1. **IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

   **Product identifier**
   - **Product name**: Areca™

   **Chemical Family**: Aluminum ester of alkyl phosphonate

   **Chemical Name of Active Ingredient(s)**
   - **Fosetyl-aluminum**

   **EPA Registration No.**: 53883-320-59807

   **Recommended Use**: Fungicide; See product label for a complete list of uses and use sites.

   **Restrictions on Use**: See product label for any restrictions on the use of this product.

   **Company information**: OHP, Inc.
   - PO Box 51230
   - Mainland, PA 19451
   - (800) 659-6745

   **Emergency telephone number**
   - FOR FIRE, SPILL, AND/OR LEAK EMERGENCIES CONTACT:
     - (24 hours a day) call: Chemtrec: 1-800-424-9300
   - FOR MEDICAL EMERGENCIES AND HEALTH AND SAFETY INQUIRIES CONTACT (24 hours a day) and Product Information call: 1-800-356-4647

   **SDS Information or Request**: ohp.com

2. **HAZARD(S) IDENTIFICATION**

   **EMERGENCY OVERVIEW**: White granules with a faint odor. Causes temporary eye irritation.

   **OSHA HCS CLASSIFICATION (29 CFR 1910.1200)**
   - **Eye Damage/Irritation**: Category 2A

   **Signal Word**: WARNING

   **Hazard Statement(s)**: Causes eye irritation.

   **Precautionary Statement(s)**:
   - **Prevention**: Wash hands thoroughly after handling.
   - Wear eye protection/face protection.

   **Response**: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

   **Storage**: No statement required. See Section 7 for storage information.

   **Disposal**: No statement required. See Section 13 for disposal information.

   The following percentage of the mixture consists of components with unknown hazards regarding the acute toxicity:
   - 13.53% Acute oral toxicity
   - 17.53% Acute dermal toxicity
   - 17.53% Acute Inhalation toxicity
   - 13.53% Eye irritation
   - 13.53% Skin irritation
   - 13.53% Skin sensitization

3. **COMPOSITION/INFORMATION ON INGREDIENTS**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fosetyl-aluminum</td>
<td>39148-24-8</td>
<td>80.0%</td>
</tr>
</tbody>
</table>

   *Ingredients not listed or listed with a weight % range are considered a trade secret and are withheld under 29 CFR 1910.1200(i).*

4. **FIRST AID MEASURES**

   **IF IN EYES**: Hold eye open and rinse slowly and gently with water for 15 to 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.

   **IF ON SKIN**: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center 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 mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

   **IF INGESTED**: 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 do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

5. **FIREFIGHTING MEASURES**

   **Suitable Extinguishing Media**: Dry chemical, foam, water spray (fog), carbon dioxide

   **Unsuitable Extinguishing Media**: Heavy water stream

   **Hazardous Combustion Products**: Thermal decomposition
SAFETY DATA SHEET

ARECA™

EPA Registration Number: 53883-320-59807

may produce oxides of carbon, nitrogen, phosphorous and aluminum.

Special Protective Equipment & Precautions . . . . . . . . . : Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Foam and/or dry chemical are preferred to minimize environmental contamination. If water is used, dike and collect water to prevent run-off. Wear self-contained breathing apparatus and full fire-fighting turn-out gear (Bunker gear).

Unusual Fire & Explosion Hazards . . . . . . . . : May form explosive dust mixtures with air.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions . . . . : See Section 8 for personal protection equipment.

Environmental Precautions : Keep spilled material and any rinseate from contaminating soil or from entering sewage and drainage systems and bodies of water.

Methods for Containment . . . : Isolate the spill area. Keep unnecessary and unprotected personnel from entering. Avoid inhalation of dust. Avoid actions that cause dust to become airborne.

Methods for Clean-up . . . . : Uncontaminated product may be placed in a container for use according to label directions. Do not put spilled material back in the original container. Avoid actions that cause dust to become airborne during dry clean-up such as sweeping or using compressed air. Use HEPA vacuum or thoroughly wet with water to clean-up dust. Pick up wash liquid with additional absorbent and place in a disposable container.

Other Information . . . . : None known

7. HANDLING AND STORAGE

Handling . . . . . . . . : RECOMMENDATIONS ARE INTENDED FOR MANUFACTURING, PACKAGING AND COMMERCIAL BLENDING WORKERS. PESTICIDE APPLICATORS AND WORKERS must refer to the product label and Directions for Use attached to the product for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard 40 CFR part 170. Handle and open container in a manner as to prevent spillage. Do not eat, drink or smoke while handling this product. Immediately wash off accidental contact with product from skin, clothing and out of eyes.

Storage . . . . . . . . : See pesticide label for full information on product storage. Do not contaminate water, food or feed by storage of this product. Store away from sources of heat, out of direct sunlight and away from incompatible materials. Pesticides should be stored in secured areas away from children and animals.

Storage
Temperature (Min/Max) . . . : Not determined
Product Incompatibilities . . . : Strong acids and bases

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Users of a pesticide product must refer to the product label for personal protective equipment requirements.

Exposure Guidelines:

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>NIOSH REL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrous magnesium silicate (CAS # 14807-96-6)</td>
<td>20 million particles per cubic foot (TWA)</td>
<td>2 mg/m³ (TWA)</td>
<td>2 mg/m³ (TWA)</td>
</tr>
</tbody>
</table>

Engineering Controls . . . : Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs or other specified exposure limits. Local exhaust ventilation is preferred.

