1. Identification

Product identifier used on the label

ALLURE MD

Recommended use of the chemical and restriction on use
Recommended use*: insecticide

* The “Recommended use” identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:
BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Registrant:
Whitmire Micro-Gen Research Laboratories, Inc.
3568 Tree Court Industrial Blvd.
St. Louis, MO 63122

Other means of identification

Substance number: 444249
EPA Register number: 73813-3-499
Chemical family: pheromone

2. Hazards Identification


Classification of the product

<table>
<thead>
<tr>
<th>Flam. Liq.</th>
<th>Skin Corr./Irrit.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

Flammable liquids
Skin corrosion/irritation
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Eye Dam./Irrit. 2A Serious eye damage/eye irritation
STOT SE 3 (irritating to respiratory system) Specific target organ toxicity — single exposure

Label elements

Pictogram:

Signal Word: Warning

Hazard Statement:
H227 Combustible liquid.
H319 Causes serious eye irritation.
H315 Causes skin irritation.
H335 May cause respiratory irritation.

Precautionary Statements (Prevention):
P280 Wear protective gloves and eye/face protection.
P271 Use only outdoors or in a well-ventilated area.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (Response):
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P303 + P352 IF ON SKIN (or hair): Wash with plenty of soap and water.
P332 + P313 If skin irritation occurs: Get medical advice/attention.
P337 + P311 If eye irritation persists: Call a POISON CENTER or doctor/physician.
P362 + P364 Take off contaminated clothing and wash before reuse.
P370 + P378 In case of fire: Use extinguishing powder, foam or CO2 for extinction.

Precautionary Statements (Storage):
P233 Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Precautionary Statements (Disposal):
P501 Dispose of contents/container to hazardous or special waste collection point.


Emergency overview

CAUTION:
KEEP OUT OF REACH OF CHILDREN.
KEEP OUT OF REACH OF DOMESTIC ANIMALS.
HARMFUL IF SWALLOWED.
Avoid contact with the skin, eyes and clothing. Avoid inhalation of mists/vapours.

3. Composition / Information on Ingredients

This product does not contain any components classified as hazardous under the referenced regulation.


<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Weight %</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>31654-77-0</td>
<td></td>
<td>9,12-Tetradecadien-1-ol, 1-acetate, (9E,12Z)-</td>
</tr>
</tbody>
</table>

4. First-Aid Measures

Description of first aid measures

General advice:
First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:
Keep patient calm, remove to fresh air, seek medical attention.

If on skin:
Wash thoroughly with soap and water.

If in eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

If swallowed:
Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

Indication of any immediate medical attention and special treatment needed

Note to physician
Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media
Suitable extinguishing media:
- foam
- dry powder
- carbon dioxide

**Special hazards arising from the substance or mixture**

**Hazards during fire-fighting:**
- carbon monoxide,
If product is heated above decomposition temperature, toxic vapours will be released. The substances/groups of substances mentioned can be released in case of fire.

**Advice for fire-fighters**

Protective equipment for fire-fighting:
- Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

**Further information:**
- Evacuate area of all unnecessary personnel. Contain contaminated water/firefighting water. Do not allow to enter drains or waterways.

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**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**

Take appropriate protective measures. Clear area. Shut off source of leak only under safe conditions. Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

**Environmental precautions**

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater. Contain contaminated water/firefighting water. A spill of or in excess of the reportable quantity requires notification to state, local and national emergency authorities. This product is not regulated by CERCLA (‘Superfund’).

**Methods and material for containment and cleaning up**

Dike spillage. Pick up with suitable absorbent material. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

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**7. Handling and Storage**

**Precautions for safe handling**

RECOMMENDATIONS ARE FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS. PESTICIDE APPLICATORS & WORKERS must refer to the Product Label and Directions for Use attached to the product. Provide good ventilation of working area (local exhaust ventilation if necessary). Keep away from sources of ignition - No smoking. Keep container tightly sealed. Protect against heat. Handle and open container with care. Do not open until ready to use. Once container is opened, content should be used as soon as possible. Provide means for controlling leaks and spills. Follow label warnings even after container is emptied. The substance/product may be handled only by appropriately trained personnel. Avoid all direct contact with the substance/product. Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts/mists/vapours. Wear suitable personal protective clothing and equipment.

