# 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier**

**Product Name**

PURGE® III INSECTICIDE

**Other means of identification**

**Product Code(s)** 6586-A

**Synonyms**

PIPERONYL BUTOXIDE: Butylcarbityl(6-propylpiperonyl) ether, 1,3-Benzodioxole, 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-

, N-OCTYL BICYCLOHEPTENE DICARBOXIMIDE:

N-(2-ethylhexyl)-5-norbornene-2,3-dicarboximide;

N-(2-ethylhexyl)-8,9,10-trinorborn-5-ene-2,3-dicarboximide;

, Pyrethrins

**Active Ingredient(s)**

Piperonyl Butoxide, n-Octyl bicycloheptene dicarboximide, Pyrethrins

**PCP #** 30616

**Recommended use of the chemical and restrictions on use**

**Recommended Use:** Insecticide

**Restrictions on Use:** Use as recommended by the label

**Supplier Address**

FMC Corporation
2929 Walnut Street
Philadelphia, PA 19104
(215) 299-6000 (General Information)
medsinfo@fmc.com (E-Mail General Information)

**Emergency telephone number**

For leak, fire, spill or accident emergencies, call:

1 800 / 424 9300 (CHEMTREC - U.S.A.)
1 703 / 741-5970 (CHEMTREC - International)
1 703 / 527 3887 (CHEMTREC - Alternate)

Medical Emergencies:
1 800 / 331-3148 (ProPharma Group - U.S.A. & Canada)
1 651 / 632-6793 (ProPharma Group - All Other Countries - Collect)

## 2. HAZARDS IDENTIFICATION

### Classification

**OSHA Regulatory Status**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)
Acute toxicity - Inhalation (Dusts/Mists) | Category 4
Aspiration toxicity | Category 1
Flammable Aerosols | Category 2
Gases Under Pressure | Compressed Gas

GHS Label elements, including precautionary statements

**EMERGENCY OVERVIEW**

**Danger**

**Hazard Statements**
H304 - May be fatal if swallowed and enters airways
H332 - Harmful if inhaled

**Physical Hazards**
H223 - Flammable aerosol
H280 - Contains gas under pressure; may explode if heated

**Precautionary Statements - Prevention**
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking
P211 - Do not spray on an open flame or other ignition source
P251 - Do not pierce or burn, even after use
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P312 - Call a POISON CENTER or doctor if you feel unwell
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor
P331 - Do NOT induce vomiting

**Precautionary Statements - Storage**
P405 - Store locked up
P410 + P403 - Protect from sunlight. Store in a well-ventilated place
P412 - Do not expose to temperatures exceeding 50 °C/ 122 °F

**Precautionary Statements - Disposal**
P501 - Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**
No hazards not otherwise classified were identified.

**Other Information**
No information available.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,1-Difluoroethane</td>
<td>75-37-6</td>
<td>40-50</td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated light</td>
<td>64742-47-8</td>
<td>30-40</td>
</tr>
<tr>
<td>Petroleum gases, liquified, sweetened</td>
<td>68476-86-8</td>
<td>10-20</td>
</tr>
<tr>
<td>n-Octyl bicycloheptene dicarboximide</td>
<td>113-48-4</td>
<td>3.05</td>
</tr>
<tr>
<td>Piperonyl butoxide</td>
<td>51-03-6</td>
<td>1.95</td>
</tr>
<tr>
<td>Pyrethrins</td>
<td>8003-34-7</td>
<td>0.975</td>
</tr>
</tbody>
</table>
4. FIRST AID MEASURES

**Eye Contact**
Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further treatment advice.

**Skin Contact**
Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.

**Inhalation**
Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

**Ingestion**
Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not induce vomiting or give anything by mouth to an unconscious person.

**Most important symptoms and effects, both acute and delayed**
Central nervous system effects.

**Indication of immediate medical attention and special treatment needed, if necessary**
Contains petroleum distillate. Vomiting may cause aspiration pneumonia. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**
Foam. Carbon dioxide (CO\(_2\)). Dry chemical. Water spray.

