## 1. IDENTIFICATION: CHEMICAL PRODUCT AND COMPANY

**PRODUCT NAME:** Aloft® GC SC Insecticide  
**EPA REGISTRATION NUMBER:** 59639-212  
**VC NUMBER(S):** 1993  
**PRODUCT DESCRIPTION:** Insecticide  
*Aloft* is a registered trademark of Valent U.S.A. Corporation

**MANUFACTURER/DISTRIBUTOR**  
VALENT U.S.A. CORPORATION  
P.O. Box 8025  
1600 Riviera Avenue, Suite 200  
Walnut Creek, CA 94596-8025

**EMERGENCY TELEPHONE NUMBERS**  
**HEALTH EMERGENCY OR SPILL (24 hr):** (800) 892-0099  
**TRANSPORTATION (24 hr.): CHEMTREC** (800) 424-9300 or (202) 483-7616

**PRODUCT INFORMATION**  
AGRICULTURAL PRODUCTS: (800) 682-5368

The current SDS is available through our website (www.valent.com), or by calling the product information numbers listed above.

## 2. HAZARDS IDENTIFICATION

This product is an EPA FIFRA registered pesticide. Some classifications on this SDS are not the same as the FIFRA-required classifications on the product label. Certain sections of this SDS are superseded by federal law under EPA FIFRA for a registered pesticide. Please see Section 15, REGULATORY INFORMATION for an explanation.

**Classification** - (per U.S. OSHA 29 CFR 1910.1200 (Hazcom 2012))

<table>
<thead>
<tr>
<th>Acute toxicity - Oral</th>
<th>Category 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Inhalation (Vapors)</td>
<td>Category 2</td>
</tr>
</tbody>
</table>

**Label elements**

**EMERGENCY OVERVIEW**

**Danger**
Hazard statements
Toxic if swallowed
May be harmful in contact with skin
Harmful if inhaled

Precautionary statements

Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product

Response
See Section 4, First Aid Measures

Eyes   IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Skin   IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Inhalation IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
Ingestion IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.
FIRE   In case of fire: Use Water spray, fog or regular foam for extinction.
Spill   None.

Storage
Store locked up

Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other Information
• Very toxic to aquatic life
• Very toxic to aquatic life with long lasting effects
63 % of the mixture consists of ingredient(s) of unknown toxicity

For information on Transportation requirements see Section 14.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Weight/ Percent</th>
<th>TRADE SECRET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clothianidin</td>
<td>210880-92-5</td>
<td>20 - 30</td>
<td></td>
</tr>
<tr>
<td>Bifenthrin</td>
<td>82657-04-3</td>
<td>10 - 15</td>
<td></td>
</tr>
</tbody>
</table>
Other ingredients, which may be maintained as trade secrets, are any substances other than an active ingredient contained in this product. Some of these may be hazardous, but their identities are withheld because they are considered trade secrets. The hazards associated with the other ingredients are addressed in this document. Specific information on other ingredients for the management of exposures, spills, or safety assessments can be obtained by a treating physician or nurse by calling (800) 892-0099 at any time.

### 4. FIRST AID MEASURES

**EMERGENCY NUMBER (800) 892-0099**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-892-0099 for emergency medical treatment information.

**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:**
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 the poison control center or doctor. Do not give anything to an unconscious person.

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

**NOTES TO PHYSICIAN:**
None

### 5. FIRE FIGHTING MEASURES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash point °C</td>
<td>&gt;93 °C</td>
</tr>
<tr>
<td><strong>EXTINGUISHING MEDIA:</strong></td>
<td>For a small fire use DRY chemical powder. For a large fire use water spray, fog or foam. Do not use water jet.</td>
</tr>
<tr>
<td>FLAMMABLE LIMITS IN AIR - LOWER (%)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>FLAMMABLE LIMITS IN AIR - UPPER (%)</td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>NFPA RATING:</strong></td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td>2</td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
<tr>
<td>Special</td>
<td>None</td>
</tr>
</tbody>
</table>

