not use for food, feed or oil purposes. Store away from food and feedstuffs." Use with an EPA - approved dye or colorant that imparts an unnatural color of the seed.

## STORAGE AND DISPOSAL

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

**Storage:** Store in a sheltered location away from food or feed. Do not allow containers to freeze. After prolonged storage, product may separate. If this occurs, resuspend with agitation. Do not contaminate water, food, or feed by storage and disposal. Handle and open container in a manner as to prevent spillage. If container is leaking, invert to prevent leakage. If container is leaking or if material is spilled for any reason or cause, carefully contain any spilled material to prevent non-target contamination. Do not walk through spilled material and dispose of as directed for pesticides below. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides above. Refer to Precautionary Statements on label for hazards associated with the handling of this material. In spill or leak incidents, keep unauthorized people away. You may contact Infotrac for decontamination procedures or any other assistance that may be necessary. Infotrac's Telephone No. is 1-800-535-5053.

**Pesticide Disposal:** Improper disposal of excess pesticide or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instruction, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. Arkion® also can be contacted for guidance on the disposal of pesticide wastes.

### Container Handling:

{Note to PM: Only one of the following two container handling instruction statements will be used based on the actual size of the product package.}

[For 2.5 gallons:] Nonrefillable container (equal to or less than 5 gallons): Do not reuse or refill container. Triple rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or 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 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

[OR]

[For 250 or 275 gallon tote:] Nonrefillable container (greater than 5 gallons): Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state.

Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ 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 or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or a mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

GENERAL: CONSULT FEDERAL, STATE OR LOCAL DISPOSAL AUTHORITIES FOR APPROVED ALTERNATIVE PROCEDURES.

**CONDITIONS OF SALE AND WARRANTY:**

Arkion® warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label only when used in accordance with label directions under normal conditions of use. Since timing, method of application, weather and ground conditions, mixture with other chemicals, and other factors affecting the use of this product are beyond our control, no warranty is given concerning the use of this product contrary to label directions, or under conditions which are abnormal or not reasonably foreseeable.

**ARKION® MAKES NO OTHER WARRANTIES EITHER EXPRESS OR IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE.**

Handling, storage and use of the product by Buyer or User are beyond the control of Arkion® and Seller. Risks such as ineffectiveness will be assumed by the Buyer or User.

**TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO CASE WILL ARKION® OR SELLER BE HELD LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE HANDLING, STORAGE OR USE OF THIS PRODUCT, NOR HELD RESPONSIBLE FOR INJURY OR LOSS AS A RESULT OF THE HANDLING OR USE OF THIS PRODUCT.**

**Contain and collect spilled product immediately.**

AV - 1011® and Arkion® are registered trademark of Arkion® Life Sciences LLC, 551 Mews Drive, Suite J, New Castle, DE 19720

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