**Specific Hazards Arising from the Chemical**
Contents under pressure.

**Explosion data**
No information available.

**Sensitivity to Mechanical Impact**
No information available.

**Sensitivity to Static Discharge**
No information available.

**Protective equipment and precautions for firefighters**
Isolate fire area. Evaluate upwind. In the event of fire, wear self contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions**
Isolate and post spill area. Remove all sources of ignition. Ventilate the area. Wear suitable protective clothing, gloves and eye/face protection. For personal protection see section 8. If ventilation is not possible wear full protection suit and chemical protective equipment.

**Other**
For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.

**Environmental Precautions**
Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds, and sewer drains.

**Methods for Containment**
Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**
Transfer damaged cartridges or cans to containers for later disposal. Clean and neutralize spill area, tools and equipment by washing with water and soap. Waste must be classified and labeled prior to recycling or disposal. Dispose of waste as indicated in Section 13. Rinsate may be disposed at a waste water treatment plant.

7. HANDLING AND STORAGE
Handling
Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal. BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 130°F. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects.

Storage
Keep in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep out of reach of children and animals. Keep/store only in original container.

Incompatible products

8. EXPOSURE CONTROLS/PERSOAL PROTECTION

Control parameters

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH | Mexico
|---------------|----------|----------|-------|---------
| Pyrethrins (8003-34-7) | TWA: 5 mg/m³ | TWA: 5 mg/m³ | IDLH: 5000 mg/m³ | Mexico: TWA 5 mg/m³ |
| Petroleum distillates, hydrotreated light (64742-47-8) | TWA: 200 mg/m³ | Skin | - | - |
| Pyrethrins (8003-34-7) | TWA: 5 mg/m³ | TWA: 5 mg/m³ | TWA: 5 mg/m³ | TWA: 5 mg/m³ |

Appropriate engineering controls

Engineering measures
Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

Individual protection measures, such as personal protective equipment

Eye/Face Protection
If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

Skin and Body Protection
Wear long-sleeved shirt, long pants, socks, and shoes.

Hand Protection
Rubber/latex/neoprene or other suitable chemical resistant gloves.

Respiratory Protection
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures
Clean water should be available for washing in case of eye or skin contamination. Wash skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. Remove and wash contaminated clothing before re-use. Launder work clothing separately from regular household laundry.

General information
If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| Appearance | Clear, Aerosolized liquid |
| Physical State | Liquid Aerosol |
| Color | Clear |
| Odor | No information available |
| Odor threshold | No information available |
10. STABILITY AND REACTIVITY

Reactivity
None under normal use conditions.

Chemical Stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Hazardous polymerization
Hazardous polymerization does not occur.

Conditions to avoid
Keep away from open flames, hot surfaces and sources of ignition.

Incompatible materials

Hazardous Decomposition Products
Carbon oxides (COx), hydrogen fluoride, Carbonyl fluoride.

11. TOXICOLOGICAL INFORMATION

Product Information

LD50 Oral 2140 mg/kg (rat)
LD50 Dermal > 2000 mg/kg (rabbit)
LC50 Inhalation 2.5 mg/L 4 hr (rat)

Serious eye damage/eye irritation Slightly or non-irritating (rabbit).
Skin corrosion/irritation Slightly or non-irritating (rabbit).
Sensitization Non-sensitizing

Information on toxicological effects

Symptoms
Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Mutagenicity
Piperonyl butoxide ether may affect mammalian liver microsomal detoxification enzymes. n-Octyl bicycloheptene dicarboximide was negative in a chromosome aberration assay.

Carcinogenicity
Not recognized as carcinogenic by Research Agencies (IARC, NTP, OSHA, ACGIH).

Reproductive toxicity
No information available.

STOT - single exposure
Not classified.
STOT - repeated exposure
Target organ effects
Mice fed 0.3 or 0.9% piperonyl butoxide in the diet for 20 days had increased liver weight and other signs of liver toxicity. Male rats given up to 2.4% of piperonyl butoxide in the diet for up to 12 weeks had clinical and histologic signs of liver damage; the highest dose group showed preneoplastic changes, including enlargement of hepatocyte nuclei and multinucleated cells. Kidney damage was also seen.