Protection against fire and explosion:
The relevant fire protection measures should be noted. Fire extinguishers should be kept handy. Avoid extreme heat.

**Conditions for safe storage, including any incompatibilities**
Segregate from incompatible substances. Segregate from foods and animal feeds. Segregate from textiles and similar materials.

Further information on storage conditions: Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect containers from physical damage. Protect against contamination. The authority permits and storage regulations must be observed.

Storage stability:
May be kept indefinitely if stored properly.
If an expiry date is mentioned on the packaging/label this takes priority over the statements on storage duration in this safety data sheet.

### 8. Exposure Controls/Personal Protection

**Users of a pesticidal product should refer to the product label for personal protective equipment requirements.**

No occupational exposure limits known.

**Advice on system design:**
Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

**Personal protective equipment**

**RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:**

**Respiratory protection:**
Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator. For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

**Hand protection:**
Chemical resistant protective gloves. Protective glove selection must be based on the user’s assessment of the workplace hazards.

**Eye protection:**
Safety glasses with side-shields. Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

**Body protection:**
Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

**General safety and hygiene measures:**
**RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS** Wear long sleeved work shirt and long work pants in addition to other stated personal protective equipment. Work place should be equipped with a shower and an eye wash. Handle in
accordance with good industrial hygiene and safety practice. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

## 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Form:</strong></td>
<td>liquid, oily</td>
</tr>
<tr>
<td><strong>Odour:</strong></td>
<td>mild, oily</td>
</tr>
<tr>
<td><strong>Odour threshold:</strong></td>
<td>Not determined due to potential health hazard by inhalation</td>
</tr>
<tr>
<td><strong>Colour:</strong></td>
<td>colourless</td>
</tr>
<tr>
<td><strong>pH value:</strong></td>
<td>approx. 5.5 - 7.0 (1,000 g/l)</td>
</tr>
<tr>
<td><strong>Melting point:</strong></td>
<td>approx. 2 - 4 °C</td>
</tr>
<tr>
<td><strong>Boiling point:</strong></td>
<td>142 - 146 °C (3.99 hPa)</td>
</tr>
<tr>
<td><strong>Flash point:</strong></td>
<td>62 °C</td>
</tr>
<tr>
<td><strong>Flammability:</strong></td>
<td>not highly flammable</td>
</tr>
<tr>
<td><strong>Lower explosion limit:</strong></td>
<td>As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.</td>
</tr>
<tr>
<td><strong>Upper explosion limit:</strong></td>
<td>As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.</td>
</tr>
<tr>
<td><strong>Vapour pressure:</strong></td>
<td>approx. 0.16 - 6.9 Pa (20 °C)</td>
</tr>
<tr>
<td><strong>Density:</strong></td>
<td>approx. 0.88 - 0.89 g/cm³ (25 °C)</td>
</tr>
<tr>
<td><strong>Vapour density:</strong></td>
<td>not applicable</td>
</tr>
<tr>
<td><strong>Self-ignition temperature:</strong></td>
<td>Based on its structural properties the product is not classified as self-igniting.</td>
</tr>
<tr>
<td><strong>Thermal decomposition:</strong></td>
<td>carbon monoxide, carbon dioxide</td>
</tr>
<tr>
<td><strong>Stable at ambient temperature. If product is heated above decomposition temperature toxic vapours may be released. To avoid thermal decomposition, do not overheat.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Viscosity, dynamic:</strong></td>
<td>not determined</td>
</tr>
<tr>
<td><strong>Solubility in water:</strong></td>
<td>insoluble</td>
</tr>
<tr>
<td><strong>Evaporation rate:</strong></td>
<td>not applicable</td>
</tr>
<tr>
<td><strong>Other Information:</strong></td>
<td>If necessary, information on other physical and chemical parameters is indicated in this section.</td>
</tr>
</tbody>
</table>
10. Stability and Reactivity

Reactivity
No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:
Corrosive effects to metal are not anticipated.

Oxidizing properties:
Based on its structural properties the product is not classified as oxidizing.

Chemical stability
The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions
The product is chemically stable.

Conditions to avoid
No conditions known that should be avoided.

