1. Product and Company Identification

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

24 Hour Emergency Response Information
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

2. Hazards Identification

Emergency overview
CAUTION:
FLAMMABLE.
KEEP OUT OF REACH OF CHILDREN.
KEEP OUT OF REACH OF DOMESTIC ANIMALS.
Avoid contact with the skin, eyes and clothing.
Aerosol container contains flammable gas under pressure.

State of matter: liquid
Colour: pale straw yellow
Odour: flowery

Potential health effects
Primary routes of exposure:
Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

Acute toxicity:

Irritation / corrosion:
May cause moderate irritation to the skin. May cause moderate but temporary irritation to the eyes.

Sensitization:
Skin sensitizing effects were not observed in animal studies.
3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Content (W/W)</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>106-24-1</td>
<td>6.0 %</td>
<td>2,6-Octadien-1-ol, 3,7-dimethyl-, (E)-</td>
</tr>
<tr>
<td></td>
<td>0.5 %</td>
<td>Lemongrass Oil</td>
</tr>
<tr>
<td>8042-47-5</td>
<td>&gt; 40.0 %</td>
<td>White mineral oil (petroleum)</td>
</tr>
<tr>
<td>124-38-9</td>
<td>&lt; 5.0 %</td>
<td>carbon dioxide</td>
</tr>
<tr>
<td></td>
<td>&gt; 40.0 %</td>
<td>Proprietary ingredients</td>
</tr>
</tbody>
</table>

4. First-Aid Measures

**General advice:**
First aid providers should wear personal protective equipment to prevent exposure. Remove contaminated clothing. Move person to fresh air. If person is not breathing, call 911 or ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or physician for treatment advice. Have the product container or label with you when calling a poison control center or doctor or going for treatment.

**If inhaled:**
Remove the affected individual into fresh air and keep the person calm.

**If on skin:**
Rinse skin immediately with plenty of water for 15 - 20 minutes.

**If in eyes:**
Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing.

**If swallowed:**
Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Do not induce vomiting. Have person sip a glass of water if able to swallow.

5. Fire-Fighting Measures

- **Lower explosion limit:** not determined
- **Upper explosion limit:** not determined
- **Flammability of Aerosol:** 0 in
- **Products:** no flashback
- **NFPA 30B flammability:** Level 3 Aerosol

**Suitable extinguishing media:**
foam, dry powder, carbon dioxide, water spray

**Hazards during fire-fighting:**
carbon monoxide, carbon dioxide, nitrogen dioxide, nitrogen oxide,
The substances/groups of substances mentioned can be released in case of fire. Aerosol container contains flammable gas under pressure. Risk of explosion at excessive temperatures.

**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.
6. Accidental release measures

**Personal precautions:**
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.

**Cleanup:**
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.

7. Handling and Storage

**Handling**

**General advice:**
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:**
Aerosol container contains flammable gas under pressure. The relevant fire protection measures should be noted. Fire extinguishers should be kept handy. Avoid all sources of ignition: heat, sparks, open flame. Avoid extreme heat. Ground all transfer equipment properly to prevent electrostatic discharge. Electrostatic discharge may cause ignition.

**Storage**

**General advice:**
Protect containers from physical damage. Store in a cool, dry, well-ventilated area. Avoid all sources of ignition: heat, sparks, open flame.

**Storage incompatibility:**
General advice: Segregate from incompatible substances. Segregate from foods and animal feeds. Segregate from textiles and similar materials.

**Temperature tolerance**
Protect from temperatures above: 130 °F
Explosive at or above indicated temperature.

8. Exposure Controls and Personal Protection

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

Personal protective equipment

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. Personal protective equipment should be decontaminated prior to reuse. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks). Take off immediately all contaminated clothing. Store work clothing separately. Hands and/or face should be washed before breaks and at the end of the shift. No eating, drinking, smoking or tobacco use at the place of work. Keep away from food, drink and animal feeding stuffs.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>aerosol</td>
</tr>
<tr>
<td>Odour</td>
<td>flowery</td>
</tr>
<tr>
<td>Colour</td>
<td>pale straw yellow</td>
</tr>
<tr>
<td>pH value</td>
<td>insoluble</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>approx. 6.9 hPa (approx. 20 °C)</td>
</tr>
<tr>
<td>Density</td>
<td>&lt; 1 g/cm3 (20 °C)</td>
</tr>
<tr>
<td>Vapour density</td>
<td>not determined</td>
</tr>
<tr>
<td>Partitioning coefficient n-octanol/water (log Pow):</td>
<td>not applicable</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>not determined</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>not soluble</td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

Conditions to avoid:
Substances to avoid:
strong acids, strong bases, strong oxidizing agents

Hazardous reactions:
The product is chemically stable.

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, nitrogen dioxide, nitrogen oxide
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

Acute toxicity

Oral:
Type of value: LD50
Species: rat (female)
Value: > 5,000 mg/kg

Inhalation:
Type of value: LC50
Species: rat (male/female)
Value: > 2.11 mg/l
Exposure time: 4 h

Dermal:
Type of value: LD50
Species: rat (male/female)
Value: > 5,000 mg/kg

Irritation / corrosion

Skin:
Species: rabbit
Result: moderately irritating

Eye:
Species: rabbit
Result: mildly irritating

Sensitization:
Buehler test
Species: guinea pig
Result: Skin sensitizing effects were not observed in animal studies.

