

**SAFETY DATA SHEET**  
D-Force Insecticide

SDS # : 7099-A  
Revision date: 2020-10-19  
Format: NA  
Version 1.06



**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Identifier**

**Product Name** D-Force Insecticide

**Other means of identification**

**Product Code(s)** 7099-A

**Synonyms** (1R,3R)-3(2,2-dibromovinyl)-2,2-dimethylcyclopropane carboxylic

**Active Ingredient(s)** Deltamethrin

**Chemical Family** Pyrethroid Ester Insecticide

**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)  
SDS-Info@fmc.com (E-Mail General Information)

**Emergency telephone number**

Medical Emergencies :  
1 800 / 331-3148 (U.S.A. & Canada)  
1 651 / 632-6793 (All Other Countries - Collect)

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)

**2. HAZARDS IDENTIFICATION**

**Classification**

**OSHA Regulatory Status**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Gases)	Category 4
Skin sensitization	Category 1B
Aspiration toxicity	Category 1
Flammable Aerosols	Category 1


GHS Label elements, including precautionary statements

**EMERGENCY OVERVIEW**

**Danger**

**Hazard Statements**  
H302 - Harmful if swallowed  
H304 - May be fatal if swallowed and enters airways  
H317 - May cause an allergic skin reaction  
H332 - Harmful if inhaled

**Physical Hazards**  
H222 - Extremely flammable aerosol  
H229 - Pressurized container: May burst 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
- P270 - Do not eat, drink or smoke when using this product
- P271 - Use only outdoors or in a well-ventilated area
- P272 - Contaminated work clothing should not be allowed out of the workplace
- P280 - Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

- P302 + P352 - IF ON SKIN: Wash with plenty of water and soap
- P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
- P362 + P364 - Take off all contaminated clothing and wash it before reuse
- 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
- P330 - Rinse mouth

**Precautionary Statements - Storage**

- P403 - Store in a well-ventilated place
- 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 according to label directions

**Hazards not otherwise classified (HNOC)**

No hazards not otherwise classified were identified.

**Other Information**

Very toxic to aquatic life with long lasting effects.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Chemical Family** Pyrethroid Ester Insecticide.

Chemical name	CAS-No	Weight %
Petroleum distillates, hydrotreated light	64742-47-8	>75
Naphtha (petroleum), light alkylate	64741-66-8	10-20
Carbon Dioxide	124-38-9	1-5
Deltamethrin	52918-63-5	0.06

Synonyms are provided in Section 1.

#### 4. FIRST AID MEASURES

<b>Eye Contact</b>	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.
<b>Skin Contact</b>	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.
<b>Inhalation</b>	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.
<b>Ingestion</b>	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 give anything by mouth to an unconscious person.
<b>Most important symptoms and effects, both acute and delayed</b>	None known.
<b>Indication of immediate medical attention and special treatment needed, if necessary</b>	Treat symptomatically. Contains petroleum distillate. Vomiting may cause aspiration pneumonia.

#### 5. FIRE-FIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Small Fire</b>	Dry chemical. Carbon dioxide (CO <sub>2</sub> ).
<b>Large Fire</b>	Water spray. Foam.
<b>Specific Hazards Arising from the Chemical</b>	Contents under pressure. Do not incinerate or puncture
<b>Explosion data</b>	
<b>Sensitivity to Mechanical Impact</b>	No information available.
<b>Sensitivity to Static Discharge</b>	No information available.
<b>Protective equipment and precautions for firefighters</b>	As in any fire, wear self-contained breathing apparatus and full protective gear. Isolate fire area. Evaluate upwind.

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	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.
<b>Other</b>	For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.

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<b>Environmental Precautions</b>	Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds, and sewer drains.
<b>Methods for Containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	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

<b>Handling</b>	Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.
<b>Storage</b>	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.
<b>Incompatible products</b>	None known

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
Carbon Dioxide (124-38-9)	STEL 30000 ppm TWA: 5000 ppm	TWA: 5000 ppm TWA: 9000 mg/m <sup>3</sup>	IDLH: 40000 ppm TWA: 5000 ppm TWA: 9000 mg/m <sup>3</sup> STEL: 30000 ppm STEL: 54000 mg/m <sup>3</sup>	Mexico: TWA 5000 ppm Mexico: STEL 30000 ppm
Chemical name	British Columbia	Quebec	Ontario TWAEV	Alberta
Petroleum distillates, hydrotreated light (64742-47-8)	TWA: 200 mg/m <sup>3</sup> Skin	-	-	-
Carbon Dioxide (124-38-9)	TWA: 5000 ppm STEL: 15000 ppm	TWA: 5000 ppm TWA: 9000 mg/m <sup>3</sup> STEL: 30000 ppm STEL: 54000 mg/m <sup>3</sup>	TWA: 5000 ppm STEL: 30000 ppm	TWA: 5000 ppm TWA: 9000 mg/m <sup>3</sup> STEL: 30000 ppm STEL: 54000 mg/m <sup>3</sup>

