1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier
Product Name: AZERA® Gardening
EPA Registration Number: 1021-1872

Other means of identification
Part Code: 2905

Recommended use of the chemical and restrictions on use:
Recommended Use: An Insecticide for Organic Crop Protection.

Details of the supplier of the safety data sheet

Manufacturer Address: McLaughlin Gormley King Company
8810 10th Avenue North
Minneapolis, MN 55427
Telephone Number: (800) 645-6466, or (763) 544-0341
e-Mail Address: mgk-sds@mgk.com

Emergency telephone numbers:
24 Hour TRANSPORTATION Emergency: CHEMTREC®: (800) 424-9300
International: (703) 527-3887

24 Hour MEDICAL Emergency: SafetyCall®: (888) 740-8712, or (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 (888) 740-8712, or (952) 852-9509.

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status:
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Inhalation (Dusts/Mists)</td>
<td>Category 4</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>Category 1</td>
</tr>
<tr>
<td>Aspiration toxicity</td>
<td>Category 1</td>
</tr>
<tr>
<td>Flammable liquids</td>
<td>Category 4</td>
</tr>
</tbody>
</table>

Label elements

Emergency Overview

DANGER
**Hazard statements**
- H304 - May be fatal if swallowed and enters airways
- H332 - Harmful if inhaled
- H315 - Causes skin irritation
- H317 - May cause an allergic skin reaction
- H402 - Harmful to aquatic life
- H412 - Harmful to aquatic life with long lasting effects
- H227 - Combustible liquid

**Precautionary Statements - Prevention:**
- P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
- P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
- P264 - Wash face, hands and any exposed skin thoroughly after handling
- P271 - Use only outdoors or in a well-ventilated area
- P272 - Contaminated work clothing should not be allowed out of the workplace
- P280 - Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response:**
- P321 - Specific treatment (see Section 4/ First Aid).
- P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
- P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
- P362 - Take off contaminated clothing and wash before reuse
- P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- P312 - Call a POISON CENTER or doctor/physician if you feel unwell
- P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- P331 - Do NOT induce vomiting
- P370 + P378 - In case of fire: Use CO2, dry chemical, or foam for extinction

**Precautionary Statements - Storage:**
- P405 - Store locked up
- P403 + P235 - Store in a well-ventilated place. Keep cool

**Precautionary Statements - Disposal:**
- P501 - Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC):**
Not applicable.

---

**3. COMPOSITION/ INFORMATION ON INGREDIENTS**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Azadirachtin</td>
<td>11141-17-6</td>
<td>1.20</td>
</tr>
<tr>
<td>Pyrethrins</td>
<td>8003-34-7</td>
<td>1.40</td>
</tr>
<tr>
<td>1-Hexanol</td>
<td>111-27-3</td>
<td>25&lt;----&gt;50</td>
</tr>
</tbody>
</table>
4. FIRST AID MEASURES

Aspiration pneumonia hazard:  • No information available

Description of first aid measures:

Eye contact:  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 Contact:  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.

Self-protection of the First Responder:  Use personal protective equipment as required.

Note to physicians:  For skin effects, a highly efficient therapeutic agent for Pyrethrin/Pyrethroid exposure is topical application of tocopherol acetate (Vitamin E).

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Unsuitable extinguishing media:
Caution: Use of water spray when fighting fire may be inefficient.

Hazardous combustion products:  Carbon monoxide, Carbon dioxide (CO2).

Specific hazards arising from the chemical
Keep product and empty container away from heat and sources of ignition. Risk of ignition.

Explosion data
Sensitivity to Mechanical Impact:  None.
Sensitivity to Static Discharge:  None.

Protective equipment and precautions for firefighters:
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions: Use personal protective equipment as required. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Pay attention to flashback. Take precautionary measures against static discharges.

Environmental precautions: Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment: Prevent further leakage or spillage if safe to do so.

Methods for cleaning up: Cover liquid spill with sand, earth or other non-combustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Pick up and transfer to properly labeled containers. Soak up with inert absorbent material. Dam up. Take precautionary measures against static discharges.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling: Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Use with local exhaust ventilation. All equipment used when handling the product must be grounded. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). For more information, see product label.

