



SAFETY DATA SHEET

D-Fense Dust

SECTION 1: IDENTIFICATION

Product Name: D-Fense Dust
EPA Registration No.: 53883-283
Recommended Use: Insecticide; See product label for a complete list of uses and use sites.
Restrictions on Use: See product label for any restrictions on the use of this product.
Chemical Family: Pyrethroid
Chemical Name of Active Ingredient(s): Deltamethrin
Manufactured for: Control Solutions, Inc.
 5903 Genoa-Red Bluff
 Pasadena, TX 77507

FOR FIRE, SPILL, AND/OR LEAK EMERGENCIES CONTACT: CHEMTREC 1-800-424-9300
FOR MEDICAL EMERGENCIES AND HEALTH AND SAFETY INQUIRIES CONTACT: Safety Call 1-866-897-8050

SECTION 2: HAZARD(S) IDENTIFICATION

EMERGENCY OVERVIEW: White powder with a faint, chalk-like odor. May cause mechanical eye irritation.

OSHA HCS CLASSIFICATION (29 CFR 1910.1200)

Specific Target Organ Toxicity – Repeated Exposure	Category 2
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Signal Word: WARNING



Hazard Statement(s): May cause damage to lungs through prolonged or repeated exposure.

Precautionary Statement(s):

- Prevention:** Do not breathe dust.
- Response:** Get medical advice/attention if you feel unwell.
- Storage:** No statement required. See section 7 for storage information.
- Disposal:** Dispose of contents/container in accordance with Federal, state and local laws and regulations.

The following percentage of the mixture consists of components with unknown hazards regarding the acute toxicity:

- 0.8% Acute oral toxicity
- 99.5% Acute dermal toxicity
- 99.5% Acute Inhalation toxicity

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight %
Calcium carbonate	1317-65-3	95.0 – 100.0
Deltamethrin	52918-63-5	0.05%
Crystalline silica, quartz	14808-60-7	<0.5%

*Ingredients not listed or listed with a weight % range are considered a trade secret and are withheld under 29 CFR 1910.1200(i).

SECTION 4: FIRST AID MEASURES	
IF IN EYES:	Hold eye 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 treatment advice.
IF ON SKIN:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.
IF INHALED:	Move person 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.
IF INGESTED:	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 by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed: Mild mechanical eye irritation. Repeated inhalation may cause coughing, discomfort in the chest and shortness of breath.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Foam, dry chemical, carbon dioxide or water spray
Unsuitable Extinguishing Media: Water jet
Hazardous Combustion Products: Thermal decomposition may produce toxic carbon and nitrogen oxides.
Special Protective Equipment & Precautions: Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Foam and/or dry chemical are preferred to minimize environmental contamination. If water is used, dike and collect water to prevent run-off. Wear self-contained breathing apparatus and full fire-fighting turn-out gear (Bunker gear).
Unusual Fire & Explosion Hazards: None known

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: See Section 8 for personal protection equipment.
Environmental Precautions: Keep spilled material and any rinsate from contaminating soil or from entering sewage and drainage systems and bodies of water.
Methods for Containment: Isolate the spill area. Keep unnecessary and unprotected personnel from entering. Sweep up spills using a dust suppressant agent which does not react with the product. If using a vacuum cleaner to collect material, use a cleaner equipped with a HEPA filter. Collect in a suitable container for disposal.
Methods for Clean-up: Place contaminated material in appropriate container for disposal. After removal, flush contaminated area thoroughly with water. Pick up wash liquid with additional absorbent and place in a disposable container. Do not put spilled material back in the original container.
Other Information: None known

SECTION 7: HANDLING AND STORAGE

Handling: RECOMMENDATIONS ARE INTENDED FOR MANUFACTURING, PACKAGING AND COMMERCIAL BLENDING WORKERS. PESTICIDE APPLICATORS AND WORKERS must refer to the product label and Directions for Use attached to the product for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard 40 CFR part 170. Handle and open container in a manner as to prevent spillage. Do not eat, drink or smoke while handling this product. Immediately wash off accidental contact with product from skin, clothing and out of eyes.

Storage: See pesticide label for full information on product storage. Do not contaminate water, food or feed by storage of this product. Store away from sources of heat, out of direct sunlight and away from incompatible materials. Pesticides should be stored in secured areas away from children and animals.

Storage Temperature (Min/Max): Not determined

Product Incompatibilities: Avoid contact with strong acids

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Users of a pesticide product must refer to the product label for personal protective equipment requirements.

Exposure Guidelines:

COMPONENT	OSHA PEL	ACGIH TLV	NIOSH REL
Calcium carbonate	5 mg/m ³ (resp. fraction) 15 mg/m ³ (total dust)		5 mg/m ³ (resp. fraction) 15 mg/m ³ (total dust)
Crystalline silica	0.3 mg/m ³ (total dust)(TWA) 0.1 mg/m ³ (respirable)(TWA)	0.025 mg/m ³ (resp. fraction) (TWA)	0.05 mg/m ³ (resp. dust) (TWA)

Engineering Controls: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs or other specified exposure limits. Local exhaust ventilation is preferred.

Respiratory Protection: In areas of poor ventilation, use a NIOSH approved respirator with cartridges/canisters approved for silica dust.

Eye Protection: Chemical goggles or safety glasses and full-face shield.