Incompatible materials
air, strong oxidizing agents

Hazardous decomposition products
Decomposition products:
No hazardous decomposition products if stored and handled as prescribed/indicated., Prolonged thermal loading can result in products of degradation being given off.

Thermal decomposition:
Possible thermal decomposition products:
carbon monoxide, carbon dioxide
Stable at ambient temperature. If product is heated above decomposition temperature toxic vapours may be released. To avoid thermal decomposition, do not overheat.

11. Toxicological information

Primary routes of exposure
Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Oral
Type of value: LD50
Species: rat
Value: > 5,000 mg/kg
The statement for acute oral toxicity was derived from products of similar composition.
Inhalation
Type of value: LC50
Species: rat
Value: > 5 mg/l
The statement for acute inhalative toxicity was derived from products of similar composition.

Dermal
Type of value: LD50
Species: rat
Value: > 2,000 mg/kg

Irritation / corrosion
Assessment of irritating effects: May cause slight but temporary irritation to the eyes. May cause moderate irritation to the skin.

Skin
Species: rabbit
Result: Irritant.
Data of a comparable product

Eye
Species: rabbit
Result: non-irritant
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Sensitization
Assessment of sensitization: Skin sensitizing effects were not observed in animal studies.
Species: guinea pig
Result: Non-sensitizing.
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Chronic Toxicity/Effects

Repeated dose toxicity

Genetic toxicity

Carcinogenicity

Reproductive toxicity
Assessment of reproduction toxicity: No data required for Straight Chained Lepidopteran Pheromones (SCLP) following the recommendation of OECD [OECD Series on Pesticides, No. 12 -
Safety Data Sheet
ALLURE MD
Revision date : 2015/06/02
Version: 4.0
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Guidance for Registration Requirements for Pheromones and Other Semiochemicals Used for Arthropod Pest Control, 26-Feb-2002 (ENV/JM/MONO (2001)12)]

Teratogenicity

Other Information
Misuse can be harmful to health.

Symptoms of Exposure
The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11. Further important symptoms and effects are so far not known.

12. Ecological Information

Toxicity
Aquatic toxicity
Assessment of aquatic toxicity:
Acutely toxic for fish. Acutely toxic for aquatic invertebrates. Very toxic (acute effect) to aquatic plants.

Toxicity to fish
(96 h) 8.3 mg/l, Oncorhynchus mykiss (static)

Aquatic invertebrates
EC50 (48 h) 1.13 mg/l, Daphnia magna

Aquatic plants
EC50 (72 h) 1.2 mg/l, Pseudokirchneriella subcapitata (static)

No observed effect concentration (72 h) 0.13 mg/l, Pseudokirchneriella subcapitata (static)

Persistence and degradability
Assessment biodegradation and elimination (H2O)
Readily biodegradable (according to OECD criteria).

Bioaccumulative potential
Assessment bioaccumulation potential
No data required for Straight Chained Lepidopteran Pheromones (SCLP) following the recommendation of OECD [OECD Series on Pesticides, No. 12 - Guidance for Registration Requirements for Pheromones and Other Semiochemicals Used for Arthropod Pest Control, 26-Feb-2002 (ENV/JM/MONO (2001)12)]

Mobility in soil
Assessment transport between environmental compartments
The substance will rapidly evaporate into the atmosphere from the water surface.
Study not necessary due to exposure considerations.
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Additional information

Other ecotoxicological advice:
Do not discharge product into the environment without control.

13. Disposal considerations

Waste disposal of substance:
Do not discharge into waterways or sewer systems without proper authorization. Dispose of in accordance with national, state and local regulations. Dispose of in a licensed facility. Residues should be disposed of in the same manner as the substance/product.

Container disposal:
Completely empty packaging may be treated as household waste. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers. Do not reuse empty containers.

14. Transport Information

Land transport
USDOT
Not classified as a dangerous good under transport regulations

Sea transport
IMDG
Not classified as a dangerous good under transport regulations

Air transport
IATA/ICAO
Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations

Registration status:
Chemical TSCA, US released / listed
Crop Protection TSCA, US released / exempt

EPCRA 311/312 (Hazard categories): Acute;

16. Other Information

SDS Prepared by:
BASF NA Product Regulations
SDS Prepared on: 2015/06/02
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