1. Identification

Product identifier used on the label

PT PHANTOM II PRESSURIZED INSECTICIDE

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: 462410
EPA Registration number: 499-548
Molecular formula: C15 H11 Br Cl F3 N2 O
Synonyms: chlorfenapyr

2. Hazards Identification


Classification of the product

STOT SE 3 (Vapours may cause Specific target organ toxicity — single exposure
drowsiness and
dizziness.)

Aquatic Acute 1 Hazardous to the aquatic environment - acute
Aquatic Chronic 1 Hazardous to the aquatic environment - chronic
Flam. Aerosol 2 Flammable aerosols

Label elements

Pictogram:

Signal Word:
Warning

Hazard Statement:
H223 Flammable aerosol.
H336 May cause drowsiness or dizziness.
H400 Very 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.
P271 Use only outdoors or in a well-ventilated area.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
P260 Do not breathe dust/gas/mist/vapours.

Precautionary Statements (Response):
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for
breathing.
P391 Collect spillage.

Precautionary Statements (Storage):
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P410 + P412 Protect from sunlight. Do no expose to temperatures exceeding 50°C/
122°F.
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.
Avoid contact with the skin, eyes and clothing.
Avoid inhalation of mists/vapours.
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>122453-73-0</td>
<td>0.5%</td>
<td>chlorfenapyr</td>
</tr>
<tr>
<td>115-10-6</td>
<td>&lt;15.0%</td>
<td>dimethyl ether</td>
</tr>
<tr>
<td>124-38-9</td>
<td>&lt;2.0%</td>
<td>carbon dioxide</td>
</tr>
<tr>
<td>67-64-1</td>
<td>&lt;35.0%</td>
<td>Acetone</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:
Rinse skin immediately with plenty of water for 15 - 20 minutes.

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. Furthermore, important symptoms and effects are so far not known. Hazards: Danger of drowsiness and dizziness.

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, water spray
Special hazards arising from the substance or mixture

Hazards during fire-fighting:
carbon monoxide, carbon dioxide, hydrogen bromide, Hydrogen chloride, hydrogen fluoride, nitrogen oxides
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.

Methods and material for containment and cleaning up
Dike spillage. 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

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 for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard 40 CFR part 170. Ensure adequate ventilation. Provide good ventilation of working area (local exhaust ventilation if necessary). Keep away from sources of ignition - No smoking. Keep container tightly sealed. Protect contents from the effects of light. Protect against heat. Protect from air. 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. Do not return residues to the storage containers. 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 all sources of ignition: heat, sparks, open flame. Sources of ignition should be kept well clear. Avoid extreme heat. Keep away from oxidizable substances. Electrical equipment should conform to national electric code. 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: Keep away from heat. Protect from direct sunlight. Keep at temperature not exceeding 50°C. Keep out of the reach of children. Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame.

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

<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>PEL 1,000 ppm 2,400 mg/m³; STEL value 1,000 ppm 2,400 mg/m³; TWA value 750 ppm 1,800 mg/m³</td>
<td>TWA value 500 ppm; STEL value 750 ppm</td>
</tr>
<tr>
<td>carbon dioxide</td>
<td>PEL 5,000 ppm 9,000 mg/m³; TWA value 10,000 ppm 18,000 mg/m³; STEL value 30,000 ppm 54,000 mg/m³</td>
<td>TWA value 5,000 ppm; STEL value 30,000 ppm</td>
</tr>
</tbody>
</table>

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. 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

Form: liquid, aerosol
Odour: solvent-like
Odour threshold: Not determined due to potential health hazard by inhalation.
Colour: yellow to orange
pH value: approx. 6 - 8 (approx. 20 °C)
Melting point: The product has not been tested.
Boiling point: approx. 56 °C
Information applies to the solvent.
Flash point: <-28 °C (Directive 92/69/EEC, A.9)
Ignition distance test for spray aerosols: > 18 in (ASTM D 3065)
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: 530 °C (Regulation 440/2008/EC, A.15)
Vapour pressure: approx. 7 bar (20 °C)
Density: approx. 0.94 g/cm3 (approx. 20 °C)
Vapour density: not applicable
Partitioning coefficient n-octanol/water (log Pow): not applicable
Thermal decomposition: No decomposition if stored and handled as prescribed/indicated.
Viscosity, dynamic: not determined
Solubility in water: miscible
Evaporation rate: not applicable
Other Information: If necessary, information on other physical and chemical parameters is indicated in this section.
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:
Not an oxidizer.

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

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

Conditions to avoid
Avoid all sources of ignition: heat, sparks, open flame.

Incompatible materials
strong bases, strong acids, strong oxidizing agents

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

Thermal decomposition:
No decomposition if stored and handled as prescribed/indicated.

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
Assessment of acute toxicity: Relatively nontoxic after single ingestion. Relatively nontoxic after short-term skin contact.

Oral
Type of value: LD50
Species: rat (female)
Value: > 5,000 mg/kg (OECD Guideline 425)

Inhalation
Type of value: LC50
Species: rat (male/female)
Value: > 2.11 mg/l (OECD Guideline 403)
Exposure time: 4 h
An aerosol was tested.
No mortality was observed.

