

# MATERIAL SAFETY DATA SHEET



Date Issued: 06/16/2010  
 MSDS No: AZERA™  
 Date-Revised: 07/18/2011  
 Revision No: 2

## AZERA™ Insecticide

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** AZERA™ Insecticide  
**PRODUCT DESCRIPTION:** An Insecticide Formulation for use in Spraying Equipment.  
**PRODUCT CODE:** 2905, EPA REG. NO. : 1021-1872  
**ACTIVE INGREDIENT(S):** Pyrethrins; Azadirachtin

#### MANUFACTURER

McLaughlin Gormley King Company  
 8810 10th Avenue North  
 Minneapolis, MN 55427  
**Service Number:** (800) 645-6466  
**Alternate Customer Service:** (763) 544-0341

#### 24 HR. EMERGENCY TELEPHONE NUMBERS

**CHEMTREC U.S. and CANADA:**(800) 424-9300  
**CHEMTREC All Other Areas:**(703) 527-3887  
**Emergency Phone:**(888) 740-8712  
**Alternate Emergency Phone:**(952) 852-9509

**COMMENTS:** MGK® Hours of operation are 8:00 am to 4:30 pm CST, 14:00 to 22:30 GMT.

For MEDICAL EMERGENCIES or PESTICIDE INCIDENTS, call 24 hours a day to 1-888-740-8712.

### 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**IMMEDIATE CONCERNS:** CAUTION. OSHA-COMBUSTIBLE LIQUID. Do not use or store near heat, sparks, open flame, or any other ignition sources. Causes moderate eye irritation. Avoid contact with skin, eyes, and clothing.

Wear OSHA-approved safety glasses with side-shields, safety goggles, or a full face-shield.  
 Wear chemical-resistant gloves such as Barrier Laminate, Neoprene Rubber, Nitrile Rubber, or Viton.  
 Wear a long-sleeved shirt and long pants, shoes and socks.

#### POTENTIAL HEALTH EFFECTS

**EYES:** Causes moderate eye irritation.

**SKIN:** Can cause skin irritation. Can cause a burning or prickling sensation on more sensitive areas (face, eyes, mouth). Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

**SKIN ABSORPTION:** May be harmful if absorbed through the skin.

**INGESTION:** May be harmful if swallowed.

**INHALATION:** Excessive inhalation may be irritating to the respiratory tract.

#### SIGNS AND SYMPTOMS OF OVEREXPOSURE

**CHRONIC EFFECTS:** None known.

**COMMENTS:** This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS	EINECS
Pyrethrins	1.4	8003-34-7	232-319-8
Azadirachtin	1.2	11141-17-6	Not Avail.

**COMMENTS:** Ingredients not identified are proprietary or non-hazardous. Values are not product specifications.

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### 4. FIRST AID MEASURES

**EYES:** Hold eye open and rinse slowly and gently with water for 15-20 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.

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

**INGESTION:** If swallowed, IMMEDIATELY call a poison control center or doctor 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 a doctor. Never give anything by mouth to an unconscious person.

**INHALATION:** Remove affected 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.

**NOTES TO PHYSICIAN:** For skin effects, a highly efficient therapeutic agent for pyrethrin exposure is topical application of tocopherol acetate (Vitamin E).

### 5. FIRE FIGHTING MEASURES

**FLASHPOINT AND METHOD:** 67.2°C (153°F) TAG Closed Cup

**FLAMMABLE CLASS:** OSHA-COMBUSTIBLE LIQUID

**EXTINGUISHING MEDIA:** Foam, carbon dioxide or dry chemical.

**HAZARDOUS COMBUSTION PRODUCTS:** Under fire conditions this product will support combustion and may decompose to give off toxic gases such as carbon monoxide, carbon dioxide, and nitrogen oxides.

**FIRE FIGHTING PROCEDURES:** Treat as an oil fire. Use a full-faced self-contained breathing apparatus along with full protective gear. Keep nearby containers and equipment cool with a water stream.

### 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Shut off ignition sources. Stop release, if possible without risk. Dike or contain release, if possible, and if immediate response can prevent further damage or danger. Isolate and control access to the release area. Take actions to reduce vapors. Absorb with appropriate absorbent. Clean spill area of residues and absorbent.

**LARGE SPILL:** Shut off ignition sources. Stop release, if possible without risk. Dike or contain release, if possible, and if immediate response can prevent further damage or danger. Isolate and control access to the release area. Take actions to reduce vapors. Collect product into drums, etc. via drains, pumps, etc. Absorb with appropriate absorbent. Clean spill area of residues and absorbent.

#### ENVIRONMENTAL PRECAUTIONS

**WATER SPILL:** Contains Pyrethrins, which are toxic to fish and other aquatic invertebrates. Contaminated absorbent and wash water should be disposed of according to local, state, and federal regulations.

