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

- **Product identifier**
  - Trade name: TRIATHLON® BA
  - Product type: Liquid Concentrate
  - Active Ingredient: Bacillus amyloliquefaciens strain D747
  - EPA Registration No.: 70051-107-59807

Relevant identified uses of the substance or mixture and uses advised against
- **Identified uses**: Bio-Fungicide
- **Uses advised against**: Any use not listed on the label

Details of the supplier of the safety data sheet
- **Company information**: OHP, Inc.
  - PO Box 51230
  - Mainland, PA 19451
  - (800) 659-6745

Emergency telephone number
- **TRANSPORTATION EMERGENCY (24 hours a day) call**: Chemtrec: 1-800-424-9300
- **MEDICAL EMERGENCY (24 hours a day) and Product Information call**: 1-800-356-4647

SDS Information or Request: ohp.com

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture
- **Hazard Classification**: Not classified as hazardous by OSHA

- **EPA Signal Word**: Caution see section 15

- **Hazard Statements**: None

- **Pictogram**: None

Precautionary Statements: Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with eyes, or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco and using the toilet.

Other Hazards: For Terrestrial Uses:
- Do not apply directly to water or to areas where surface water is present, or to intertidal areas below mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate. Do not apply when weather conditions favor drift or runoff from treated areas.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Substance/Ingredient</th>
<th>Percentage</th>
<th>CAS#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacillus amyloliquefaciens strain D747</td>
<td>98.85</td>
<td>68038-60-8</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Description of first aid measures
- **Eye Contact**: Immediately flush with water holding eye open for 15-20 minutes. Remove contact lenses after 5 minutes if present and continue rinsing eye. Seek medical attention if irritation persists.

- **Skin Contact**: Remove contaminated clothing and wash affected area with plenty of soap and water. If irritation persists call poison control or doctor for treatment advice.

- **Inhalation**: Remove individual to fresh air. If person is not breathing call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth if possible. Call poison control center or doctor for further advice.

Most important symptoms and effects, both acute and delayed
- May cause an allergic reaction in some individuals

Indication of any immediate medical attention and special treatment needed
- **Note to Physicians**: The active ingredient contained in this product has a high affinity for activated charcoal. In case of ingestion of large amounts, administer 5 mg/kg activated charcoal suspension (50g/400mL water).

5. FIREFIGHTING MEASURES

- **Extinguishing media**: All extinguishing media

- **Suitable Extinguishing Media**: None known

- **Unsuitable Extinguishing Media**: None known

Special hazards arising from the substance or mixture
- **Hazardous combustion products**: None known

Advice for firefighters
- **Protection of Firefighters**: None specified
6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Use personal protections as indicated in Section 8.

For emergency responders: Use personal protection recommended in Section 8.

Environmental precautions
Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local and national health and environmental regulations.

Methods and material for containment and cleaning up

Methods for Containment: Recover free product. Use absorbent material to minimize runoff of product or mixed product.

Methods for Clean-Up: Sweep up and place in a chemical container. Seal the container and handle in an approved manner. Do not allow wash water to contaminate water supplies. Dispose of in accordance with Federal State and local regulations for disposal of non-hazardous waste.

Other Information: None

Reference to other sections
See Section 8 for occupational exposure limits and risk management measures. Refer to Section 13 for disposal considerations.

7. HANDLING AND STORAGE

Precautions for safe handling:
- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticides got 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.

Conditions for safe storage, including any incompatibilities
Store pesticide in a cool dry area that is inaccessible to children. Store in original containers only. Keep container closed when not in use.

Specific end use(s)
Wastes resulting from the use of this product maybe be disposed of on site or at an approved waste disposal facility.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters
OSHA Permissible Exposure Limits (PELs): Not determined
ACGIH Threshold Limit Values: Not determined
Other Exposure Limits: Not determined

Exposure controls
Engineering Controls: Use in well ventilated area
Personal Protective Equipment
Eye/ Face Protection: None specified
Skin Protection: Long sleeved shirt and long pants
Hand Protection: Waterproof gloves
Body Protection: Shoes plus socks
Respiratory Protection: Mixer loaders and applicators must wear a dust/mist respirator meeting NIOSH standards of at least N-95, R-95, or P-95.
Thermal Hazards: None
General Hygiene
Considerations: Repeated exposure to high concentrates of microbial proteins can cause allergic sensitization.
Wash clothing and PPE using manufacturer’s instructions immediately after use and before reuse.