Respiratory Protection . . . : In areas of poor ventilation or where exposure limits are exceeded, use a NIOSH approved respirator with cartridges/canisters approved for pesticides.

Eye Protection . . . : Chemical goggles or safety glasses and full-face shield.

Protective Gloves . . . : Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile, neoprene rubber, polyvinyl chloride (PVC) or Viton.

Other Protective Clothing . . : Long-sleeved shirt, long pants and shoes plus socks.

General Safety Measures . . : Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately after handling this product. Wash outside of gloves before removing. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product’s concentrate. Do not reuse them. Follow manufacturer’s instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance . . . . : White granules (solid)
Odor . . . . . . . : Faint
Odor Threshold . . . : Not determined
### 10. STABILITY AND REACTIVITY

**Reactivity**: Not reactive under normal conditions.

**Chemical Stability**: Stable under normal storage and handling conditions.

**Possibility of Hazardous Reactions**: No potential for hazardous reactions known.

**Conditions to Avoid**: High humidity.

**Incompatible Materials**: Strong acids and strong bases.

**Hazardous Decomposition Products**: Thermal decomposition may produce oxides of carbon, nitrogen, phosphorous and aluminum.

### 11. TOXICOLOGICAL INFORMATION

**Likely Routes of Exposure**: Eye contact, Skin contact, Inhalation, Ingestion.

**Symptoms of Exposure**: Mild to moderate, but temporary, eye irritation.

**Oral LD₅₀**: 2,860 mg/kg (Based upon similar formulation.)

**Dermal LD₅₀**: >2,000 mg/kg (Based upon similar formulation.)

**Inhalation LC₅₀**: >5.0 mg/L (Based upon similar formulation.)

**Eye Irritation/Damage**: Mildly irritating (Based upon similar formulation.)

**Skin Corrosion/Irritation**: Slightly irritating (Based upon similar formulation.)

**Skin Sensitization**: Not a sensitizer (Based upon similar formulation.)

**Chronic/Subchronic Toxicity**: No data available.

**Mutagenicity**: No data available.

**Reproductive Toxicity**: No data available.

**Neurotoxicity**: No data available.

**Target Organs**: No data available.

**Aspiration Hazard**: Not anticipated to be an aspiration hazard.

**Carcinogenicity**: See below.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>None listed</td>
<td></td>
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</tbody>
</table>

### 12. ECOLOGICAL INFORMATION

**Environmental Hazards Statement from FIFRA Regulated Pesticide Label**:

This pesticide is toxic to aquatic and estuarine invertebrates. Drift and runoff may be hazardous to aquatic and estuarine organisms in neighboring areas. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment washwaters.

**ECOTOXICITY DATA**: Data presented below is on the fosetyl-aluminum technical.

**Fish Toxicity**: *Oncorhynchus mykiss*: 96-hour LC₅₀ = 430 mg/L

**Aquatic Invertebrate Toxicity**: *Daphnia magna*: 48-hour EC₅₀ = 178 – 365 mg/L

**Aquatic Plant Toxicity**: *Scenedesmus pannonicus*: 90-hour EC₅₀ = 21.9 mg/L

**Avian Toxicity**: No data available.

**Honeybee Toxicity**: No data available.

**ENVIRONMENTAL EFFECTS**:

**Persistence and Degradability**: No data available.

**Bioaccumulation**: No data available.

**Mobility**: No data available.

**Other Adverse Effects**: No data available.
13. DISPOSAL CONSIDERATIONS

Waste Disposal . . . . . . . . . .: Refer to the pesticide label for full information on disposal. Pesticide wastes are toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal law. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

Container Disposal . . . . . . . . . .: Refer to the pesticide label for full information on disposal. When possible, triple rinse the container and offer for recycling if available.

RCRA Characteristics . . . . . . . . : It is the responsibility of the individual disposing of this product to determine the RCRA classification and hazard status of the waste.

14. TRANSPORTATION INFORMATION

DOT (Ground): . . . . . . . . . .: Not regulated
IMDG (Sea) . . . . . . . . . . . . . .: Not regulated
IATA (Air) . . . . . . . . . . . . . : Not regulated

15. REGULATORY INFORMATION

Labeling Requirements Under FIFRA: This chemical is a pesticide product registered by the 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 and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

CAUTION
Harmful if swallowed, absorbed through skin or inhaled. Causes moderate eye irritation. Avoid contact with eyes, skin, and clothing.

TSCA Inventory . . . . . . . . . .: This product is exempt from TSCA inventory listing requirements as it is solely for FIFRA regulated use.

SARA Title III Information:

Section 302 – Extremely hazardous substances . . : None
Section 311/312 – Hazard Categories . . . . : Acute (Immediate)
Section 313 – . . . . . . . . : This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Weight %</th>
<th>SARA 313 – Threshold Values (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None listed</td>
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</table>

CERCLA – This product contains the following chemicals which have a reportable quantity (RQ) under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>RQ</th>
<th>Quantity of Finished Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>None listed</td>
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<td></td>
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</table>

CALIFORNIA PROPOSITION 65:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Prop 65 Category(ies)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None listed</td>
<td></td>
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</table>

U.S. STATE RIGHT-TO-KNOW REGULATIONS:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fosetyl-aluminum</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Sodium sulfate</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION

NFPA

<table>
<thead>
<tr>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>0</td>
<td>None</td>
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Revision Date . . . . . . . . : July 29, 2016
Document Superseded . . . . : N/A – New document

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