1. Identification

Product identifier used on the label

ALPINE FLEA INSECTICIDE WITH IGR

Recommended use of the chemical and restriction on use

* 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 Canada Inc.
100 Milverton Drive
Mississauga, ON L5R 4H1, CANADA

Contact address: 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: 463659
EPA Registration number: 499-540
Synonyms: Pyriproxyfen + Prallethrin + Dinotefuran

2. Hazards Identification


Classification of the product

<table>
<thead>
<tr>
<th>Classification</th>
<th>Hazardous to the aquatic environment - acute</th>
<th>Hazardous to the aquatic environment - chronic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic Acute</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Aquatic Chronic</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
Flam. Aerosol 1 Flammable aerosols

Label elements

Pictogram:

Signal Word:
Danger

Hazard Statement:
H222 Extremely flammable aerosol.
H229 Pressurized container: May burst if heated.
H401 Toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements (Prevention):
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273 Avoid release to the environment.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.

Precautionary Statements (Response):
P391 Collect spillage.

Precautionary Statements (Storage):
P410 + P412 Protect from sunlight. Do no expose to temperatures exceeding 50°C/122°F.

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

Hazards not otherwise classified

Labeling of special preparations (GHS):
The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 16 - 18 % dermal
The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 16 - 17 % oral
The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 16 - 18 % Inhalation - vapour
The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 16 - 18 % Inhalation - mist


Emergency overview

CAUTION:
KEEP OUT OF REACH OF CHILDREN.
Contains petroleum distillates.
Avoid contact with the skin, eyes and clothing.
Wash thoroughly after handling.
3. Composition / Information on Ingredients


<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Weight %</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>165252-70-0</td>
<td>0.25 %</td>
<td>Dinotefuran</td>
</tr>
<tr>
<td>95737-68-1</td>
<td>0.1 %</td>
<td>Pyridine, 2-[1-methyl-2-(4-phenoxyphenoxy)ethoxy]-</td>
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<tr>
<td>23031-36-9</td>
<td>0.05 %</td>
<td>Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propen-1-yl)-, 2-methyl-4-oxo-3-(2-propyn-1-yl)-2-cyclopenten-1-yl ester</td>
</tr>
<tr>
<td>64742-47-8</td>
<td>7.0 - 10.0%</td>
<td>Distillates (petroleum), hydrotreated light</td>
</tr>
<tr>
<td>68476-86-8</td>
<td>10.0 - 15.0%</td>
<td>Petroleum gases, liquefied, sweetened</td>
</tr>
</tbody>
</table>


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<th>CAS Number</th>
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<td>64742-47-8</td>
<td>&lt;= 10.0%</td>
<td>Distillates (petroleum), hydrotreated light</td>
</tr>
<tr>
<td>68476-86-8</td>
<td>&lt;= 15.0%</td>
<td>Liquefied petroleum gas propellant</td>
</tr>
<tr>
<td></td>
<td>&lt;= 75.0%</td>
<td>Proprietary ingredients</td>
</tr>
</tbody>
</table>

4. First-Aid Measures

Description of first aid measures

General advice:
Remove contaminated clothing.

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

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.

If swallowed:
Rinse mouth and then drink plenty of water.

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
5. Fire-Fighting Measures

Extinguishing media

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

Special hazards arising from the substance or mixture
Hazards during fire-fighting:
carbon monoxide, carbon dioxide, nitrogen oxides, toxic gases/vapours
Aerosol container contains flammable gas under pressure. Pressure inside container is increased when heated, and may cause explosion. 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.

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.

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.

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:
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.

Conditions for safe storage, including any incompatibilities
Segregate from foods and animal feeds.

Further information on storage conditions: Protect containers from physical damage. Store in a cool, dry, well-ventilated area. Avoid all sources of ignition: heat, sparks, open flame. Store protected against freezing.

