

### SECTION 1: IDENTIFICATION

#### 1.1. Product Identifier

**Product Form:** Mixture

**Product Name:** AV-1011® Rice Seed Treatment

**Product Code:** EPA Registration No: 69969-4

#### 1.2. Intended Use of the Product

**Use of the substance/mixture:** Rice Seed Treatment

#### 1.3. Name, Address, and Telephone of the Responsible Party

##### Company

Arkion Life Sciences LLC.

551 Mews Drive Suite J

New Castle, DE 19720

[302-504-7400](tel:302-504-7400); [800-468-6324](tel:800-468-6324)

#### 1.4. Emergency Telephone Number

**Emergency Number** : 1-800-535-5053

INFOTRAC – TOLL FREE 24 HOUR EMERGENCY TELEPHONE NUMBER

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1. Classification of the Substance or Mixture

##### Classification (GHS-US)

Eye Irrit. 2B H320

Skin Sens. 1 H317

Carc. 2 H351

Full text of H-phrases: see section 16

#### 2.2. Label Elements

##### GHS-US Labeling

##### Hazard Pictograms (GHS-US)



##### Signal Word (GHS-US)

: Warning

##### Hazard Statements (GHS-US)

: H317 - May cause an allergic skin reaction.

H320 - Causes eye irritation.

H351 - Suspected of causing cancer.

##### Precautionary Statements (GHS-US)

: P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P261 - Avoid breathing vapors, mist, spray.

P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.

P272 - Contaminated work clothing must not be allowed out of the workplace.

P280 - Wear eye protection, protective clothing, protective gloves.

P302+P352+P362+P364 - IF ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P405 - Store locked up.

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

#### 2.3. Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. The dried or powdered form of this substance may form combustible dust concentrations in air.

#### 2.4. Unknown Acute Toxicity (GHS-US)

No data available

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.1. Substance**

Not applicable

**3.2. Mixture**

Name	Product Identifier	%	Classification (GHS-US)
Anthraquinone	(CAS No) 84-65-1	50	Comb. Dust Skin Sens. 1A, H317 Carc. 2, H351
Water	(CAS No) 7732-18-5	< 42	Not classified

Full text of H-phrases: see section 16

**SECTION 4: FIRST AID MEASURES****4.1. Description of First Aid Measures**

**First-aid Measures General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

**First-aid Measures After Inhalation:** Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

**First-aid Measures After Skin Contact:** Remove contaminated clothing. Drench affected area with water or soap and water for at least 15 minutes. Wash contaminated clothing before reuse. Obtain medical attention if irritation develops or persists.

**First-aid Measures After Eye Contact:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

**First-aid Measures After Ingestion:** Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

**4.2. Most important symptoms and effects, both acute and delayed**

**Symptoms/Injuries:** May cause an allergic skin reaction. Suspected of causing cancer. Causes eye irritation.

**Symptoms/Injuries After Inhalation:** May cause respiratory irritation.

**Symptoms/Injuries After Skin Contact:** May cause an allergic skin reaction. Symptoms may include: Redness, pain, swelling, itching, burning, dryness, and dermatitis.

**Symptoms/Injuries After Eye Contact:** Causes eye irritation. Symptoms may include: Redness, pain, swelling, itching, burning, tearing, and blurred vision.

**Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse effects.

**Chronic Symptoms:** Suspected of causing cancer.

**4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed**

If you feel unwell, seek medical advice (show the label where possible).

**SECTION 5: FIRE-FIGHTING MEASURES****5.1. Extinguishing Media**

**Suitable Extinguishing Media:** Use extinguishing media appropriate for surrounding fire.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

**5.2. Special Hazards Arising From the Substance or Mixture**

**Fire Hazard:** Not flammable. Product will burn if dried and heated with a flame.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Hazardous reactions will not occur under normal conditions.

**5.3. Advice for Firefighters**

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers. Do not allow run-off from firefighting to enter drains or water courses.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Other Information:** Refer to Section 9 for flammability properties.

**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1. Personal Precautions, Protective Equipment and Emergency Procedures**

**General Measures:** Avoid all contact with skin, eyes, or clothing. Avoid breathing dust.

**6.1.1. For Non-emergency Personnel**

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

## 6.1.2. For Emergency Responders

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

## 6.2. Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

## 6.3. Methods and Material for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

**Methods for Cleaning Up:** Clear up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material, then place in suitable container. Contact competent authorities after a spill.

## 6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

**Precautions for Safe Handling:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. This material may present a combustible dust hazard in its dried form. Any

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations.

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Store locked up. Keep container closed when not in use.

Keep/Store away from direct sunlight, and extremely high or low temperatures. Store in a sheltered location away from food or feed. Do not allow product to freeze.

**Incompatible Products:** None known.

**Storage Temperature:** < 50 °C (122 °F) and above freezing

### 7.3. Specific End Use(s)

For the protection of Rice seed against consumption by Blackbirds.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

### 8.2. Exposure Controls

#### Appropriate Engineering Controls

: Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Provide adequate general and local exhaust ventilation. Ensure all national/local regulations are observed.

#### Personal Protective Equipment

: Protective goggles. Gloves. Protective clothing. Insufficient ventilation: wear respiratory protection.



#### Materials for Protective Clothing

: Chemically resistant materials and fabrics.

#### Hand Protection

: Wear chemically resistant protective gloves.

#### Eye Protection

: Chemical safety goggles.

#### Skin and Body Protection

: Wear suitable protective clothing.

