

**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 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

**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

Chemical name	CAS-No	Weight %
Piperonyl butoxide	51-03-6	1.95
n-Octyl bicycloheptene dicarboximide	113-48-4	3.05
Pyrethrins	8003-34-7	0.975
1,1-Difluoroethane	75-37-6	40-50
Petroleum distillates, hydrotreated light	64742-47-8	30-40
Petroleum gases, liquified, sweetened	68476-86-8	10-20

Synonyms are provided in Section 1.

## 4. FIRST AID MEASURES

<b>Eye Contact</b>	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.
<b>Skin Contact</b>	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.
<b>Inhalation</b>	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.
<b>Ingestion</b>	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.
<b>Most important symptoms and effects, both acute and delayed</b>	Central nervous system effects.
<b>Indication of immediate medical attention and special treatment needed, if necessary</b>	Contains petroleum distillate. Vomiting may cause aspiration pneumonia. Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	Foam. Carbon dioxide (CO <sub>2</sub> ). Dry chemical. Water spray.
<b>Specific Hazards Arising from the Chemical</b>	Contents under pressure.
<b>Explosion data</b>	
<b>Sensitivity to Mechanical Impact</b>	Not sensitive.
<b>Sensitivity to Static Discharge</b>	Not sensitive.
<b>Protective equipment and precautions for firefighters</b>	Isolate fire area. Evaluate downwind. In the event of fire, wear self contained breathing apparatus.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	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.
<b>Other</b>	For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.
<b>Environmental Precautions</b>	Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds, and sewer drains.
<b>Methods for Containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	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

<b>Handling</b>	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.
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**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** Strong oxidizing agents. Bases. Powdered earth metals.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
Pyrethrins 8003-34-7	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	IDLH: 5000 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	Mexico: TWA 5 mg/m <sup>3</sup> Mexico: STEL 10 mg/m <sup>3</sup>
Chemical name	British Columbia	Quebec	Ontario TWAEV	Alberta
Pyrethrins 8003-34-7	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>
Petroleum distillates, hydrotreated light 64742-47-8	TWA: 200 mg/m <sup>3</sup> Skin	-	-	-

### 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

<b>Appearance</b>	Clear, Aerosolized liquid
<b>Physical State</b>	Liquid Aerosol
<b>Color</b>	Clear
<b>Odor</b>	No information available
<b>Odor threshold</b>	No information available
<b>pH</b>	No information available
<b>Melting point/freezing point</b>	Not applicable
<b>Boiling Point/Range</b>	No information available
<b>Flash point</b>	> 85 °C / > 185 °F (8-inch Flame Extension)
<b>Evaporation Rate</b>	No information available
<b>Flammability (solid, gas)</b>	No information available

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.
Incompatible materials	Strong oxidizing agents. Bases. Powdered earth metals.
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.
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### 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.
Carcinogenicity	n-Octyl bicycloheptene dicarboximide was negative in a chromosome aberration assay,
Reproductive toxicity	Not recognized as carcinogenic by Research Agencies (IARC, NTP, OSHA, ACGIH).
STOT - single exposure	No information available.
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.

Chemical name	ACGIH	IARC	NTP	OSHA
Piperonyl butoxide 51-03-6		Group 3		

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Piperonyl butoxide (51-03-6)				
Active Ingredient(s)	Duration	Species	Value	Units
Piperonyl Butoxide	LC50	Fish	3.94	ppm
	LD50	Bee	25	µg/bee
	LD50	Bobwhite quail	>2250	mg/kg
	LD50	Mallard duck	>5620	ppm

**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.

**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-Difluroethane, Isopropyl alcohol), 2.1

**ICAO/IATA**  
**UN/ID no** ID8000  
**Proper Shipping Name** Consumer commodity  
**Hazard class** 9

**IMDG/IMO**  
**UN/ID no** UN1950



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Chemical name	New Jersey	Massachusetts	Pennsylvania
Piperonyl butoxide 51-03-6	X		
Pyrethrins 8003-34-7	X	X	X
1,1-Difluoroethane 75-37-6	X	X	

**International Inventories**

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

**Mexico - Grade** Moderate risk, Grade 2

**CANADA**

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



**16. OTHER INFORMATION**

<b>NFPA</b>	<b>Health Hazards 2</b>	<b>Flammability 3</b>	<b>Instability 0</b>	<b>Special Hazards -</b>
<b>HMIS</b>	<b>Health Hazards 2</b>	<b>Flammability 3</b>	<b>Physical hazard 0</b>	<b>Personal Protection X</b>

**Revision date:** 2015-05-08  
**Revision note** Format Change



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**End of Safety Data Sheet**