SAFETY DATA SHEET
PURGE® III INSECTICIDE

SDS #: 6586-A
Revision date: 2015-05-08
Format: NA
Version 1

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 DICARBOXYLIDE: 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

Recommended use of the chemical and restrictions on use

Recommended Use: Insecticide

Restrictions on Use: Use as recommended by the label

Manufacturer Address

FMC Corporation
1735 Market Street
Philadelphia, PA 19103
(215) 299-6000 (General Information)
msdsinfo@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 / 527 3887 (CHEMTREC - Collect - All Other Countries)
Medical Emergencies:
1 800 / 331-3148 (PROSAR - U.S.A. & Canada)
1 651 / 632-6793 (PROSAR - 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>Piperonyl butoxide</td>
<td>51-03-6</td>
<td>1.95</td>
</tr>
<tr>
<td>n-Octyl bicycloheptene dicarboximide</td>
<td>113-48-4</td>
<td>3.05</td>
</tr>
<tr>
<td>Pyrethrins</td>
<td>8003-34-7</td>
<td>0.975</td>
</tr>
<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>
</tbody>
</table>

Synonyms are provided in Section 1.

4. FIRST AID MEASURES
PURGE® III INSECTICIDE

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 (within the U.S. and Canada) 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

Specific Hazards Arising from the Chemical
Contents under pressure.

Explosion data
Sensitivity to Mechanical Impact
Not sensitive.

Sensitivity to Static Discharge
Not sensitive.

Protective equipment and precautions for firefighters
Isolate fire area. Evaluate downwind. 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 bleach 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/PERSONAL PROTECTION

#### Control parameters

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyrethrins 8003-34-7</td>
<td>TWA: 5 mg/m³</td>
<td>TWA: 5 mg/m³</td>
<td>IDLH: 5000 mg/m³</td>
<td>Mexico: TWA 5 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pyrethrins 8003-34-7</td>
<td>TWA: 5 mg/m³</td>
<td>TWA: 5 mg/m³</td>
<td>TWA: 5 mg/m³</td>
<td>Mexico: STEL 10 mg/m³</td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated light 64742-47-8</td>
<td>TWA: 200 mg/m³</td>
<td>Skin: -</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

#### 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**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear, Aerosolized liquid</td>
</tr>
<tr>
<td>Physical State</td>
<td>Liquid Aerosol</td>
</tr>
<tr>
<td>Color</td>
<td>Clear</td>
</tr>
<tr>
<td>Odor</td>
<td>No information available</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>No information available</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 85 °C / &gt; 185 °F (8-inch Flame Extension)</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
</tr>
</tbody>
</table>
Flammability Limit in Air
  Upper flammability limit: No information available
  Lower flammability limit: No information available
Vapor pressure No information available
Vapor density No information available
Density 6.9 lb/gal
Specific gravity No information available
Water solubility No information available
Solubility in other solvents No information available
Partition coefficient No information available
Autoignition temperature No information available
Decomposition temperature No information available
Viscosity, kinematic No information available
Viscosity, dynamic No information available
Explosive properties No information available
Oxidizing properties No information available
Molecular weight No information available
Bulk density 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.
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 (rat)
Eye Contact Slightly or non-irritating (rabbit)
Skin Contact 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 Not classified.
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></td>
<td>Group 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>51-03-6</td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

Ecotoxicity

<table>
<thead>
<tr>
<th>Piperonyl butoxide (51-03-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Ingredient(s)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Piperonyl Butoxide</td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
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<tr>
<td></td>
</tr>
</tbody>
</table>

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.

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.

<table>
<thead>
<tr>
<th>Packaging Type</th>
<th>Proper Shipping Name</th>
<th>Hazard class</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.3 oz Containers</td>
<td>Consumer commodity</td>
<td>ORM-D</td>
</tr>
</tbody>
</table>

TDG

<table>
<thead>
<tr>
<th>UN/ID no</th>
<th>Proper Shipping Name</th>
<th>Hazard class</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN1950</td>
<td>Aerosols</td>
<td>2.1</td>
<td>UN1950, Aerosols (1-1-Difluoroethane, Isopropyl alcohol), 2.1</td>
</tr>
</tbody>
</table>

ICAO/IATA

<table>
<thead>
<tr>
<th>UN/ID no</th>
<th>Proper Shipping Name</th>
<th>Hazard class</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID8000</td>
<td>Consumer commodity</td>
<td>9</td>
</tr>
</tbody>
</table>

IMDG/IMO

<table>
<thead>
<tr>
<th>UN/ID no</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN1950</td>
</tr>
<tr>
<td>Chemical name</td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td>Piperonyl butoxide - 51-03-6</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: No
- 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</td>
<td>1 lb</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8003-34-7</td>
<td></td>
<td></td>
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</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):

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Hazardous Substances RQs</th>
<th>Extremely Hazardous Substances RQs</th>
<th>RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyrethrins</td>
<td>1 lb</td>
<td></td>
<td>RQ 1 lb final RQ</td>
</tr>
<tr>
<td>8003-34-7</td>
<td></td>
<td></td>
<td>RQ 0.454 kg final RQ</td>
</tr>
</tbody>
</table>

### 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**
**PURGE® III INSECTICIDE**

**International Inventories**

<table>
<thead>
<tr>
<th>Component</th>
<th>TSCA (United States)</th>
<th>DSL (Canada)</th>
<th>EINECS/ELINCS (Europe)</th>
<th>ENCS (Japan)</th>
<th>China (IECSC)</th>
<th>KECL (Korea)</th>
<th>PICCS (Philippines)</th>
<th>AICS (Australia)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piperonyl butoxide 51-03-6 (1.95)</td>
<td>X X X X X X X</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n-Octyl bicycloheptene dicarboximide 113-48-4 (3.05)</td>
<td>X X X X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pyrethrins 8003-34-7 (0.975)</td>
<td>X X X X X X</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,1-Difluoroethane 75-37-6 (40-50)</td>
<td>X X X X X X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated light 64742-47-8 (30-40)</td>
<td>X X X X X X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Petroleum gases, liquified, sweetened 68476-86-8 (10-20)</td>
<td>X X X X X X</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Mexico - Grade  
Moderate risk, Grade 2

CANADA

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

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>3</td>
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<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical hazard</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

Revision date: 2015-05-08  
Revision note: Format Change
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Prepared By:

FMC Corporation

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End of Safety Data Sheet