#### Appropriate engineering controls

<b>Engineering measures</b>	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.
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#### Individual protection measures, such as personal protective equipment

<b>Eye/Face Protection</b>	If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.
<b>Skin and Body Protection</b>	Wear suitable protective clothing. Protective shoes or boots.
<b>Hand Protection</b>	Use protective gloves made of chemical materials such as nitrile or neoprene. Wash the outside of gloves with soap and water before reuse. Check regularly for leaks.
<b>Respiratory Protection</b>	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.
<b>Hygiene measures</b>	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**

<b>Appearance</b>	Clear, Colorless Aerosolized liquid
<b>Physical State</b>	Aerosol
<b>Color</b>	Clear, Colorless
<b>Odor</b>	No information available
<b>Odor threshold</b>	No information available
<b>pH</b>	No information available
<b>Melting point/freezing point</b>	Not applicable
<b>Boiling Point/Range</b>	No information available
<b>Flash point</b>	Non-flammable per flame projection test.
<b>Evaporation Rate</b>	No information available
<b>Flammability (solid, gas)</b>	No information available
<b>Flammability Limit in Air</b>	
<b>Upper flammability limit:</b>	No information available
<b>Lower flammability limit:</b>	No information available
<b>Vapor pressure</b>	No information available
<b>Vapor density</b>	No information available
<b>Relative density</b>	6.69 lb/gal
<b>Specific gravity</b>	No information available
<b>Water solubility</b>	No information available
<b>Solubility in other solvents</b>	No information available
<b>Partition coefficient</b>	No information available
<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Viscosity, kinematic</b>	No information available
<b>Viscosity, dynamic</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available
<b>Molecular weight</b>	No information available
<b>Bulk density</b>	No information available

## 10. STABILITY AND REACTIVITY

<b>Reactivity</b>	Not applicable
<b>Chemical Stability</b>	Stable under recommended storage conditions.
<b>Possibility of Hazardous Reactions</b>	None under normal processing.
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Heat, flames and sparks.
<b>Incompatible materials</b>	None known.
<b>Hazardous Decomposition Products</b>	None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

**Product Information**

<b>LD50 Oral</b>	> 2000 mg/kg (rat)
<b>LD50 Dermal</b>	> 2000 mg/kg (rat)
<b>LC50 Inhalation (dust)</b>	> 2.2 mg/L (rat) 4 hr

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**Serious eye damage/eye irritation** Mildly irritating.  
**Skin corrosion/irritation** Irritating to skin.  
**Sensitization** May cause sensitization by skin contact

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation (vapor)
Petroleum distillates, hydrotreated light (64742-47-8)	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 5.2 mg/L ( Rat ) 4 h
Naphtha (petroleum), light alkylate (64741-66-8)	> 7000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 6.31 mg/L ( Rat ) 4 h

### Information on toxicological effects

**Symptoms** Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Chronic toxicity** Deltamethrin: Repeated or prolonged exposure may cause central nervous system effects (decrease motor activity, tremor, difficulty breathing, impaired gait and choreoathetosis).

**Mutagenicity** Deltamethrin: Not genotoxic in laboratory studies.

**Carcinogenicity** Deltamethrin: No evidence of carcinogenicity from animal studies.

**Neurological effects** Deltamethrin: Neurobehavioral effects (tremors) were observed in studies with animals.

**Reproductive toxicity** Deltamethrin: No toxicity to reproduction in animal studies.

**Developmental toxicity** Deltamethrin: Not teratogenic in animal studies.

**STOT - single exposure** Not classified.  
**STOT - repeated exposure** Not classified.  
**Target organ effects** Nervous system.