Conditions for safe storage, including any incompatibilities

Storage Conditions: Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat. Keep in properly labeled containers. For more information, see product label.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Control parameters

Exposure Guidelines: This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
### 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties:

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Comment: Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td>@ 5% in H₂O.</td>
</tr>
<tr>
<td>Appearance</td>
<td>Dark, amber</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Fruity-odor/ odor of fruit.</td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Color (Gardner Scale)</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>67.2 °C / 153.0 °F</td>
<td>Tag Closed Cup;</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit (UEL)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit (LEL)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient; n-Octanol</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Water:</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>
Autoignition temperature: No information available
Decomposition temperature: No information available
Kinematic viscosity: No information available
Dynamic viscosity: 34.7 cPs. @ 24.3 °C.
Refractive Index: 1.4409 @ 25°C (77°F)

Other Information:

Density: 0.941 g/cm³ @ 20.0 °C
VOC Content (%): 58.05

Miscibility/ Solubility:
Water: Partially miscible
Alcohol: Miscible
Aromatic solvents: Partially miscible
Petroleum distillates: Partially miscible

10. STABILITY AND REACTIVITY

Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Hazardous polymerization: Hazardous polymerization does not occur.

Conditions to avoid
Heat, flames and sparks.

Incompatible materials:
Incompatible with strong acids and bases. Incompatible with oxidizing agents.

Hazardous Decomposition Products
Carbon monoxide, Carbon dioxide (CO2).

11. TOXICOLOGICAL INFORMATION

Numerical measures of toxicity - Product Information

Oral LD₅₀ >5,000 mg/kg (rat)
Dermal LD₅₀ >5,000 mg/kg (rabbit)
Inhalation LC₅₀ >2.04 mg/L (rat; 4 hours)
Eye contact: Irritation clearing in 72 hours. (rabbit).
Skin Contact: Moderate irritation at 72 hours. (rabbit).
Skin Irritation Index: 4.7

Sensitization: Positive. (guinea pig).

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Reproductive toxicity: No information available.
Developmental Toxicity No information available.
12. ECOLOGICAL INFORMATION

Ecotoxicity:

Persistence and degradability
No information available.

Bioaccumulation
No information available.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition coefficient; n-Octanol/ Water:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Hexanol</td>
<td>2.03</td>
</tr>
<tr>
<td>111-27-3</td>
<td></td>
</tr>
</tbody>
</table>

Other adverse effects: No information available

Environmental hazards (EPA):
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 local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes: Disposal should be in accordance with applicable regional, national and local laws and regulations. For more information, see product label.

Contaminated packaging: For more information, see product label.

14. TRANSPORT INFORMATION

DOT (Department of Transportation)

Proper Shipping Name: Insecticides, Insect or Animal Repellent, Liquid
Hazard Class: Non-Hazardous

Other Shipping Information: This material is not regulated as a hazardous material by the DOT in quantities less than 71.4 Lbs.

Shipping name for quantities less than 71.4 Lbs.: Insecticides, Insect or Animal Repellent, Liquid

Air (IATA/ ICAO)

Proper Shipping Name: Insecticides, Insect or Animal Repellent, Liquid
Hazard Class: Non-Hazardous
15. REGULATORY INFORMATION

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard
Categories

Acute health hazard: Yes
Chronic Health Hazard: No
Fire hazard: Yes
Sudden release of pressure hazard: No
Reactive Hazard: No

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyrethrins</td>
<td>1 lb</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8003-34-7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA/SARA RQ</th>
<th>Reportable Quantity (RQ):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyrethrins</td>
<td>1 lb</td>
<td>-</td>
<td>RQ 1 lb final RQ</td>
</tr>
<tr>
<td>8003-34-7</td>
<td></td>
<td></td>
<td>RQ 0.454 kg final RQ</td>
</tr>
</tbody>
</table>

US State Regulations:

California Proposition 65:
This product does not contain any Proposition 65 chemicals

U.S. EPA Label Information:

EPA Registration Number: 1021-1872

Difference between SDS and EPA (FIFRA) Pesticide label:
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 pesticide label also includes other important information, including directions for use. The hazard information required on the pesticide label is reproduced below:
Signal word: CAUTION

Precautionary Statements:
• Causes moderate eye irritation.
• Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

International:
TSCA Does not comply
DSL/NDSL Does not comply
EINECS/ELINCS Does not comply
ENCS Does not comply
IECSC Does not comply
KECL Does not comply
PICCS Does not comply
AICS Does not comply

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION.

Issue Date: 07-Oct-2015  Revision Date: 07-Oct-2015  Revision Note: - New SDS.
- GHS - Classification.

SDS Prepared By: Troy Azzivitto, MGK® Chemistry Department.
e-Mail Address: mgk-sds@mgk.com

Disclaimer: 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.

End of Safety Data Sheet.