SAFETY DATA SHEET

PURGE® III INSECTICIDE

SDS # : 6586-A
Revision date: 2017-12-13
Format: NA
Version 1.04

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)
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 / 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

Chemical name	CAS-No	Weight %
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
n-Octyl bicycloheptene dicarboximide	113-48-4	3.05
Piperonyl butoxide	51-03-6	1.95
Pyrethrins	8003-34-7	0.975

Synonyms are provided in Section 1.

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

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 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/m³	TWA: 5 mg/m³	IDLH: 5000 mg/m³ TWA: 5 mg/m³	Mexico: TWA 5 mg/m³ Mexico: STEL 10 mg/m³
Chemical name	**British Columbia**	**Quebec**	**Ontario TWAEV**	**Alberta**
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

pH	No information available
Melting point/freezing point	Not applicable
Boiling Point/Range	No information available
Flash point	> 85 °C / > 185 °F (8-inch Flame Extension)
Evaporation Rate	No information available
Flammability (solid, gas)	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 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 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		
Pyrethrins 8003-34-7		Group 2A		

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

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

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Pyrethrins 8003-34-7		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-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
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:

Chemical name	CAS-No	Weight %	SARA 313 - Threshold Values %
Piperonyl butoxide - 51-03-6	51-03-6	1.95	1.0

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):

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Pyrethrins 8003-34-7	1 lb			

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):

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Pyrethrins 8003-34-7	1 lb 0.454 kg	

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 distilliate. 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

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

International Inventories

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
1,1-Difluoroethane 75-37-6	X	X	X	X	X	X	X	X
Petroleum distillates, hydrotreated light 64742-47-8	X	X	X		X	X	X	X
Petroleum gases, liquified, sweetened 68476-86-8	X	X	X		X	X	X	X
n-Octyl bicycloheptene dicarboximide 113-48-4		X	X	X	X		X	X
Piperonyl butoxide 51-03-6	X	X	X	X	X	X	X	X
Pyrethrins 8003-34-7		X	X		X	X	X	X

Mexico - Grade Moderate risk, Grade 2

Chemical name	Carcinogen Status	Mexico
Pyrethrins		Mexico: TWA 5 mg/m^3 Mexico: STEL 10 mg/m^3

Chemical name	Mexico - Pollutant Release and	Pollutant Release and Transfer

	Transfer Register - Reporting Emissions for Fabrication, Process or Use -Threshold Quantities	Register - Reporting Emissions - Threshold Quantities
Pyrethrins	500 2500 kg/yr	500 kg/yr

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	**Health Hazards** 2	**Flammability** 3	**Instability** 0	**Special Hazards** -
HMIS	**Health Hazards** 2	**Flammability** 3	**Physical hazard** 0	**Personal Protection** X

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

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Reason for revision: (M)SDS sections updated

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End of Safety Data Sheet