**Neurological effects** Deltamethrin: Neurobehavioral effects (tremors) were observed in studies with animals.

**Aspiration hazard** Potential for aspiration if swallowed.

Chemical name	ACGIH	IARC	NTP	OSHA
Deltamethrin 52918-63-5		Group 3		

#### Legend:

**IARC (International Agency for Research on Cancer)**  
Group 3 - Not classifiable as to its carcinogenicity to humans

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Deltamethrin (52918-63-5)				
Active Ingredient(s)	Duration	Species	Value	Units
Deltamethrin	96 h LC50	Fish	0.26	µg/L
	48 h EC50	Crustacea	0.56	µg/L
	72 h EC50	Algae	9.1	mg/L
	21 d NOEC	Fish	0.032	µg/L
	21 d NOEC	Crustacea	0.0041	µg/L

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
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Naphtha (petroleum), light alkylate 64741-66-8	72 h EC50: = 30000 mg/L (Pseudokirchneriella subcapitata)		48 h LC50: = 2 mg/L (Mysidopsis bahia)
Petroleum distillates, hydrotreated light 64742-47-8		96 h LC50: = 2.2 mg/L (Lepomis macrochirus) static 96 h LC50: = 2.4 mg/L (Oncorhynchus mykiss) static 96 h LC50: = 45 mg/L (Pimephales promelas) flow-through	96 h LC50: = 4720 mg/L (Den-dronereides heteropoda)

**Persistence and degradability** Deltamethrin: Non-persistent. Does not readily hydrolyze at pH 7 and 8. Readily hydrolyzed at pH 9. Not readily biodegradable.

**Bioaccumulation** Deltamethrin: The substance has a potential for bioconcentration.

**Mobility** Deltamethrin: Immobile; Not expected to reach groundwater.

### 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 containers and packages** 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** Ship as Limited Quantity. Carton marks include Limited Quantity mark and orientation arrows.

**UN/ID no** UN1950  
**Proper Shipping Name** Aerosols, flammable  
**Hazard class** 2.1  
**Description** UN1950, Aerosols, flammable, 2.1, Limited Quantity

**TDG** Ship as Limited Quantity. Carton marks include Limited Quantity mark and orientation arrows.

**UN/ID no** UN1950  
**Proper Shipping Name** Aerosols, flammable  
**Hazard class** 2.1  
**Description** UN1950, Aerosols, flammable, 2.1, Limited Quantity

**ICAO/IATA** Ship as Limited Quantity. Carton marks include Limited Quantity mark and orientation arrows.

**UN/ID no** UN1950  
**Proper Shipping Name** Aerosols, flammable  
**Hazard class** 2.1  
**Description** UN1950, Aerosols, flammable, 2.1, Limited Quantity

**IMDG/IMO** Ship as Limited Quantity. Carton marks include Limited Quantity mark and orientation arrows.

**UN/ID no** UN1950  
**Proper Shipping Name** Aerosols  
**Hazard class** 2.1  
**EmS No.** F-D, S-U  
**Description** UN1950, Aerosols, 2.1, Limited Quantity

**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 does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	Yes
<b>Chronic health hazard</b>	Yes
<b>Fire hazard</b>	Yes
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	No

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**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 or absorbed through the skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

This product is toxic to fish.

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

<b>Chemical name</b>	<b>New Jersey</b>	<b>Massachusetts</b>	<b>Pennsylvania</b>
Carbon Dioxide 124-38-9	X	X	X

**International Inventories**

<b>Chemical name</b>	<b>TSCA (United States)</b>	<b>DSL (Canada)</b>	<b>EINECS/ELINC S (Europe)</b>	<b>ENCS (Japan)</b>	<b>China (IECSC)</b>	<b>KECL (Korea)</b>	<b>PICCS (Philippines)</b>	<b>AICS (Australia)</b>
Petroleum distillates, hydrotreated light 64742-47-8	X	X	X		X	X	X	X
Naphtha (petroleum), light alkylate 64741-66-8	X	X	X		X	X	X	X



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Carbon Dioxide 124-38-9	X	X	X	X	X	X	X	X
Deltamethrin 52918-63-5			X		X	X	X	X

**CANADA**  
 Not applicable

**16. OTHER INFORMATION**

<b>NFPA</b>	<b>Health Hazards</b> 2	<b>Flammability</b> 1	<b>Instability</b> 0	<b>Special Hazards</b> -
<b>HMIS</b>	<b>Health Hazards</b> 2*	<b>Flammability</b> 1	<b>Physical hazard</b> 0	<b>Personal Protection</b> X

*\*Indicates a chronic health hazard.*

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

**Revision date:** 2020-10-19  
**Reason for revision:** SDS sections updated

**Disclaimer**

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**End of Safety Data Sheet**