

MATERIAL SAFETY DATA SHEET

CB-40 Insecticide



MSDS Ref. No.: 100000015991

Date Approved: 02/17/2010

Revision No.: 2

This document has been prepared to meet the requirements of the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200 and other regulatory requirements.

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:	CB-40 Insecticide
ACTIVE INGREDIENT(S):	Pyrethrins*; Piperonyl butoxide (PBO)**; N Octyl bicycloheptane dicarboximide***
CHEMICAL FAMILY:	Pyrethrin Insecticide
SYNONYMS:	Pyrethrins and Pyrethroids, Pyrethrum*; Butylcarbityl(6-propylpiperonyl) ether, 1,3-Benzodioxole, 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-**; N-(2-ethylhexyl)-5-norbornene-2,3-dicarboximide; N-(2-ethylhexyl)-8,9,10-trinorborn-5-ene-2,3-dicarboximide***
GENERAL USE:	Insecticide EPA Registration No. 279-3397

MANUFACTURER

FMC CORPORATION
Agricultural Products Group
1735 Market Street
Philadelphia, PA 19103
(215) 299-6000 (General Information)
msdsinfo@fmc.com (Email - General Information)

EMERGENCY TELEPHONE NUMBERS

(800) 331-3148 (Medical - U.S.A. & Canada)
(651) 632-6793 (Medical - Collect - All Other Countries)

For leak, fire, spill, or accident emergencies, call:
(800) 424-9300 (CHEMTREC - U.S.A. & Canada)
(703) 527-3887 (CHEMTREC - Collect - All Other Countries)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

- Pale yellow, opaque emulsion, in an aerosol form, with a pyrethrin odor.
- Flammable liquid and vapor.
- Contents under pressure, do not expose to fire or extreme heat.

- Harmful if inhaled, absorbed through skin or swallowed.
- May be irritating to the skin and eyes.
- Irritating to the upper respiratory tract at high airborne concentrations.

POTENTIAL HEALTH EFFECTS: Effects from overexposure may occur from inhaling, or coming into contact with skin or eyes. The components in this product may be irritating to the eyes, skin and respiratory tract.

MEDICAL CONDITIONS AGGRAVATED: None presently known.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Wt.%	EC No.	EC Class
Pyrethrins	8003-34-7	0.5	None	Xn, N: R20/21/22-50/53
Piperonyl butoxide (PBO)	51-03-6	1	200-076-7	Not classified per Annex I of Directive 67/548/EEC
N Octyl bicycloheptane dicarboximide	113-48-4	1	204-029-1	Not classified per Annex I of Directive 67/548/EEC
Aromatic Hydrocarbons	64742-47-8	1 - 3	265-149-8	Xn; R65
Isopropanol	67-63-0	10 - 15	200-661-7	F-Xi; R11-36-67
1,1-Difluoroethane	75-37-6	20 - 30	200-866-1	

4. FIRST AID MEASURES

EYES: Flush with large quantities of water for at least 15 minutes, lifting the upper and lower eyelids intermittently. If wearing contact lenses, remove after the first five minutes and continue flushing with water. If irritation occurs and persists, get medical attention.

SKIN: Remove contaminated clothing and thoroughly wash with soap and water. If irritation occurs and persists, contact a medical doctor.

INGESTION: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything to an unconscious person.

INHALATION: Remove to fresh air. If breathing difficulty or discomfort occurs and persists, see a medical doctor. If breathing has stopped, give artificial respiration and see a medical doctor immediately.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use water fog, carbon dioxide, dry chemical, foam

FIRE / EXPLOSION HAZARDS: Exposure to temperatures above 130°F may cause container to rupture.

FIRE FIGHTING PROCEDURES: Isolate area. Evacuate downwind. Fight fire from protected location or safe distance. Keep containers cool to avoid bursting. Wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

RELEASE NOTES: Isolate and post spill area. Wear protective clothing and personal protective equipment as prescribed in Section 8, "Exposure Controls/Personal Protection". Keep unprotected persons and animals out of the area.

7. HANDLING AND STORAGE

HANDLING AND STORAGE: Store in a cool, dry, well-ventilated place. Do not use or store near heat, open flame or hot surfaces. Do not contaminate other products, water or food by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS

Chemical Name	ACGIH	OSHA	Supplier
Pyrethrins	5 mg/m ³ (TWA)	5 mg/m ³ (PEL)	
Isopropanol	200 ppm (TWA) 400 ppm (STEL)	400 ppm (PEL) 980 mg/m ³ (PEL) 500 ppm (STEL) 1,225 mg/m ³ (STEL)	

ENGINEERING CONTROLS: Use in well ventilated area. Avoid contact.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: For splash, mist or spray exposure, wear chemical protective goggles or a face shield.

RESPIRATORY: When used as directed, respiratory protection is not required. High concentrations may require air supplied systems.