(Least-0, Slight-1, Moderate-2, High-3, Extreme-4). These values are obtained using professional judgement. Values were not available in the guidelines or published evaluations prepared by the National Fire Protection Association, NFPA.
FIRE FIGHTING INSTRUCTIONS: Products of combustion from fires involving this material may be toxic. Avoid breathing smoke and mists. Avoid personnel and equipment contact with fallout and runoff. Minimize the amount of water used for fire fighting. Do not enter any enclosed area without full protective equipment, including self-contained breathing equipment. Contain and isolate runoff and debris for proper disposal. Decontaminate personal protective equipment and fire fighting equipment before reuse.

6. ACCIDENTAL RELEASE MEASURES

VALENT EMERGENCY PHONE NUMBER: (800) 892-0099
CHEMTREC EMERGENCY PHONE NUMBER: (800) 424-9300

OBSERVE PRECAUTIONS IN SECTION 8: PERSONAL PROTECTION
Stop the source of the spill if safe to do so. Contain the spill to prevent further contamination of the soil, surface water, or ground water. For additional spill response information refer to the North American Emergency Response Guidebook.

UN/NA NUMBER: Not applicable
EMERGENCY RESPONSE GUIDEBOOK NO.: Not applicable

FOR SPILLS AND LEAKS

CONTAINMENT: Spill may produce slippery conditions.
Avoid runoff into storm sewers or other bodies of water.
Dike area to avoid run-off.

CLEANUP: Clean up spill immediately. Absorb spill with inert material (such as dry sand or earth), then place in a chemical waste container. Wash area with soap and water. Pick up wash liquid with additional absorbent and place in a chemical waste container.

7. HANDLING AND STORAGE

END USER MUST READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.

HANDLING:
Use only in well ventilated area. Avoid contact with skin and eyes. Do not breathe spray mist. Keep pesticide in original container. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

STORAGE:
Store in well ventilated area. Keep container tightly closed. Keep pesticide in original container. Do not store or transport near food or feed. Do not contaminate food or feed. Do not put concentrate into food or drink containers. Do not dilute concentrate in food or drink containers. Store in a cool, dry place, out of direct sunlight.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

END USER MUST READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.

EYES & FACE: Do not get this material in your eyes. Eye contact can be avoided by wearing protective eyewear.

RESPIRATORY PROTECTION: Use this material only in well ventilated areas. If operating conditions result in airborne concentrations of this material, the use of an approved respirator is recommended.

SKIN & HAND PROTECTION: Do not get on skin or clothing. Skin contact should be minimized by wearing protective clothing including coveralls worn over short-sleeved shirt and short pants, socks, chemical-resistant footwear and chemical-resistant gloves. Remove contaminated clothing.
ENGINEERING CONTROLS: Use in a well ventilated area.

EXPOSURE LIMITS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH Exposure Limits</th>
<th>OSHA Exposure Limits</th>
<th>Manufacturer's Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clothianidin</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Bifenthrin</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Alcohols, C12-15, ethoxylated</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Viscous</td>
</tr>
<tr>
<td>Color</td>
<td>Off-white</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
</tr>
</tbody>
</table>

PROPERTIES

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>VALUES</th>
<th>REMARKS</th>
<th>METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>6.6 - 7.6</td>
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<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>100°C</td>
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<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt;93 °C</td>
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<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Upper flammability limits</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit</td>
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<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>Dispersible in water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Viscosity</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available</td>
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<td></td>
</tr>
<tr>
<td>Oxidizing properties</td>
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</tr>
<tr>
<td>Density</td>
<td>1.138 g/mL</td>
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<td></td>
</tr>
<tr>
<td>Bulk density</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity
Not reactive

Chemical stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to avoid
Extremes of temperature and direct sunlight.
**Incompatible materials**
None known based on information supplied.

