



MATERIAL SAFETY DATA SHEET

Section 1: Product & Company Identification

Product Name: CRC® Insect Repellent

Product Number (s): 14011

Product Use: Insect repellent

Manufacturer / Supplier Contact Information:

In United States:

CRC Industries, Inc.

885 Louis Drive

Warminster, PA 18974

www.crcindustries.com

1-215-674-4300 (General)

(800) 521-3168 (Technical)

(800) 272-4620 (Customer Service)

In Canada:

CRC Canada Co.

2-1246 Lorimar Drive

Mississauga, Ontario L5S 1R2

www.crc-canada.ca

1-905-670-2291

In Mexico:

CRC Industries Mexico

Av. Benito Juárez 4055 G

Colonia Orquídea

San Luís Potosí, SLP CP 78394

www.crc-mexico.com

52-444-824-1666

24-Hr Emergency – CHEMTREC: (800) 424-9300 or (703) 527-3887

Section 2: Hazards Identification

Emergency Overview

CAUTION: Harmful if Swallowed. May Cause Eye Irritation. Flammable. Contents Under Pressure.
Appearance & Odor: Clear, colorless liquid; mild alcohol odor

Potential Health Effects:

ACUTE EFFECTS:

EYE: Causes substantial but temporary eye injury.

SKIN: May cause skin reaction in rare cases. No harmful effects are expected from skin absorption.

INHALATION: Excessive inhalation of mist can cause nasal and respiratory irritation.

INGESTION: Harmful if swallowed.

CHRONIC EFFECTS: None known

TARGET ORGANS: None known

Medical Conditions Aggravated by Exposure: Pre-existing skin conditions may be aggravated by exposure.

See Section 11 for toxicology and carcinogenicity information on product ingredients.

Section 3: Composition/ Information on Ingredients

COMPONENT	CAS NUMBER	% by Wt.
DEET (N,N-Diethyl-M-Toluamide)	134-62-3	25.0
N-Octyl Bicycloheptene Dicarboximide	113-48-4	5.0
Di-n-Propyl Isocinchomeronate	136-45-8	2.5
Isopropyl Alcohol	67-63-0	30 - 40
Acetone	67-64-1	1 - 5
Liquefied Petroleum Gas	68476-86-8	20 - 30

Section 4: First Aid Measures

Eye Contact: Immediately flush with plenty of water for 15 minutes. Call a physician if irritation persists.

Skin Contact: Remove contaminated clothing and wash affected area with soap and water. Call a physician if irritation persists. Wash contaminated clothing prior to re-use.

Inhalation: Remove person to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Call a physician.

Ingestion: If swallowed, 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 directed by a poison control center or doctor. Never give anything by mouth to an unconscious person.

Note to Physicians: None

Section 5: Fire-Fighting Measures

Flammable Properties: This product is flammable in accordance with aerosol flammability definitions. (See 16 CFR 1500.3(c)(6))

Flash Point:	75°F (TCC)	Upper Explosive Limit:	NE
Autoignition Temperature:	NE	Lower Explosive Limit:	NE

Fire and Explosion Data:

Suitable Extinguishing Media: Foam, carbon dioxide or dry chemical; class B fire extinguishers

Products of Combustion: Carbon dioxide, carbon monoxide, nitrogen oxides

Explosion Hazards: Aerosol containers, when exposed to heat from fire, may build pressure and explode. Vapors may accumulate in a confined space and create a flammable atmosphere.

Protection of Fire-Fighters: Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye and skin protection should be provided. Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition.

Section 6: Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8.

Environmental Precautions: Take precautions to prevent contamination of ground and surface waters. Do not flush into sewers or storm drains.

Methods for Containment & Clean-up: Eliminate sources of ignition. Dike area to contain spill. Ventilate the area with fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate respiratory protection. Recover or absorb spilled material using an absorbent designed for chemical spills. Place used absorbents into proper waste containers.

Section 7: Handling and Storage

Handling Procedures: Do not use near sources of ignition. Use only at normal room temperatures. Do not spray towards face. Do not puncture or incinerate can. Use with proper ventilation. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. For product use instructions, please see the product label.

Storage Procedures: Store in a cool dry area out of direct sunlight. Aerosol cans must be maintained below 120 F to prevent cans from rupturing.