Genetic toxicity

Information on: 2,6-Octadien-1-ol, 3,7-dimethyl-, (E)-
Results from a number of mutagenicity studies with microorganisms, mammalian cell culture and mammals are available. Taking into account all of the information, there is no indication that the substance is mutagenic.

Information on: White mineral oil (petroleum)
The substance was not mutagenic in bacteria. The substance was not mutagenic in mammalian cell culture. The substance was not genotoxic in mammalian cell culture. The substance was not genotoxic in a test with mammals. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.
Carcinogenicity

Information on: 2,6-Octadien-1-ol, 3,7-dimethyl-, (E)-
In long-term animal studies in which the substance was given in high doses by feed, a carcinogenic effect was not observed. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Information on: White mineral oil (petroleum)
Results from a number of long-term carcinogenicity studies are available. Taking into account all of the information, there is no indication that the substance itself is carcinogenic. In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed.

Reproductive toxicity

Information on: 2,6-Octadien-1-ol, 3,7-dimethyl-, (E)-
The results of animal studies gave no indication of a fertility impairing effect.

Information on: White mineral oil (petroleum)
The results of animal studies gave no indication of a fertility impairing effect.

Development:

Information on: 2,6-Octadien-1-ol, 3,7-dimethyl-, (E)-
In animal studies the substance did not cause malformations.

Information on: White mineral oil (petroleum)
No indications of a developmental toxic / teratogenic effect were seen in animal studies.

12. Ecological Information

Fish

Information on: 2,6-Octadien-1-ol, 3,7-dimethyl-, (E)-
Acute:
OECD 203; ISO 7346; 84/449/EEC, C.1 static
Brachydanio rerio/LC50 (96 h): approx. 22 mg/l
The details of the toxic effect relate to the nominal concentration.

Information on: White mineral oil (petroleum)
Acute:
OECD Guideline 203 static
Leuciscus idus/LL50 (96 h): > 10,000 mg/l
Analogous: Assessment derived from products with similar chemical character.
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Limit concentration test only (LIMIT test).

Aquatic invertebrates

Information on: 2,6-Octadien-1-ol, 3,7-dimethyl-, (E)-
Acute:
OECD Guideline 202, part 1 static
Daphnia magna/EC50 (48 h): 10.8 mg/l
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. The statement of the toxic effect relates to the analytically determined concentration.

Information on: White mineral oil (petroleum)
Acute:
OECD Guideline 202, part 1 static
Daphnia magna/LL50 (48 h): > 100 mg/l 
Analogous: Assessment derived from products with similar chemical character.
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Nominal concentration.

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Aquatic plants

Information on: White mineral oil (petroleum)
Toxicity to aquatic plants:
OECD Guideline 201 static
green algae/Lowest observed effect concentration (72 h): < 100 mg/l 
Analogous: Assessment derived from products with similar chemical character.
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Nominal concentration. Limit concentration test only (LIMIT test).

Information on: White mineral oil (petroleum)
Toxicity to aquatic plants:
OECD Guideline 201 static
green algae/Lowest observed effect concentration (72 h): < 100 mg/l 
Analogous: Assessment derived from products with similar chemical character.
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Nominal concentration. Limit concentration test only (LIMIT test).

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13. Disposal considerations

Waste disposal of substance:
Pesticide wastes are regulated. Improper disposal of excess pesticide, spray mix or rinsate is a violation of federal law. If pesticide wastes cannot be disposed of according to label instructions, contact the State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container disposal:
Do not cut, puncture, crush, or incinerate empty aerosol containers. Consult state or local disposal authorities for approved alternative procedures such as container recycling. Empty aerosol cans may meet the definition of RCRA D003. Consult local and/or regional EPA for further guidance.

14. Transport Information

Land transport
USDOT
Hazard class: 2.1
ID number: UN 1950
Hazard label: 2.1
Proper shipping name: AEROSOLS

Sea transport
IMDG
Hazard class: 2.1
ID number: UN 1950
Hazard label: 2.1
Marine pollutant: NO
Proper shipping name: AEROSOLS
15. Regulatory Information

Federal Regulations

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

OSHA hazard category: Chronic target organ effects reported; ACGIH TLV established

EPCRA 311/312 (Hazard categories): Acute; Chronic

State regulations

<table>
<thead>
<tr>
<th>State RTK</th>
<th>CAS Number</th>
<th>Chemical name</th>
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<tbody>
<tr>
<td>MA, NJ, PA</td>
<td>8042-47-5</td>
<td>White mineral oil (petroleum)</td>
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<tr>
<td>MA, NJ, PA</td>
<td>124-38-9</td>
<td>carbon dioxide</td>
</tr>
</tbody>
</table>

16. Other Information

Recommended use: insecticide

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

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