### 7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** Do not use or store near heat, sparks, open flame, or any other ignition sources.

**HANDLING:** Wear OSHA-approved safety glasses with side-shields, safety goggles, or a full-face shield. Wear chemical-resistant gloves such as Barrier Laminate, Neoprene Rubber, Nitrile Rubber, or Viton. Wear a long-sleeved shirt and long pants, shoes and socks. Mechanical ventilation should be used when handling this product in enclosed spaces. Do not contaminate water, food or feedstuffs by storage, handling, or disposal.

READ AND OBSERVE ALL PRECAUTIONS AND INSTRUCTIONS ON THE LABEL.

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**STORAGE:** Store in a cool, dry, well-ventilated place. Keep container closed. Do not use or store near heat, sparks, open flame, any ignition sources, or near strong acids, bases, and oxidizers. Always store pesticides in the original container. Store away from food and pet-food.

KEEP OUT OF REACH OF CHILDREN.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		Supplier OEL	
Chemical Name		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Pyrethrins	TWA		5		5		
Azadirachtin	TWA	None		None		None	

**ENGINEERING CONTROLS:** Mechanical ventilation should be used when handling this product in enclosed spaces. Local exhaust ventilation may be necessary.

#### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Wear OSHA-approved safety glasses with side-shields, safety goggles, or a full-face shield.

**SKIN:** Wear chemical-resistant gloves such as Barrier Laminate, Neoprene Rubber, Nitrile Rubber, or Viton, and wear protective clothing.

**PROTECTIVE CLOTHING:** Wear a long-sleeved shirt and long pants, shoes and socks.

**WORK HYGIENIC PRACTICES:** DO NOT SMOKE, EAT, OR DRINK, OR APPLY COSMETICS IN WORK AREA!

Wash promptly if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking, or using the toilet.

#### OTHER USE PRECAUTIONS: 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 the label about personal protective equipment (PPE), and restricted-entry interval. The requirements listed below 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.

PPE required for early entry to treated areas that is permitted under Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: Coveralls; Chemical-resistant gloves such as Barrier Laminate, Nitrile Rubber, Neoprene Rubber, or Viton; Shoes plus socks.

#### COMMENTS: NON-AGRICULTURAL USE REQUIREMENTS:

The requirements in this section apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR, Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

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Keep unprotected persons out of treated areas until sprays have dried.

Wear protective clothing when using or handling this product to help avoid exposure to eyes and skin. Gloves, a long-sleeved shirt and long-pants are recommended.

Allow spray to dry before allowing adults, children, or pets on treated areas.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Liquid

**ODOR:** Fruit-like odor.

**APPEARANCE:** Dark, amber-colored liquid.

**COLOR:** 18 on Gardner Scale.

**pH:** 5

**Notes:** @ 5% in water.

**VAPOR DENSITY:** Heavier than air.

**FREEZING POINT:** Not Determined

**FLASHPOINT AND METHOD:** 67.2°C (153°F) TAG Closed Cup

**SOLUBILITY IN WATER:** Partially miscible in water.

**SPECIFIC GRAVITY:** 0.941 (Water = 1) at 20°C (68°F)

**VISCOSITY #1:** 34.7 CPS at 24.3°C (75.7°F) Brookfield

**(VOC):** < 6.000 %

### 10. STABILITY AND REACTIVITY

**STABLE:** Yes

**HAZARDOUS POLYMERIZATION:** No

**CONDITIONS TO AVOID:** Not compatible with strong acids or bases. Not compatible with strong oxidizers.

### 11. TOXICOLOGICAL INFORMATION

#### ACUTE

**DERMAL LD<sub>50</sub>:** > 5000 mg/kg

**Notes:** Albino rabbit.

**ORAL LD<sub>50</sub>:** > 5000 mg/kg

**Notes:** Albino rat.

**INHALATION LC<sub>50</sub>:** The Acute Inhalation LC<sub>50</sub> of this material places it in EPA Toxic Category IV.

**EYE EFFECTS:** Irritation clearing within 72 hours.

**SKIN EFFECTS:** Slight irritation at 72 hours. Irritation Index = 0.80

**SENSITIZATION:** Positive.

**GENERAL COMMENTS:** Some or all of the toxicity data reported above was bridged from a substantially similar formula.

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**COMMENTS:** None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as being carcinogens.

Carcinogenicity/ Oncogenicity - Slightly elevated incidences of benign tumors of the thyroid and liver were seen in rats following lifetime administration of high doses of Pyrethrins. Further detailed scientific studies into the mode of action responsible for these effects show that:

- 1) Because of biological species differences, the rat thyroid tumors are not relevant to humans.
- 2) The rat liver tumors occur in animals *only* at doses greatly exceeding human exposure levels and that cause cell proliferation (mitogenesis).

