1. Product and Company Identification

Use: crop protection product, insecticide

Company
BASF CORPORATION
100 Campus Drive
Florham Park, NJ 07932
USA

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP

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

Substance number: 000000466596

2. Hazards Identification

Emergency overview

CAUTION:
HARMFUL IF ABSORBED THROUGH SKIN.
HARMFUL IF SWALLOWED.
Avoid contact with the skin, eyes and clothing.
Wash thoroughly after handling.

See Product Label for additional precautionary statements.

State of matter: liquid
Colour: brown
Odour: mild

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:
Slightly toxic after single ingestion. Slightly toxic after short-term skin contact.

Irritation / corrosion:
May cause slight but temporary irritation to the eyes. May cause slight irritation to the skin.
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>165252-70-0</td>
<td>0.5%</td>
<td>dinotefuran</td>
</tr>
<tr>
<td></td>
<td>99.5%</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:
Keep patient calm, remove to fresh air, seek medical attention.

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.

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

5. Fire-Fighting Measures

Flash point: > 100 °C Information applies to the solvent.
Self-ignition temperature: not self-igniting

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

Unsuitable extinguishing media for safety reasons:
water jet

Hazards during fire-fighting:
carbon monoxide, carbon dioxide, nitrogen oxides
The substances/groups of substances mentioned can be released in case of fire.

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. 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.

Cleanup:
Pick up with suitable absorbent material. Place into suitable containers for reuse or disposal in a licensed facility. 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:
Handle in accordance with good industrial hygiene and safety practice. No special measures necessary if stored and handled correctly.

Protection against fire and explosion:
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. Keep away from oxidizable substances.

Storage
General advice:
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 incompatibility:
General advice: Segregate from foods and animal feeds.

8. Exposure Controls and Personal Protection

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

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:
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. Keep away from food, drink and animal feeding stuffs. No eating, drinking, smoking or tobacco use at the place of work. Hands and/or face should be washed before breaks and at the end of the shift. Remove contaminated clothing immediately and dispose of safely.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>gel</td>
</tr>
<tr>
<td>Odour</td>
<td>mild</td>
</tr>
<tr>
<td>Colour</td>
<td>brown</td>
</tr>
<tr>
<td>pH value</td>
<td>approx. 6.5 - 7.0</td>
</tr>
<tr>
<td>Density</td>
<td>1.2 g/cm³ (20 °C)</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>dispersible</td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

Conditions to avoid:
Avoid all sources of ignition: heat, sparks, open flame. Avoid extreme temperatures. Avoid prolonged exposure to extreme heat. Avoid prolonged storage.

Hazardous reactions:
The product is chemically stable. Hazardous polymerization will not occur. No hazardous reactions if stored and handled as prescribed/indicated.

Decomposition products:
No hazardous decomposition products if stored and handled as prescribed/indicated.

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.

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

Oxidizing properties:
Not an oxidizer.

11. Toxicological information

Acute toxicity
Oral:
Type of value: LD50
Species: rat (male/female)
Value: > 2,000 mg/kg
No mortality was observed.

Dermal:
Type of value: LD50
Species: rat (male/female)
Value: > 2,000 mg/kg
No mortality was observed.

Irritation / corrosion

Skin:
Species: rat
Result: mildly irritating

Eye:
Species: rat
Result: non-irritant

Sensitization:
Buehler test
Species: guinea pig
Result: Non-sensitizing.

Carcinogenicity

Information on: Dinotefuran
No data available concerning carcinogenic effects.

Reproductive toxicity

Information on: Dinotefuran
No data available concerning reproduction toxicity.

Development:

Information on: Dinotefuran
No data available concerning teratogenic effects.

12. Ecological Information

Fish

Information on: Dinotefuran
Acute:
Oncorhynchus mykiss/LC50 (96 h): = >100 ppm

Aquatic invertebrates

Information on: Dinotefuran
Acute:
Daphnia magna/EC50 (48 h): >1000 ppm

No data available concerning teratogenic effects.
Aquatic plants

Information on: Dinotefuran
Toxicity to aquatic plants:
green algae/EC50 (72 h): > 100 mg/l
swollen duckweed/EC50: >110 ppm

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:
Recommend crushing, puncturing or other means to prevent unauthorized use of used containers. Contaminated packaging should be emptied as far as possible and disposed of in accordance with official regulations after being thoroughly cleaned.

14. Transport Information

Reference Bill of Lading

15. Regulatory Information

Federal Regulations

Registration status:
Chemical TSCA, US blocked / not listed
Crop Protection TSCA, US released / exempt

OSHA hazard category: ACGIH TLV established;

EPCRA 311/312 (Hazard categories): Acute;

16. Other Information

Refer to product label for EPA registration number.

Recommended use: pesticides

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.
PT®b ALPINE® COCKROACH GEL BAIT PISTON CAN

MSDS Prepared by:
BASF NA Product Regulations
msds@basf.com
MSDS Prepared on: 2010/06/23

PT®b ALPINE® COCKROACH GEL BAIT PISTON CAN is a registered trademark of BASF Canada or BASF SE
Attention - The product has not yet been fully tested.
This product is of industrial quality and unless otherwise specified or agreed intended exclusively for industrial use.
Any other intended applications should be discussed with the manufacturer.

END OF DATA SHEET