

SAFETY DATA SHEET
CB-80 Insecticide

SDS # : 6545-A
Revision date: 2017-05-23
Format: NA
Version 2



1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name CB-80 Insecticide

Other means of identification

Product Code(s) 6545-A

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

Active Ingredient(s) Piperonyl Butoxide, Pyrethrins

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
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable Aerosols	Category 2

GHS Label elements, including precautionary statements

EMERGENCY OVERVIEW

Warning

Hazard Statements

H332 - Harmful if inhaled
 H319 - Causes serious eye irritation
 H335 - May cause respiratory irritation
 H336 - May cause drowsiness or dizziness
 H223 - Flammable aerosol
 H229 - Pressurized container: May burst if heated



Precautionary Statements - Prevention

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
 P264 - Wash face, hands and any exposed skin thoroughly after handling
 P272 - Contaminated work clothing should not be allowed out of the workplace
 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
 P280 - Wear eye protection/ face protection

Precautionary Statements - Response

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P337 + P313 - If eye irritation persists: Get medical advice/ attention
 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
 P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
 P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F

Precautionary Statements - Disposal

P501 - Dispose of contents/container according to label directions

Hazards not otherwise classified (HNOC)

No hazards not otherwise classified were identified.

Other Information

May be harmful if swallowed. Harmful to aquatic life with long lasting effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS-No	Weight %
Piperonyl butoxide	51-03-6	4

Pyrethrins	8003-34-7	0.5
1,1-Difluoroethane	75-37-6	50-70
Isopropanol	67-63-0	15-30
Petroleum distillates, hydrotreated light	64742-47-8	1-5

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	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. As in any fire, wear self-contained breathing apparatus and full protective gear.

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 PROTECTIONControl parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
Pyrethrins (8003-34-7)	TWA: 5 mg/m ³	TWA: 5 mg/m ³	IDLH: 5000 mg/m ³ TWA: 5 mg/m ³	Mexico: TWA 5 mg/m ³ Mexico: STEL 10 mg/m ³
Isopropanol (67-63-0)	STEL 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m ³	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m ³ STEL: 500 ppm STEL: 1225 mg/m ³	Mexico: TWA 400 ppm Mexico: TWA 980 mg/m ³ Mexico: STEL 500 ppm Mexico: STEL 1225 mg/m ³
Chemical name	British Columbia	Quebec	Ontario TWAEV	Alberta
Pyrethrins (8003-34-7)	TWA: 5 mg/m ³	TWA: 5 mg/m ³	TWA: 5 mg/m ³	TWA: 5 mg/m ³
Isopropanol (67-63-0)	TWA: 200 ppm STEL: 400 ppm	TWA: 400 ppm TWA: 985 mg/m ³ STEL: 500 ppm STEL: 1230 mg/m ³	TWA: 200 ppm STEL: 400 ppm	TWA: 200 ppm TWA: 492 mg/m ³ STEL: 400 ppm STEL: 984 mg/m ³
Petroleum distillates, hydrotreated light (64742-47-8)	TWA: 200 mg/m ³ 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 Protective 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	Yellow, Aerosolized liquid
Physical State	Liquid Aerosol
Color	Yellow
Odor	Pyrethrins
Odor threshold	No information available
pH	No information available
Melting point/freezing point	Not applicable
Boiling Point/Range	No information available
Flash point	14.4 °C / 58 °F (Flame extension 5" - no flashback)
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	7.29 lb/gal (0.874 g/cm ³)
Specific gravity	0.8746
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	2,370 mg/kg (rat)
LD50 Dermal	> 2000 mg/kg (rabbit)
LC50 Inhalation	2.5 mg/L 4 hr (rat)
Eye Contact	Slightly or non-irritating (rabbit)
Skin Contact	Slightly or non-irritating (rabbit)
Sensitization	May cause sensitization by skin contact

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
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Piperonyl butoxide (51-03-6)	= 4570 mg/kg (Rat) = 6150 mg/kg (Rat)	> 7950 mg/kg (Rat)	
Pyrethrins (8003-34-7)	= 200 mg/kg (Rat)	= 1350 mg/kg (Rat) = 300 mg/kg (Rabbit)	= 3.4 mg/L (Rat) 4 h
Isopropanol (67-63-0)	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	= 72600 mg/m ³ (Rat) 4 h

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

Carcinogenicity No information available.