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

8. Exposure Controls/Personal Protection

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

Components with occupational exposure limits
Distillates (petroleum),
hydrotreated light ACGIH TLV TWA value 200 mg/m3 Non-aerosol (total hydrocarbon vapor);
Application restricted to conditions in which there are negligible aerosol exposures.
Skin Designation Non-aerosol (total hydrocarbon vapor);
The substance can be absorbed through the skin.

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. Keep away from food, drink and animal feeding stuffs. Store work clothing separately.

9. Physical and Chemical Properties

Form: aerosol, liquid
Odour: characteristic
Odour threshold: Not determined due to potential health hazard by inhalation.
Colour: opaque
pH value: approx. 5.0 - 7.0 (22.9 °C)
Melting temperature: approx. 0 °C
Boiling point: approx. -31.8 - -0.5 °C
Flash point: Non-flammable. Flame Projection: < 18" 
Flammability: Extremely flammable.
NFPA 30B flammability: Level 1 Aerosol
Lower explosion limit: 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.
Upper explosion limit: 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.
Autoignition: Based on the water content the product does not ignite.
Vapour pressure: approx. 4826 hPa (approx. 20 °C)
Density: approx. 0.97 g/cm³ (20 °C)
Vapour density: not applicable
Partitioning coefficient n-octanol/water (log Pow): The statements are based on the properties of the individual components.
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

Incompatible materials
No substances known that should be avoided.

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, 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.
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 (female)  
Value: > 5,000 mg/kg

**Inhalation**
Type of value: LC50  
Species: rat (male/female)  
Value: > 2.08 mg/l  
Exposure time: 4 h  
No mortality was observed.

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

**Assessment other acute effects**
Assessment of STOT single:  
Based on the available information there is no specific target organ toxicity to be expected after a single exposure.  

The product has not been tested. The statement has been derived from the properties of the individual components.

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

**Skin**
Species: rabbit  
Result: moderately irritating

**Eye**
Species: rabbit  
Result: non-irritant

**Sensitization**
Assessment of sensitization: Skin sensitizing effects were not observed in animal studies.

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

**Chronic Toxicity/Effects**

**Repeated dose toxicity**
Assessment of repeated dose toxicity: The product has not been tested. The statement has been derived from the properties of the individual components. No substance-specific organtoxicity was observed after repeated administration to animals.

Genetic toxicity
Assessment of mutagenicity: The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

Carcinogenicity
Assessment of carcinogenicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Distillates (petroleum), hydrotreated light
Assessment of carcinogenicity: Long-term exposure to highly irritating concentrations resulted in skin tumors in animals. A carcinogenic effect in humans can be excluded after brief skin contact. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Reproductive toxicity
Assessment of reproduction toxicity: The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

Teratogenicity
Assessment of teratogenicity: The product has not been tested. The statement has been derived from the properties of the individual components. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

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:
Toxic to aquatic life. Very toxic to aquatic life with long lasting effects. The product has not been tested. The statement has been derived from the properties of the individual components.

Toxicity to fish

Information on: Pyridine, 2-[1-methyl-2-(4-phenoxyphenoxy)ethoxy]-
LC50 (96 h) > 0.270 mg/l, Lepomis macrochirus

Information on: 1 Guanidine, N''-methyl-N-nitro-N'-(tetrahydro-3-furanyl)methyl]-
LC50 (96 h) > 100 mg/l, Oncorhynchus mykiss
LC50 (96 h) > 100 mg/l, Cyprinus carpio
Information on: Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propen-1-yl)-, 2-methyl-4-oxo-3-(2-propyn-1-yl)-2-cyclopenten-1-yl ester
LC50 (96 h) 0.012 mg/l, Oncorhynchus mykiss

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Aquatic invertebrates

Information on: Pyridine, 2-[1-methyl-2-(4-phenoxyphenoxy)ethoxy]-
EC50 (48 h) 0.4 mg/l, Daphnia magna (Flow through.)

