SAFETY DATA SHEET

CB-40 Insecticide

SDS #: 6544-A

Revision date: 2016-05-26

Format: NA Version 1.03



1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name CB-40 Insecticide

Other means of identification

Product Code(s) 6544-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 and Pyrethroids,

Pyrethrum

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 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 / 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
Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3

Version 1.03

Flammable Aerosols	Category 2
Gases Under Pressure	Compressed Gas

GHS Label elements, including precautionary statements

EMERGENCY OVERVIEW

Warning

Hazard Statements

- H313 May be harmful in contact with skin
- H317 May cause an allergic skin reaction
- H319 Causes serious eye irritation
- H332 Harmful if inhaled
- H335 May cause respiratory irritation
- H336 May cause drowsiness or dizziness
- H280 Contains gas under pressure; may explode if heated



Precautionary Statements - Prevention

- 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
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P264 Wash face, hands and any exposed skin thoroughly after handling
- 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

Precautionary Statements - Storage

- P403 + P233 Store in a well-ventilated place. Keep container tightly closed
- P405 Store locked up
- P410 + P412 Protect from sunlight. 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

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS-No	Weight %
Piperonyl butoxide	51-03-6	1
n-Octyl bicycloheptene dicarboximide	113-48-4	1
Pyrethrins	8003-34-7	0.5
1,1-Difluoroethane	75-37-6	20-30
Isopropanol	67-63-0	10-20

Version 1.03

Synonyms are provided in Section 1.

4.	FIRST	AID	MFAS	URFS

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 ContactTake 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

. Treatment is symptomatic and supportive.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Foam. Carbon dioxide (CO₂). Dry chemical. Water spray.

Specific Hazards Arising from the

Chemical

Other

Explosion data

Sensitivity to Mechanical Impact Sensitivity to Static Discharge Contents under pressure.

Not sensitive. 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.

For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1

"Product and Company Identification" above.

Environmental Precautions See Section 12 for additional Ecological Information.

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

HandlingDo 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

Page 3/9

Version 1.03

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	OSHA PEL NIOSH	
Pyrethrins	TWA: 5 mg/m ³	TWA: 5 mg/m ³ IDLH: 5000 mg/m ³		Mexico: TWA 5 mg/m ³
(8003-34-7)			TWA: 5 mg/m ³	Mexico: STEL 10 mg/m ³
Isopropanol	STEL 400 ppm	TWA: 400 ppm	IDLH: 2000 ppm	Mexico: TWA 400 ppm
(67-63-0)	TWA: 200 ppm	TWA: 980 mg/m ³	TWA: 400 ppm	Mexico: TWA 980 mg/m ³
			TWA: 980 mg/m ³	Mexico: STEL 500 ppm
			STEL: 500 ppm	Mexico: STEL 1225
			STEL: 1225 mg/m ³	mg/m³
		Quebec Ontario TWAEV		
Chemical name	British Columbia	Quebec	Ontario TWAEV	Alberta
Chemical name Pyrethrins	British Columbia TWA: 5 mg/m ³	Quebec TWA: 5 mg/m ³	Ontario TWAEV TWA: 5 mg/m ³	Alberta TWA: 5 mg/m ³
Pyrethrins				
Pyrethrins				
Pyrethrins (8003-34-7)	TWA: 5 mg/m ³	TWA: 5 mg/m ³	TWA: 5 mg/m³	TWA: 5 mg/m ³
Pyrethrins (8003-34-7)	TWA: 5 mg/m ³ TWA: 200 ppm	TWA: 5 mg/m ³ TWA: 400 ppm	TWA: 5 mg/m³	TWA: 5 mg/m ³ TWA: 200 ppm

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 Aerosolized liquid, Light yellow

Page 4/9

Version 1.03

Physical State
Color
Color
Codor
Light yellow
Pyrethrins

Odor threshold No information available pH No information available

Melting point/freezing point Not applicable

Boiling Point/Range No information available

Flash point 27.8 °C / 82 °F
Evaporation Rate No information available
Flammability (solid, gas) No information available

Flammability Limit in Air

Upper flammability limit:
Lower flammability limit:
Vapor pressure
Vapor density

No information available
No information available
No information available
No information available

Density 7.98 lb/gal

No information available Specific gravity No information available Water solubility Solubility in other solvents No information available **Partition coefficient** No information available No information available **Autoignition temperature 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 > 2002 2000 mg/kg (rabbit)

LC50 Inhalation 2.5 mg/L (rat)

Eye ContactSlightly or non-irritating (rabbit)Skin ContactSlightly or non-irritating (rabbit)

Sensitization Sensitizer

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.

CB-40 Insecticide

SDS #: 6544-A **Revision date:** 2016-05-26

Version 1.03

Carcinogenicity
Reproductive toxicity
Developmental toxicity
STOT - single exposure

Aspiration hazard

n-Octyl bicycloheptene dicarboximide was negative in a chromosome aberration assay, Not recognized as carcinogenic by Research Agencies (IARC, NTP, OSHA, ACGIH).

No information available.

Isopropanol has been reported to cause teratogenicity in laboratory animals.

STOT - single exposure STOT - repeated exposure Target organ effects Not classified.

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.

No information available.

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		

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	mag

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 PackagingContainers 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

Proper Shipping Name 17 oz. Container: Consumer Commodity

Hazard class Consumer Commodity: ORM-D

TDG

UN/ID no 17 oz. Container: UN1950 Proper Shipping Name 17 oz. Container: Aerosols

Hazard class 2.1

Version 1.03

ICAO/IATA

UN/ID no 17 oz. Container: ID8000

Proper Shipping Name 17 oz. Container: Consumer Commodity

Hazard class 17 oz. Container: 9

IMDG/IMO

UN/ID no 17 oz. Container: UN1950 Proper Shipping Name 17 oz. Container: Aerosols

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	1	1.0
Isopropanol - 67-63-0	67-63-0	10-20	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
Ammonium hydroxide 1336-21-6	1000 lb			Х
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
Ammonium hydroxide 1336-21-6	1000 lb 454 kg	
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

Harmful if swallowed, inhaled, or absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Version 1.03

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

International Inventories

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINC S (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Piperonyl butoxide 51-03-6	Х	Х	Х	Х	Х	Х	Х	Х
n-Octyl bicycloheptene dicarboximide 113-48-4		X	X	Х	Х		Х	Х
Pyrethrins 8003-34-7		Х	Х		Х	Х	Х	Х
1,1-Difluoroethane 75-37-6	Х	Х	Х	Х	Х	Х	Х	Х
Isopropanol 67-63-0	Х	Х	Х	Х	Х	Х	Х	Х

Mexico - Grade

Serious risk, Grade 3

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	

WHMIS Hazard Class

A - Compressed gases B5 - Flammable aerosol D1B - Toxic materials D2B - Toxic materials

Version 1.03









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

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Reason for revision: Format Change

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End of Safety Data Sheet