Aerosol Storage Level: III

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines:

	OSHA		ACGIH		OTHER		
COMPONENT	TWA	STEL	TWA	STEL	TWA	SOURCE	UNIT
DEET (N,N-Diethyl-M-Toluamide)	NE	NE	NE	NE	NE		
N-Octyl Dicycloheptene Dicarboximide	NE	NE	NE	NE	NE		
Di-N-Propyl Isocinchomeronate	NE	NE	NE	NE	NE		
Isopropyl Alcohol	400	500(v)	200	400	NE		ppm
Acetone	1000	NE	500	750	NE		ppm
Liquefied Petroleum Gas	1000	NE	1000	NE	NE		ppm
N.E. – Not Established (c) – ceiling (s) – skin (v) – vacated							

Controls and Protection:

Engineering Controls: Area should have ventilation to provide fresh air. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at the source, preventing dispersion into the general work area. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA regulations.

Respiratory Protection: None required for normal work where adequate ventilation is provided. Air monitoring is needed to determine actual employee exposure levels. Use NIOSH-approved self-contained positive pressure respirators in low circulation areas and for emergencies.

Eye/face Protection: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

Skin Protection: Use protective gloves such as nitrile or Viton. Also, use full protective clothing if there is prolonged or repeated contact of liquid with skin.

Section 9: Physical and Chemical Properties

Physical State: liquid
 Color: clear, colorless
 Odor: mild alcohol
 Odor Threshold: ND
 Specific Gravity: 0.8814
 Initial Boiling Point: ND
 Freezing Point: ND
 Vapor Pressure: ND
 Vapor Density: > 1 (air = 1)
 Evaporation Rate: ND
 Solubility: immiscible in water
 Coefficient of water/oil distribution: ND
 pH: NA
 Volatile Organic Compounds: wt %: 64.9 g/L: 572 lbs./gal: 4.76

Section 10: Stability and Reactivity

Stability: Stable

Conditions to Avoid: Do not store near open flame or in high temperature areas.

Incompatible Materials: Extreme acid or alkaline conditions may cause this product to breakdown. Contact with strong oxidizers may cause an explosive situation.

Hazardous Decomposition Products: Carbon dioxide, carbon monoxide, nitrogen oxide

Possibility of Hazardous Reactions: No

Section 11: Toxicological Information

Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

Acute Toxicity:

Component	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 (rat)
DEET (N,N-Diethyl-M-Toluamide)	1800 mg/kg	3180 µL/kg	5950 mg/m ³
N-Octyl Dicycloheptene Dicarboximide	2800 mg/kg	470 mg/kg	No data
Di-N-Propyl Isocinchomeronate	5230 mg/kg	9500 mg/kg	No data
Isopropyl Alcohol	5000 mg/kg	12,800 mg/kg	16,000 ppm/8H
Acetone	5800 mg/kg	No data	50,100 mg/m ³ /8H
Liquefied Petroleum Gas	No data	No data	No data

Chronic Toxicity:

<u>Component</u>	<u>OSHA Carcinogen</u>	<u>IARC Carcinogen</u>	<u>NTP Carcinogen</u>	<u>Irritant</u>	<u>Sensitizer</u>
DEET (N,N-Diethyl-M-Toluamide)	No	No	No	E (moderate) / S (moderate) / R (mild)	Yes
N-Octyl Dicycloheptene Dicarboximide	No	No	No	Unknown	Unknown
Di-N-Propyl Isocinchomeronate	No	No	No	Unknown	Unknown
Isopropyl Alcohol	No	No	No	E (moderate) / S (mild)	No
Acetone	No	No	No	E (moderate) / S (moderate) / R (mild)	Yes
Liquefied Petroleum Gas	No	No	No	No	No

E – Eye	S – Skin	R - Respiratory
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Reproductive Toxicity: No information available

Teratogenicity: No information available

Mutagenicity: No information available

Synergistic Effects: No information available

Section 12: Ecological Information

Ecological studies have not been conducted for this product. The following information is available for components of this product.

Ecotoxicity: N-N-Diethyl-M-Toluamide: 96Hr LC50 Fathead Minnow: 110 mg/L
5 min EC50 Photobacterium phosphoreum: 67.9 mg/L

Persistence / Degradability: No information available

Bioaccumulation / Accumulation: No information available

Mobility in Environment: No information available

Section 13: Disposal Considerations

Waste Classification: The dispensed liquid product is a RCRA hazardous waste for the characteristic of ignitability with a waste code of D001. Pressurized containers are a D003 reactive waste. (See 40 CFR Part 261.20 – 261.33)
Empty aerosol containers may be recycled.