#### Respiratory Protection

: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

#### Environmental Exposure Controls

: Do not allow the product to be released into the environment.

#### Consumer Exposure Controls

: Do not eat, drink or smoke during use.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

#### Physical State

: Liquid

#### Appearance

: Light Tan

#### Odor

: Weak aromatic

# AV-1011®

## Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Odor Threshold	: No data available
pH	: 6.5 - 8.5
Evaporation Rate	: No data available
Melting Point	: No data available
Freezing Point	: No data available
Boiling Point	: No data available
Flash Point	: No data available
Auto-ignition Temperature	: No data available
Decomposition Temperature	: > 270 °C (> 518 °F)
Flammability (solid, gas)	: No data available
Vapor Pressure	: No data available
Relative Vapor Density at 25 °C	: 1.16 x 10 <sup>-7</sup> mmHg
Relative Density	: No data available
Solubility	: Miscible
Partition Coefficient: N-Octanol/Water	: No data available
Viscosity	: No data available

**9.2. Other Information** No additional information available

## SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).
- 10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, open flames, and sources of ignition.
- 10.5. Incompatible Materials:** None known.
- 10.6. Hazardous Decomposition Products:** Under conditions of fire this material may produce: Carbon oxides (CO, CO<sub>2</sub>).

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information On Toxicological Effects

**Acute Toxicity:** Not classified

<b>Av-1011®</b>	
LD50 Oral Rat	> 5000 ml/kg
LD50 Dermal Rat	> 5000 mg/kg
LC50 Inhalation Rat	> 2.04 mg/l
<b>Anthraquinone (84-65-1)</b>	
LD50 Oral Rat	> 5000 mg/kg
LC50 Inhalation Rat	> 1300 mg/m <sup>3</sup> (Exposure time: 4 h)
<b>Water (7732-18-5)</b>	
LD50 Oral Rat	> 90000 mg/kg

**Skin Corrosion/Irritation:** Not classified (Slightly irritant but not relevant for classification)

**pH:** 6.5 - 8.5

**Serious Eye Damage/Irritation:** Causes eye irritation.

**pH:** 6.5 - 8.5

**Respiratory or Skin Sensitization:** May cause an allergic skin reaction.

**Germ Cell Mutagenicity:** Not classified (Based on available data, the classification criteria are not met)

**Carcinogenicity:** Suspected of causing cancer

<b>Anthraquinone (84-65-1)</b>	
IARC group	2B
National Toxicology Program (NTP) Status	Evidence of Carcinogenicity.

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** May cause respiratory irritation

# AV-1011®

## Safety Data Sheet

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**Symptoms/Injuries After Skin Contact:** May cause an allergic skin reaction. Symptoms may include: Redness, pain, swelling, itching, burning, dryness, and dermatitis

**Symptoms/Injuries After Eye Contact:** Causes eye irritation. Symptoms may include: Redness, pain, swelling, itching, burning, tearing, and blurred vision

**Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse effects

**Chronic Symptoms:** Suspected of causing cancer

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

AV-1011®	
LC50 Fish 1	> 190 µg/l
EC50 Daphnia 1	> 240 µg/l

Anthraquinone (84-65-1)	
LC50 Fish 1	2650 mg/l (Exposure time: 96 h - Species: Pimephales promelas)

**12.2. Persistence and Degradability** No additional information available

### 12.3. Bioaccumulative Potential

Anthraquinone (84-65-1)	
Log Pow	3.39

**12.4. Mobility in Soil** No additional information available

### 12.5. Other Adverse Effects

**Other Information** : Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

**Sewage Disposal Recommendations:** Do not dispose of waste into sewer.

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations. 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.

## SECTION 14: TRANSPORT INFORMATION

**14.1. In Accordance with DOT** Not regulated for transport

**14.2. In Accordance with IMDG** Not regulated for transport

**14.3. In Accordance with IATA** Not regulated for transport

## SECTION 15: REGULATORY INFORMATION

### 15.1 US Federal Regulations

AV-1011®	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
EPA FIFRA Pesticide Product Notice	This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.
EPA FIFRA Signal Word	Caution
EPA FIFRA Hazard Statements	Harmful if swallowed. HARMFUL IF ABSORBED THROUGH SKIN. Harmful if inhaled. Moderate eye irritant. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.
EPA FIFRA Precautionary Statements	HAZARDOUS TO HUMANS AND DOMESTIC ANIMALS. NOT A PLANT FOOD INGREDIENT. Keep out of the reach of children. Avoid contact with eyes, skin and clothing. Wash thoroughly with soap and water after handling. Avoid breathing vapor or spray mist. Remove contaminated clothing and wash clothing before reuse.
Anthraquinone (84-65-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.

# AV-1011®

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According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### Water (7732-18-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2 US State Regulations

#### Anthraquinone (84-65-1)

U.S. - California - Proposition 65 -  
Carcinogens List

WARNING: This product contains chemicals known to the State of California to cause cancer.

#### Anthraquinone (84-65-1)

U.S. - New Jersey - Right to Know Hazardous Substance List

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 01/06/2016

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

### GHS Full Text Phrases:

Carc. 2	Carcinogenicity Category 2
Comb. Dust	Combustible Dust
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Skin Sens. 1	Skin sensitization Category 1
Skin Sens. 1A	Skin sensitization Category 1A
H317	May cause an allergic skin reaction
H320	Causes eye irritation
H351	Suspected of causing cancer

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

SDS US (GHS HazCom)

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