Information on: 1 Guanidine, N''-methyl-N-nitro-N'-(tetrahydro-3-furanyl)methyl]-
EC50 (48 h) > 1,000 mg/l, Daphnia magna
EC50 (96 h) 0.79 mg/l, Mysidopsis bahia

Information on: Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propen-1-yl)-, 2-methyl-4-oxo-3-(2-propyn-1-yl)-2-cyclopenten-1-yl ester
EC50 (48 h) 0.0062 mg/l, daphnia

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Aquatic plants

Information on: Pyridine, 2-[1-methyl-2-(4-phenoxyphenoxy)ethoxy]-
EC50 (72 h) 0.15 mg/l, Pseudokirchneriella subcapitata
No observed effect concentration (7 d) 0.05 mg/l, Pseudokirchneriella subcapitata

Information on: 1 Guanidine, N''-methyl-N-nitro-N'-(tetrahydro-3-furanyl)methyl]-
EC50 (72 h) 97.6 mg/l (biomass), Pseudokirchneriella subcapitata

Information on: Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propen-1-yl)-, 2-methyl-4-oxo-3-(2-propyn-1-yl)-2-cyclopenten-1-yl ester
EC50 (72 h) 2.0 mg/l, algae

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Persistence and degradability

Assessment biodegradation and elimination (H2O)
The product has not been tested. The statement has been derived from the properties of the individual components.

Bioaccumulative potential

Assessment bioaccumulation potential
The product has not been tested. The statement has been derived from the properties of the individual components.

Assessment bioaccumulation potential

Information on: 1 Guanidine, N''-methyl-N-nitro-N'-(tetrahydro-3-furanyl)methyl]-

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

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Bioaccumulation potential

Information on: Pyridine, 2-[1-methyl-2-(4-phenoxyphenoxy)ethoxy]-
Bioconcentration factor: 1,379 - 1,495 (28 d), Lepomis macrochirus
Significant accumulation in organisms is not to be expected.

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Mobility in soil

Assessment transport between environmental compartments
The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: Pyridine, 2-[1-methyl-2-(4-phenoxypheinoxy)ethoxy]*

Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

*Information on: 1 Guanidine, N''-methyl-N-Nitro-N'-[(tetrahydro-3-furanyl)methyl]*

Following exposure to soil, the product trickles away and can - dependant on degradation - be transported to deeper soil areas with larger water loads.

Additional information

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

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, EHSM |
| Proper shipping name: | AEROSOLS (contains PROPANE, DINOTEFURAN) |

**Sea transport**

IMDG

| Hazard class: | 2.1 |
| ID number:    | UN 1950 |
| Hazard label: | 2.1, EHSM |
| Marine pollutant: | YES |
| Proper shipping name: | AEROSOLS (contains PROPANE, DINOTEFURAN) |
Air transport
IATA/ICAO
Hazard class: 2.1
ID number: UN 1950
Hazard label: 2.1
Proper shipping name: AEROSOLS, FLAMMABLE (contains PROPANE, DINOTEFURAN)

Further information
DOT: This product may be classified as ORM-D (Consumer Commodity) or Limited Quantity. After 12/31/2020, ORM-D will not apply.

15. Regulatory Information

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

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

State regulations

<table>
<thead>
<tr>
<th>State</th>
<th>RTK</th>
<th>CAS Number</th>
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<tbody>
<tr>
<td>PA</td>
<td></td>
<td>64742-47-8</td>
<td>Distillates (petroleum), hydrotreated light</td>
</tr>
<tr>
<td>MA</td>
<td></td>
<td>64742-47-8</td>
<td>Distillates (petroleum), hydrotreated light</td>
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<tr>
<td>NJ</td>
<td></td>
<td>64742-47-8</td>
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</table>

Labeling requirements under FIFRA
This chemical is a pesticide product registered by the 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, and workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

CAUTION:
KEEP OUT OF REACH OF CHILDREN.
Avoid contact with the skin, eyes and clothing.
Wash thoroughly after handling.
Aerosol container contains flammable gas under pressure.

16. Other Information

SDS Prepared by:
BASF NA Product Regulations
SDS Prepared on: 2015/09/29
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.

END OF DATA SHEET