Based on these data, the USEPA has classified Pyrethrins as "Not Likely to be Carcinogenic to Humans," at doses that do not cause a mitogenic response in the liver/ cell proliferation. Thus, Pyrethrins can be considered to be non-carcinogenic at exposure levels relevant to human use of Pyrethrins-containing products.

### 12. ECOLOGICAL INFORMATION

#### ECOTOXICOLOGICAL INFORMATION:

This product is toxic to aquatic organisms, including fish and invertebrates. Drift and run-off may be hazardous to aquatic organisms in water adjacent to treated areas. This product may contaminate water through run-off. This product has a potential for run-off for several weeks after application. Poorly draining soils and soils with shallow water tables are more prone to produce run-off that contains this product.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area.

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash-waters or rinsate. See the 'Directions for Use' on the product label for additional precautions and restrictions.

### 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

**EMPTY CONTAINER:** Non-refillable container. DO NOT reuse or refill this container.

Triple-rinse container (or equivalent) promptly after emptying. Triple-rinse as follows for containers of 5 gallons (18.9 Liters) or less: Empty the remaining contents into application equipment or a mix-tank and drain for 10 seconds after the flow begins to drip. Fill the container  $\frac{1}{4}$  full with water and re-cap. Shake for 10 seconds. Pour rinsate into application equipment or a 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. Offer for recycling if available, or reconditioning if appropriate, or puncture and dispose of container in a sanitary landfill, or by other procedures approved by state and local authorities.

**RCRA/EPA WASTE INFORMATION:** This product contains the following RCRA/CERCLA Hazardous wastes/substances:

Component, RCRA ID#, CERCLA RQ:

Pyrethrins, N/A, 1 Lb.

### 14. TRANSPORT INFORMATION

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### DOT (DEPARTMENT OF TRANSPORTATION)

**PROPER SHIPPING NAME:** Insecticides, Insect or Animal Repellent, Liquid, N.O.S.

**PRIMARY HAZARD CLASS/DIVISION:** Non-Hazardous

**REPORTABLE QUANTITY (RQ) UNDER CERCLA:** 71.4 Lbs.

**OTHER SHIPPING INFORMATION:** This material is not regulated as a hazardous material by the DOT in quantities less than 71.4 Lbs.

Proper DOT shipping name for quantities more than 71.4 Lbs.:

Environmentally Hazardous Substance, Liquid, N.O.S., RQ (Pyrethrins), 9, UN3082, III

### AIR (ICAO/IATA)

**SHIPPING NAME:** Insecticides, Insect or Animal Repellent, Liquid, N.O.S.

**PRIMARY HAZARD CLASS/DIVISION:** Non-Hazardous

### VESSEL (IMO/IMDG)

**SHIPPING NAME:** Not Available

## 15. REGULATORY INFORMATION

### UNITED STATES

#### SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

**FIRE:** Yes **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** Yes

**313 REPORTABLE INGREDIENTS:** This product contains no SARA Title III Section 313 chemicals that exceed the reporting limits.

#### 302/304 EMERGENCY PLANNING

**EMERGENCY PLAN:** There are no SARA Title III Section 302 extremely hazardous substances present in this formulation (40 CFR 355).

See Section 13 of this MSDS for the components that are subject to emergency requirements under CERCLA Section 103(a)(40 CFR 302.4).

#### TSCA (TOXIC SUBSTANCE CONTROL ACT)

**TSCA STATUS:** All chemical substances found in this product comply with the Toxic Substances Control Act's inventory reporting requirements.

### REGULATIONS

#### STATE REGULATIONS:

#### VOLATILE ORGANIC COMPOUNDS (VOC):

This product contains less than 6% VOC's.

## 16. OTHER INFORMATION

**REVISION SUMMARY:** Revision #: 2. This MSDS replaces the July 18, 2011 MSDS. Any changes in information are as follows: In Section 9: (Group Field) for Freezing Point

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### HMIS RATING

HEALTH:	2
FLAMMABILITY:	2
PHYSICAL HAZARD:	1
PERSONAL PROTECTION:	

**HMIS RATINGS NOTES:** We assign HMIS ratings to this product based on the hazards of its ingredients(s). Since the customer is most aware of the applications and conditions of use, he or she must ensure that the proper Personal Protective Equipment is provided, consistent with the information contained in Section's 7 and 8 of this MSDS.

**COMMENTS:** The data contained herein are based on information currently available to McLaughlin Gormley King Company and, to the best of our knowledge, are accurate and based on sound expert opinion. Our statements herein, however, are not to be taken as a warranty or representation for which McLaughlin Gormley King Company assumes legal responsibility.

MSDS Prepared by T. Azzivitto