**Dermal**
Type of value: LD50
Species: rat (male/female)
Value: > 5,000 mg/kg (OECD Guideline 402)

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

**Skin**
Species: rabbit
Result: Slightly irritating.

**Eye**
Species: rabbit
Result: non-irritant
Method: OECD Guideline 405

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

*Information on: Chlorfenapyr*
*Guinea pig maximization test*
Species: guinea pig
Result: Non-sensitizing.
Method: OECD Guideline 406

**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.

*Information on: Acetone*
Assessment of repeated dose toxicity: The substance may cause damage to the testes after repeated ingestion of high doses, as shown in animal studies. The substance may cause damage to the hematological system after repeated ingestion of high doses. The substance may cause damage to the kidney after repeated ingestion of high doses, as shown in animal studies.

**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. The results of various animal studies gave no indication of a carcinogenic effect.

**Reproductive toxicity**
Assessment of reproduction toxicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Chlorfenapyr
Assessment of reproduction toxicity: The results of animal studies gave no indication of a fertility impairing effect.

Information on: Acetone
Assessment of reproduction toxicity: As shown in animal studies, the product may cause damage to the testes after repeated high exposures that cause other toxic effects.

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.

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: Very toxic (acute effect) to aquatic organisms.

Toxicity to fish

Information on: chlorfenapyr
LC50 (96 h) 0.00744 mg/l, Oncorhynchus mykiss (Directive 84/449/EEC, C.1, Flow through.)

Information on: chlorfenapyr
EC50 (96 h) 0.00203 mg/l, Mysidopsis bahia (Directive 84/449/EEC, C.2)

Aquatic invertebrates

Information on: chlorfenapyr
No observed effect concentration (72 h) 0.020 mg/l, Pseudokirchneriella subcapitata (OECD Guideline 201)
EC50 (72 h) 0.132 mg/l, Pseudokirchneriella subcapitata (OECD Guideline 201)

Aquatic plants

Information on: chlorfenapyr
No observed effect concentration (72 h) 0.020 mg/l, Pseudokirchneriella subcapitata (OECD Guideline 201)

Assessment of terrestrial toxicity
Acutely very toxic to terrestrial organisms.

Bioaccumulative potential
Bioaccumulation potential

Information on: chlorfenapyr

Bioconcentration factor: 116, Cyprinus carpio
Accumulation in organisms is not to be expected.

----------------------------------

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: chlorfenapyr

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

----------------------------------

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. Empty aerosol cans may meet the definition of RCRA D003.

14. Transport Information

Land transport
USDOT
Hazard class: 2.1
ID number: UN 1950
Hazard label: 2.1, EHSM
Proper shipping name: AEROSOLS (contains ACETONE/DIMETHYLKETONE, CHLORFENAPYR)

Sea transport
IMDG
Hazard class: 2.1
ID number: UN 1950
Hazard label: 2.1, EHSM
Marine pollutant: YES
Proper shipping name: AEROSOLS (contains ACETONE/DIMETHYLKETONE, CHLORFENAPYR)

Air transport
IATA/ICAO
Hazard class: 2.1
15. Regulatory Information

Federal Regulations

Registration status:
Crop Protection  TSCA, US  released / exempt 499-548
Chemical  TSCA, US  blocked / not listed

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

<table>
<thead>
<tr>
<th>CERCLA RQ</th>
<th>CAS Number</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>5000 LBS</td>
<td>67-64-1</td>
<td>Acetone</td>
</tr>
<tr>
<td>100 LBS</td>
<td>115-10-6</td>
<td>dimethyl ether</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>State</th>
<th>CAS Number</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA</td>
<td>67-64-1</td>
<td>Acetone</td>
</tr>
<tr>
<td></td>
<td>115-10-6</td>
<td>dimethyl ether</td>
</tr>
<tr>
<td></td>
<td>124-38-9</td>
<td>carbon dioxide</td>
</tr>
<tr>
<td>MA</td>
<td>67-64-1</td>
<td>Acetone</td>
</tr>
<tr>
<td></td>
<td>115-10-6</td>
<td>dimethyl ether</td>
</tr>
<tr>
<td></td>
<td>124-38-9</td>
<td>carbon dioxide</td>
</tr>
<tr>
<td>NJ</td>
<td>67-64-1</td>
<td>Acetone</td>
</tr>
<tr>
<td></td>
<td>115-10-6</td>
<td>dimethyl ether</td>
</tr>
<tr>
<td></td>
<td>124-38-9</td>
<td>carbon dioxide</td>
</tr>
</tbody>
</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.
KEEP OUT OF REACH OF DOMESTIC ANIMALS.
Avoid contact with the skin, eyes and clothing.
Avoid inhalation of mists/vapours.
Wash thoroughly after handling.
Aerosol container contains flammable gas under pressure.

16. Other Information

SDS Prepared by:
BASF NA Product Regulations
SDS Prepared on: 2015/06/18

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.

IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK. END OF DATA SHEET