**Hazardous Decomposition Products**
None known based on information supplied.

### 11. TOXICOLOGICAL INFORMATION

#### ACUTE TOXICITY:

- **Oral Toxicity** (LD₅₀ (rats)) 310 mg/kg  EPA Tox Category II
- **Dermal Toxicity** (LD₅₀ (rabbits)) >5000 mg/kg  EPA Tox Category IV
- **Inhalation Toxicity** (LC₅₀ (rats)) >2.05 mg/L  EPA Tox Category IV
- **Eye Irritation** (rabbits) Slightly irritating  EPA Tox Category IV
- **Skin Irritation** (rabbits) Slightly irritating  EPA Tox Category IV
- **Skin Sensitization** (guinea pigs) Non-sensitizer  EPA Tox Category Not applicable

#### CARCINOGEN CLASSIFICATION

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>IARC</th>
<th>OSHA - Select Carcinogens</th>
<th>NTP Carcinogen List</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clothianidin</td>
<td>Not listed</td>
<td>Not Listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Bifenthrin</td>
<td>Not listed</td>
<td>Carcinogen</td>
<td>Not listed</td>
</tr>
<tr>
<td>Alcohols, C12-15, ethoxylated</td>
<td>Not listed</td>
<td>Not Listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

For a summary of the potential for adverse health effects from exposure to this product, refer to Section 2. For information regarding regulations pertaining to this product, refer to Section 15.

### 12. ECOLOGICAL INFORMATION

The following data were developed with: Clothianidin Technical

**AQUATIC ORGANISM TOXICITY:** Clothianidin Technical is very toxic to aquatic life with long lasting effects:

- 96-hour LC₅₀ Rainbow Trout >100 mg/L
- 96-hour LC₅₀ Bluegill >100 mg/L
- 96-hour LC₅₀ Sheepshead minnow >100 mg/L
- 48-hour LC₅₀ Water flea = 40 mg/L
- 96-hour LC₅₀ Mysid = 0.053 mg/L

**OTHER NON-TARGET ORGANISM TOXICITY:** This product is toxic to bees exposed to direct treatment, and for more than 5 days after, on blooming crops or weeds. Do not apply this product while bees are actively visiting the treatment area.

**OTHER ENVIRONMENTAL INFORMATION:**
May cause long-term adverse effects in the environment.
13. DISPOSAL CONSIDERATIONS

END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL RECOMMENDATIONS.

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

CONTAINER DISPOSAL: Non-refillable container. Do not reuse or refill this container. Triple rinse as follows: Empty the remaining contents into mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into 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 in a sanitary landfill or by other procedures approved by state and local authorities. If allowed by state and local authorities, container may be incinerated. If burned, stay out of smoke.

DISPOSAL METHODS: Check government regulations and local authorities for approved disposal of this material. Dispose of in accordance with applicable laws and regulations.

14. TRANSPORTATION INFORMATION

DOT (ground) SHIPPING NAME: Not regulated for domestic ground transport by U.S. DOT EMERGENCY RESPONSE GUIDEBOOK NO.: Not applicable

ICAO/IATA SHIPPING NAME: UN 3082 Environmentally Hazardous Substance, Liquid, N.O.S. (Clothianidin, Bifenthrin), 9, III, Marine Pollutant

REMARKS: Single or inner packaging less than 5 L (liquid) or 5 Kg net (solids) excepted from Dangerous Goods regulations -- see UN Special Provision 375.

IMDG SHIPPING NAME: UN 3082 Environmentally Hazardous Substance, Liquid, N.O.S. (Clothianidin, Bifenthrin), 9, III, Marine Pollutant

REMARKS: •Single or inner packaging less than 5 L (liquid) or 5 Kg net (solids) excepted from Dangerous Goods regulations -- see IMDG 2.10.2.7 •For US shipping, Emergency Response Guidebook No. 171

EMS NO.: F-A, S-F

15. REGULATORY INFORMATION

EPA-FIFRA LABEL INFORMATION THAT DIFFERS FROM OSHA-GHS REQUIREMENTS: This material is a pesticide product registered by the EPA under FIFRA and is subject to certain labeling requirements under federal pesticide law. These requirements may differ from the classification criteria and hazard information required by OSHA GHS for safety data sheets, and for workplace labels of non-pesticide chemicals. The following is the hazard information as required on the FIFRA pesticide label:

EPA FIFRA SIGNAL WORD: WARNING

• May be fatal if swallowed
• Causes moderate eye irritation
• Avoid contact with eyes, skin and clothing.
• Avoid breathing vapors or spray.
• Keep out of reach of children.
• Restricted Use Pesticide due to toxicity to fish and aquatic organisms
PESTICIDE REGULATIONS: All pesticides are governed under FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act). Therefore, the regulations presented below are pertinent only when handled outside of the normal use and applications of pesticides. This includes waste streams resulting from manufacturing/formulation facilities, spills or misuse of products, and storage of large quantities of products containing hazardous or extremely hazardous substances.

U.S. FEDERAL REGULATIONS: Ingredients in this product are reviewed against an inclusive list of federal regulations. Therefore, the user should consult appropriate authorities. The federal regulations reviewed include: Clean Water Act, SARA, CERCLA, RCRA, DOT, TSCA and OSHA. If no components or information is listed in the space below this paragraph, then none of the regulations reviewed are applicable.

Bifenthrin
   SARA 313 Chemicals  1.0% de minimis concentration

SARA (311, 312):
   Immediate Health:      Yes
   Chronic Health:        Yes
   Fire:                  Yes
   Sudden Pressure:       No
   Reactivity:            No

STATE REGULATIONS: Each state may promulgate standards more stringent than the federal government. This section cannot encompass an inclusive list of all state regulations. Therefore, the user should consult state or local authorities. The state regulations reviewed include: California Proposition 65, California Directors List of Hazardous Substances, Massachusetts Right to Know, Michigan Critical Materials List, New Jersey Right to Know, Pennsylvania Right to Know, Rhode Island Right to Know and the Minnesota Hazardous Substance list. For Washington State Right to Know, see Section 8 for Exposure Limit information. For Louisiana Right to Know refer to SARA information listed under U.S. Regulations above. If no components or information is listed in the space below this paragraph, then none of the regulations reviewed are applicable.

Bifenthrin
   NJ Right To Know  3194

For information regarding potential adverse health effects from exposure to this product, refer to Sections 2 and 11.

16. OTHER INFORMATION

REASON FOR ISSUE: Create a new MSDS for an existing material. Added the EPA registration number.
SDS NO.: 0480
EPA REGISTRATION NUMBER: 59639-212
REVISION NUMBER: 1
REVISION DATE: 11/24/2015
SUPERCEDES DATE: None
RESPONSIBLE PERSON(S): Valent U.S.A. Corporation, Corporate EH&S, (925) 256-2803
The information provided in this Safety Data Sheet (SDS) is provided in good faith and believed to be accurate at the time of preparation of the SDS. However, to the extent consistent with applicable law, Valent U.S.A. Corporation and its subsidiaries or affiliates extend no warranties, make no representations, and assume no responsibility as to the accuracy, suitability, or completeness of such information. Additionally, to the extent consistent with applicable law, neither Valent U.S.A. Corporation nor any of its subsidiaries or affiliates represents or guarantees that this information or product may be used without infringing the intellectual property rights of others. Except to the extent a particular use and particular information are expressly stated on the product label, it is the users' own responsibility to determine the suitability of this information for their own particular use of this product. If necessary, contact Valent U.S.A. Corporation to confirm that you have the most current product label and SDS.

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-APPROVED PRODUCT LABEL (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use as required by the Occupational Health and Safety Act (29 CFR 1910.1200, "Hazcom").

The product label provides information specifically for product use in the ordinary course. Use, storage and disposal of pesticide products is regulated by the EPA under the authority of FIFRA through the product label. All necessary hazard classification and appropriate precautionary use, storage, and disposal information is set forth on that label or labeling accompanying the pesticide or to which reference is made on the label. It is a violation of federal law to use an EPA-registered pesticide product in any manner inconsistent with its labeling.

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