Reproductive toxicity Isopropanol has been reported to cause teratogenicity in laboratory animals.

Developmental toxicity Not classified.

STOT - single exposure Not classified.

STOT - repeated exposure 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.

Target organ effects The product does not present an aspiration pneumonia hazard.

Aspiration hazard

Chemical name	ACGIH	IARC	NTP	OSHA
Piperonyl butoxide 51-03-6		Group 3		
Pyrethrins 8003-34-7		Group 2A		
Isopropanol 67-63-0		Group 3		

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
Isopropanol 67-63-0	96 h EC50: > 1000 mg/L (Desmodesmus subspicatus) 72 h EC50: > 1000 mg/L (Desmodesmus subspicatus)	96 h LC50: = 9640 mg/L (Pimephales promelas) flow-through 96 h LC50: > 1400000 µg/L (Lepomis macrochirus) 96 h LC50: = 11130 mg/L (Pimephales promelas) static	48 h EC50: = 13299 mg/L (Daphnia magna)
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	
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Persistence and degradability No information available.

Bioaccumulation No information available.

Mobility 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

Packaging Type 17 oz. Container
UN/ID no 17 oz. Container: UN1950
 13 lb. Cylinder: UN1954
Proper Shipping Name 17 oz. Container: Consumer Commodity
 13 lb. Cylinder: Compressed gas, flammable, n.o.s. (1,1-Difluoroethane, Isopropyl alcohol)
Hazard class 17 oz. Container: ORM-D
 13 lb. Cylinder: 2.1

TDG

UN/ID no 17 oz. Container: UN1950
 13 lb. Cylinder: UN1954
Proper Shipping Name 17 oz. Container: Aerosols
 13 lb. Cylinder: Compressed gas, flammable, n.o.s. (1,1-Difluoroethane, Isopropyl alcohol)
Hazard class 2.1

ICAO/IATA

UN/ID no 17 oz. Container ID8000
 13 lb. Cylinder: UN 1954
Proper Shipping Name 17 oz. Container: Consumer Commodity
 13 lb. Cylinder: Compressed gas, flammable, n.o.s. (1,1-Difluoroethane, Isopropyl alcohol)
Hazard class 17 oz. Container: 9
 13 lb. Cylinder: 2.1

IMDG/IMO

UN/ID no 17 oz. Container: UN1950
 13 lb. Cylinder: UN1954
Proper Shipping Name 17 oz. Container: Aerosols
 13 lb. Cylinder: Compressed gas, flammable, n.o.s. (1,1-Difluoroethane, Isopropyl alcohol)
Hazard class 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	4	1.0
Isopropanol - 67-63-0	67-63-0	15-30	1.0

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):

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 distillates. Causes moderate eye irritation. Harmful if swallowed, inhaled or absorbed through skin. Prolonged or repeated contact with the skin may cause allergic reactions in some individuals

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
Piperonyl butoxide 51-03-6	X		
Pyrethrins	X	X	X

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8003-34-7			
1,1-Difluoroethane 75-37-6	X		X
Isopropanol 67-63-0	X		X

International Inventories

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Piperonyl butoxide 51-03-6	X	X	X	X	X	X	X	X
Pyrethrins 8003-34-7		X	X		X	X	X	X
1,1-Difluoroethane 75-37-6	X	X	X	X	X	X	X	X
Isopropanol 67-63-0	X	X	X	X	X	X	X	X
Petroleum distillates, hydrotreated light 64742-47-8	X	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
Isopropanol		Mexico: TWA 400 ppm Mexico: TWA 980 mg/m ³ Mexico: STEL 500 ppm Mexico: STEL 1225 mg/m ³

Chemical name	Mexico - Pollutant Release and Transfer Register - Reporting Emissions for Fabrication, Process or Use - Threshold Quantities	Pollutant Release and Transfer 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
- D1B - Toxic materials
- 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

CB-80 Insecticide

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Reason for revision: (M)SDS sections updated

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End of Safety Data Sheet