PROTECTIVE CLOTHING: No special clothing is required; however, all work clothing should be laundered before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR:	Pyrethrin
APPEARANCE:	Pale yellow, opaque emulsion (Aerosol)
FLASH POINT:	27.77 °C (82 °F) Non-flammable per flame projection test.
pH:	Not available
SPECIFIC GRAVITY:	0.9574

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID:	Excessive heat, sparks, open flames and other sources of ignition.
STABILITY:	Stable
POLYMERIZATION:	Will not occur
INCOMPATIBLE MATERIALS:	Avoid contact with strong oxidizers, alkaline materials and powdered earth metals.
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon monoxide, carbon dioxide, hydrogen fluoride and carbonyl fluoride.

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS: May be irritating to the eyes.

SKIN EFFECTS: May be irritating to the skin.

DERMAL LD₅₀: Pyrethrins: > 2,000 mg/kg (rat)
Piperonyl butoxide: > 2,000 mg/kg (rat)
N-octyl bicycloheptene dicarboximide: > 5,000 mg/kg (rabbit)

ORAL LD₅₀: Pyrethrins: 2,370 mg/kg (male rat)
 Pyrethrins: 1,030 mg/kg (female rat)
 Piperonyl butoxide: 4,570 mg/kg (male rat)
 Piperonyl butoxide: 7,220 mg/kg (female rat)
 N-octyl bicycloheptene dicarboximide: 5,000 mg/kg (rat)

INHALATION LC₅₀: Pyrethrins: 2.5 mg/l (4 h) (female rat)
 Pyrethrins: 3.9 mg/l (4 h) (male rat)
 Pyrethrins: 3.4 mg/l (4 h) (combined)
 Piperonyl butoxide: > 5.9 mg/l (4 h) (rat)

ACUTE EFFECTS FROM OVEREXPOSURE: Harmful if inhaled, absorbed through skin or swallowed. This product may be irritating to the eyes and skin. Ingestion or inhalation of large quantities of isopropanol vapors may cause flushing, headache, dizziness, mental depression, nausea, vomiting, narcosis, anesthesia and coma. Inhalation of high concentrations of 1,1-difluoroethane is harmful and may cause heart irregularities, unconsciousness or death.

CHRONIC EFFECTS FROM OVEREXPOSURE: Piperonyl butoxide ether may affect mammalian liver microsomal detoxification enzymes. 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. Isopropanol has been reported to cause teratogenicity in laboratory animals.

CARCINOGENICITY:

Chemical Name	IARC	NTP	OSHA	Other
Piperonyl butoxide (PBO)	3	Not listed	Not listed	(ACGIH) Not listed

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: No data available for the product.

ECOTOXICOLOGICAL INFORMATION: No data available for the product.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Do not puncture or incinerate container. Open dumping or burning of this material or its packaging is prohibited. Empty containers can be disposed of with ordinary household trash, as per label recommendations.

EMPTY CONTAINER: Do not puncture or incinerate container.

14. TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION (DOT)

PACKAGING TYPE: 17 oz. Container
PROPER SHIPPING NAME: Consumer Commodity
PRIMARY HAZARD CLASS / DIVISION: ORM-D

INTERNATIONAL MARITIME DANGEROUS GOODS (IMDG)

PACKAGING TYPE: 17 oz. Container
PROPER SHIPPING NAME: Aerosols
PRIMARY HAZARD CLASS / DIVISION: 2.1
UN/NA NUMBER: UN 1950
MARINE POLLUTANT: Pyrethrins
LABEL(S): FLAMMABLE GAS
PLACARD(S): FLAMMABLE GAS
MARKING(S): UN 1950 + Marine Pollutant

INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO) / INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA)

PACKAGING TYPE: 17 oz. Container
PROPER SHIPPING NAME: Consumer Commodity
PRIMARY HAZARD CLASS / DIVISION: 9
UN/NA NUMBER: ID8000

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355, APPENDIX A):

Not listed

SECTION 311 HAZARD CATEGORIES (40 CFR 370):

Immediate, Delayed, Pressure

SECTION 313 REPORTABLE INGREDIENTS (40 CFR 372):

This product contains the following ingredients subject to Section 313 reporting requirements:
Piperonyl butoxide, Isopropanol

CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT)**CERCLA DESIGNATION & REPORTABLE QUANTITIES (RQ) (40 CFR 302.4):**

Listed

<u>Chemical Name</u>	<u>RQ</u>
Pyrethrins	1 lb
Isopropanol	100 lb

HAZARD AND RISK PHRASE DESCRIPTIONS:

EC Symbols:	F	(Highly Flammable)
	Xn	(Harmful)
	N	(Dangerous for the environment)
EC Risk Phrases:	R11	(Highly flammable)
	R20/21/22	(Harmful by inhalation, in contact with skin and if swallowed.)
	R36	(Irritating to eyes.)
	R50/53	(Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.)
	R65	(Harmful: may cause lung damage if swallowed.)
	R67	(Vapors may cause drowsiness and dizziness.)

16. OTHER INFORMATION

REVISION SUMMARY:

This MSDS replaces Revision #1, dated December 16, 2009.

Changes in information are as follows:

Section 1 (Product and Company Identification)

Section 16 (Other Information)

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