Environmental exposure controls
Do not apply directly to water or to areas where surface water is present or intertidal areas below high water mark. Do not contaminate water when disposing of equipment wash water or rinsate. Do not apply when weather conditions favor drift or run off from treated areas.
9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

- **Appearance**: Tan liquid
- **Odour**: Yeast like
- **Odour Threshold**: Not determined
- **pH**: 4.0-5.0
- **Melting Point / Freezing Point**: 32°F (0°C)
- **Initial Boiling Point**: 212°F (100°C)
- **Boiling Range**: Not available
- **Flash Point**: Not available
- **Evaporation Rate**: Not available
- **Flammability (solid, gas)**: Not available
- **Lower & Upper Flammability Limits**: Not available
- **Vapour Pressure**: Not available
- **Vapour Density**: Not available
- **Density**: 8.5-8.6 lb./gallon
- **Solubility**: Not available
- **Partition Coefficient (n-octanol/water)**: Not available
- **Auto-ignition Temperature**: Not available
- **Decomposition Temperature**: Not available
- **Viscosity**: 4.0-16 cP
- **Explosive Properties**: None known
- **Oxidising Properties**: None known
- **Other information**: Not available.

10. STABILITY AND REACTIVITY

- **Reactivity**: Stable
- **Chemical stability**: Stable
- **Possibility of hazardous reactions**: None known
- **Conditions to avoid**: None known
- **Incompatible materials**: None known
- **Hazardous decomposition products**: None known

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

**Acute Toxicity**

**Toxicological information on the substance or mixture:**

- **LD$_{50}$ (oral)**: LD$_{50}$ > 5000 mg/kg body weight rat, test results based on similar product containing the same active ingredient.
- **LD$_{50}$ (dermal)**: LD$_{50}$ > 5050 mg/kg body weight rat, test results based on similar product containing the same active ingredient.
- **LC$_{50}$ (inhalation)**: LC$_{50}$ > 2.18 mg/L, test results based on similar product containing the same active ingredient.

**Skin corrosion / irritation**: Non-irritating, Toxicity Category IV

**Eye irritation**: No positive effects exhibited in any eyes after treatment. Practically non-irritating, Toxicity Category IV

**Respiratory or skin sensitization**: No data available.

**Other information on adverse health effects:**

- **Carcinogenicity**: NTP Listed: Not applicable.
- **IARC Listed**: Not applicable.
- **OSHA**: Not applicable.

**Reference to other sections**

See Section 4 for symptoms and acute and delayed effects.

12. ECOLOGICAL INFORMATION

**Toxicity**

<table>
<thead>
<tr>
<th>Test species</th>
<th>Test method</th>
<th>Test substance</th>
<th>LC$_{50}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Bobwhite</td>
<td>Acute oral toxicity</td>
<td><em>B. amyloliquefaciens</em> strain D747</td>
<td>LD$_{50}$ &gt; 2250 mg/kg body weight</td>
</tr>
<tr>
<td>Oncorhynchus mykiss</td>
<td>30 days</td>
<td><em>B. amyloliquefaciens</em> strain D747</td>
<td>LC$_{50}$ &gt; 8.1 x 10$^9$ CFU/L</td>
</tr>
<tr>
<td>Daphnia magna</td>
<td>21 days</td>
<td><em>B. amyloliquefaciens</em> strain D747</td>
<td>EC$_{50}$ &gt; 2.3 x 10$^9$ CFU/L</td>
</tr>
<tr>
<td>Apis mellifera</td>
<td>48 hour</td>
<td><em>B. amyloliquefaciens</em> strain D747</td>
<td>LC$_{50}$ &gt; 1.0 x 10$^9$ CFU/mL</td>
</tr>
</tbody>
</table>
Persistence and degradability: The active substance B. amyloliquefaciens D747 populations spreading to the environment during or after field application will rapidly decline to naturally occurring background levels.

Bioaccumulative potential: The active substance B. amyloliquefaciens D747 does not multiply and accumulate in animals and humans.

Mobility in soil: The active substance B. amyloliqufaciens D747 spores readily adsorb to the clay fractions in soils and show no evidence of leaching. Therefore the risk of ground water contamination is considered negligible.

Other adverse effects: No data available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

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

Pesticide Storage: Store in a dry area inaccessible to children. Store in original containers only. Keep container closed when not in use.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of onsite or at an approved waste disposal facility.

Container Handling: Non-refillable container. Do not reuse or refill this container.

- For containers equal to or less than 5 gallons
  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 equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

- For containers greater than 5 gallons
  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 equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

14. TRANSPORTATION INFORMATION

UN number: Not regulated.
UN proper shipping name: Not regulated.
Transport hazard class(es): Not regulated.
Packaging group: Not regulated.
Environmental hazards: Not regulated.
Special precautions for user: Not regulated.
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not regulated.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

EPA: This product 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-pesticidal chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

CAUTION, KEEP OUT OF REACH OF CHILDREN
Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.
Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.
SAFETY DATA SHEET

TRIATHLON® BA

EPA Registration Number: 70051-107-59807

16. OTHER INFORMATION

Disclaimer:
To the best of our knowledge, the information contained herein is accurate. However, neither OHP, Inc. nor any of its subsidiaries assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All material may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

SDS Information:

Revision date . . . . . . . . . . . .: March 23, 2015

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