All disposal activities must comply with federal, state, provincial and local regulations. Local regulations may be more stringent than state, provincial or national requirements.

Section 14: Transport Information

US DOT (ground): Consumer Commodity, ORM-D

ICAO/IATA (air): Consumer Commodity, ID8000, 9

IMO/IMDG (water): Aerosols, UN1950, 2.1, Limited Quantity

Special Provisions: None

Section 15: Regulatory Information

U.S. Federal Regulations:

Toxic Substances Control Act (TSCA):

All ingredients are either listed on the TSCA inventory or are exempt.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Reportable Quantities (RQ's) exist for the following ingredients: Acetone (5000 lbs)

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Superfund Amendments Reauthorization Act (SARA) Title III:

Section 302 Extremely Hazardous Substances (EHS): None

Section 311/312 Hazard Categories:	Fire Hazard	Yes
	Reactive Hazard	No
	Release of Pressure	Yes
	Acute Health Hazard	Yes
	Chronic Health Hazard	No

Section 313 Toxic Chemicals: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:
Di-N-Propyl Isocinchomeronate (2.5%)

Clean Air Act:

Section 112 Hazardous Air Pollutants (HAPs): None

Occupational Safety and Health Administration:

This product is regulated by the Hazard Communications Standard.

U.S. State Regulations:

California Safe Drinking Water and Toxic Enforcement Act (Prop 65):

This product may contain the following chemicals known to the state of California to cause cancer, birth defects or other reproductive harm: Di-N-Propyl Isocinchomeronate

Consumer Products VOC Regulations: In states with Consumer Products VOC regulations, this product is compliant as an Insect Repellent.

State Right to Know:

New Jersey:	68476-86-8
Pennsylvania:	67-63-0, 68476-86-8
Massachusetts:	67-63-0, 68476-86-8
Rhode Island :	67-63-0, 68476-86-8

Canadian Regulations:

Controlled Products Regulations:

This product has been classified in accordance with the hazard criteria of the Controlled Product Regulation and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS Hazard Class: This product is cannot be sold for use in Canada.

Canadian DSL Inventory: All ingredients are either listed on the DSL Inventory or are exempt.

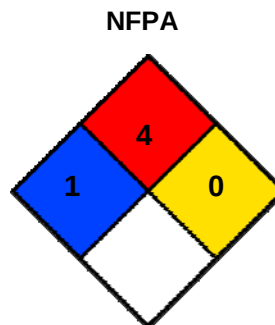
European Union Regulations:

RoHS Compliance: This product is compliant with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003. This product does not contain any of the restricted substances as listed in Article 4(1) of the RoHS Directive.

Additional Regulatory Information: EPA Registration Number: 51147-13-55809. This product is registered in all 50 United States and Puerto Rico. CRC Insect Repellent is not registered and cannot be sold outside of the United States and Puerto Rico.

Section 16: Other Information

HMIS® (II)	
Health:	1
Flammability:	4
Reactivity:	0
PPE:	B



Ratings range from 0 (no hazard) to 4 (severe hazard)

Prepared By: Michelle Rudnick
CRC #: 926
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Changes since last revision: MSDS reformatted to meet the requirements of the Canadian Controlled Products Regulations.

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this MSDS consult your supervisor, a health & safety professional, or CRC Industries.

ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstract Service
CFR: Code of Federal Regulations
DOT: Department of Transportation
DSL: Domestic Substance List
g/L: grams per Liter
HMIS: Hazardous Materials Identification System
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
IMDG: International Maritime Dangerous Goods
IMO: International Maritime Organization
lbs./gal: pounds per gallon
LC: Lethal Concentration
LD: Lethal Dose

NA: Not Applicable
ND: Not Determined
NIOSH: National Institute of Occupational Safety & Health
NFPA: National Fire Protection Association
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PMCC: Pensky-Martens Closed Cup
PPE: Personal Protection Equipment
ppm: Parts per Million
RoHS: Restriction of Hazardous Substances
STEL: Short Term Exposure Limit
TCC: Tag Closed Cup
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Information System