Aspiration hazard
Potential for aspiration if swallowed. May be fatal if swallowed and enters airways.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piperonyl butoxide</td>
<td>Group 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51-03-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pyrethrins</td>
<td>Group 2A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8003-34-7</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Legend:
IARC (International Agency for Research on Cancer)
Group 2A - Probably Carcinogenic to Humans
Group 3 - Not classifiable as to its carcinogenicity to humans

12. ECOLOGICAL INFORMATION

Ecotoxicity

<table>
<thead>
<tr>
<th>Active Ingredient(s)</th>
<th>Duration</th>
<th>Species</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piperonyl Butoxide</td>
<td>LC50</td>
<td>Fish</td>
<td>3.94</td>
<td>ppm</td>
</tr>
<tr>
<td></td>
<td>LD50</td>
<td>Bee</td>
<td>25</td>
<td>µg/bee</td>
</tr>
<tr>
<td></td>
<td>LD50</td>
<td>Bobwhite quail</td>
<td>&gt;2250</td>
<td>mg/kg</td>
</tr>
<tr>
<td></td>
<td>LD50</td>
<td>Mallard duck</td>
<td>&gt;5620</td>
<td>ppm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Toxicity to algae</th>
<th>Toxicity to fish</th>
<th>Toxicity to daphnia and other aquatic invertebrates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyrethrins</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8003-34-7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

96 h LC50: = 0.054 mg/L (Oncorhynchus mykiss) 96 h LC50: 0.02 - 0.03 mg/L (Oncorhynchus mykiss) static 96 h LC50: = 0.074 mg/L (Lepomis macrochirus) 96 h LC50: 0.0425 - 0.121 mg/L (Pimephales promelas) flow-through 96 h LC50: 0.003 - 0.0046 mg/L (Lepomis macrochirus) flow-through 96 h LC50: 0.224 - 0.458 mg/L (Pimephales promelas) static 96 h LC50: = 0.0031 - 0.0038 mg/L (Oncorhynchus mykiss) flow-through 96 h LC50: 0.0322 - 0.0472 mg/L (Lepomis macrochirus) static

Persistence and degradability
No information available.

Bioaccumulation
No information available.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods
Improper disposal of excess pesticide, spray mixture, or rinsate is prohibited. If these wastes cannot be disposed of by use according to label instructions, contact appropriate disposal authorities for guidance. Proper personal protective equipment, as described in Sections 7 and 8, must be worn while handling materials for waste disposal.

Contaminated Packaging
Containers must be disposed of in accordance with local, state and federal regulations. Refer to the product label for container disposal instructions.
14. TRANSPORT INFORMATION

DOT

USDOT is requiring that products formerly classified as “Consumer Commodity, ORM-D” transition to “Limited Quantity” by 12/31/2020. During the transition period the 49CFR carton shipping marks may be Consumer Commodity (old) or Limited Quantity Diamond (new). Please prepare shipping documents to match the carton mark.

Packaging Type: 7.3 oz Containers
Proper Shipping Name: Consumer commodity
Hazard class: ORM-D

TDG

UN/ID no: UN1950
Proper Shipping Name: Aerosols
Hazard class: 2.1
Description: UN1950, Aerosols (1-1-Difluoroethane, Isopropyl alcohol), 2.1

ICAO/IATA

UN/ID no: ID8000
Proper Shipping Name: Consumer commodity
Hazard class: 9

IMDG/IMO

UN/ID no: UN1950
Proper Shipping Name: Aerosols
Hazard class: 2.1
EmS No.: F-D, S-U
Description: UN1950, Aerosols (1-1-Difluoroethane, Isopropyl alcohol), 2.1

15. REGULATORY INFORMATION

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piperonyl butoxide - 51-03-6</td>
<td>51-03-6</td>
<td>1.95</td>
<td>1.0</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazard Categories

- Acute health hazard: Yes
- Chronic health hazard: Yes
- Fire hazard: Yes
- Sudden release of pressure hazard: Yes
- Reactive Hazard: No

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyrethrins 8003-34-7</td>
<td>1 lb</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):
FIFRA Information
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 for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

CAUTION
Contains petroleum distillate. Harmful if absorbed through the skin.

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

International Inventories

Mexico - Grade
Moderate risk, Grade 2
CANADA

WHMIS Statement
This product has been classified in accordance with the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

WHMIS Hazard Class
A - Compressed gases
B5 - Flammable aerosol
D2B - Toxic materials

16. OTHER INFORMATION

NFPA / HMIS Ratings Legend
Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0

Revision date: 2017-12-13
Reason for revision: (M)SDS sections updated

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Prepared By:
FMC Corporation

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End of Safety Data Sheet