Protective Gloves: Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile, neoprene rubber, polyvinyl chloride (PVC) or Viton.

Other Protective Clothing: Long-sleeved shirt, long pants and chemical resistant footwear plus socks.

General Safety Measures: Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately after handling this product. Wash outside of gloves before removing. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White powder	Upper/Lower Flammability Limits:	Not determined
Odor:	Faint chalk-like	Vapor Pressure:	Not determined
Odor Threshold:	Not determined	Vapor Density:	Not determined
pH (1% dispersion):	8.8 - 9.4	Relative Density (@24°C):	2.71 g/ml (typical)
Melting /Freezing Point:	Not determined	Solubility in Water:	Not determined
Boiling Point/Range:	Not determined	Partition Coefficient:	Not determined
Flash Point:	Not applicable	Auto-ignition Temperature:	Not determined
Evaporation Rate:	Not determined	Decomposition Temperature:	Not determined
Flammability:	Not applicable	Viscosity:	Not applicable

SECTION 10: STABILITY AND REACTIVITY

Reactivity:	No hazardous chemical reactions known.
Chemical Stability:	Stable under normal storage and handling conditions.
Possibility of Hazardous Reactions:	No potential for hazardous reactions known.
Conditions to Avoid:	Extreme temperatures
Incompatible Materials:	Strong acids
Hazardous Decomposition Products:	Thermal decomposition may produce toxic carbon and nitrogen oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

Likely Routes of Exposure:	Eye contact, Skin contact, Inhalation, Ingestion
Symptoms of Exposure:	Mild mechanical eye irritation. Repeated inhalation may cause coughing, discomfort in the chest and shortness of breath.
Oral LD₅₀:	>2,000 mg/kg (Estimated based upon component data)
Dermal LD₅₀:	>2,000 mg/kg (Estimated based upon component data)
Inhalation LC₅₀:	>5.0 mg/L (Estimated based upon component data) No components are known to be acutely toxic via inhalation.
Eye Irritation/Damage:	Not anticipated to be an eye irritant based upon component data.
Skin Corrosion/Irritation:	Not anticipated to be a skin irritant based upon component data.
Skin Sensitization:	Non-sensitizer, based upon component data.
Chronic/Subchronic Toxicity:	Deltamethrin caused neurobehavioral effects and/or neuropathological changes in animal studies. The toxic effects of Deltamethrin are related to transient hyperactivity typical for pyrethroid neurotoxicity. Overexposure to the respirable dust of crystalline silica (quartz or cristobalite, less than or equal to 5 microns in size) may lead to silicosis in humans, which is a progressive and irreversible lung disease.
Mutagenicity:	Deltamethrin was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.
Reproductive Toxicity:	No data available
Neurotoxicity:	No data available
Target Organs:	No data available
Aspiration Hazard:	Not likely due to the form of the product.

Carcinogenicity:

Chemical Name	ACGIH	IARC	NTP	OSHA
Crystalline silica	Group A2	Category 1	Known to be Human Carcinogen	

SECTION 12: ECOLOGICAL INFORMATION**Environmental Hazards Statement from FIFRA Regulated Pesticide Label:**

This product is toxic to fish and aquatic invertebrates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product into sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or regional office of the EPA.

ECOTOXICITY DATA:

The data presented below is for deltamethrin technical.

Fish Toxicity:

Pumpkinseed sunfish 96 hr LC₅₀ = 0.58 µg/L

Sheepshead minnow 96 hr LC₅₀ = 0.36 µg/L

Aquatic Invertebrate Toxicity:

Daphnia magna 48 hr EC₅₀ = 0.11 µg/L

Mysid shrimp 96 hr LC₅₀ = 0.0017 µg/L

Aquatic Plant Toxicity:

No data available

Avian Toxicity:

Bobwhite Quail LD₅₀ >2,250 mg/kg-bw

Mallard Duck LC₅₀ >4,640 mg/kg diet

Honeybee Toxicity:

Contact LD₅₀ = 0.0015 µg/bee

ENVIRONMENTAL EFFECTS:

Persistence and Degradability: No data available

Bioaccumulation: No data available

Mobility: No data available

Other Adverse Effects: No data available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal: **Refer to the pesticide label for full information on disposal.** Pesticide wastes are toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal law. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

Container Disposal: **Refer to the pesticide label for full information on disposal.** When possible, triple rinse the container and offer for recycling if available.

RCRA Characteristics: It is the responsibility of the individual disposing of this product to determine the RCRA classification and hazard status of the waste.

SECTION 14: TRANSPORTATION INFORMATION

DOT (Ground):	Not regulated
IMDG (Sea):	UN3077, Environmentally hazardous substance, solid, n.o.s. (Deltamethrin mixture), 9, PGIII, Marine Pollutant
IATA (Air):	UN3077, Environmentally hazardous substance, solid, n.o.s. (Deltamethrin mixture), 9, PGIII, Marine Pollutant

SECTION 15: REGULATORY INFORMATION

Labeling Requirements Under FIFRA: 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

Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

TSCA Inventory: This product is exempt from TSCA inventory listing requirements as it is solely for FIFRA regulated use.

SARA Title III Information:

- Section 302 – Extremely hazardous substances:** None
Section 311/312 – Hazard Categories: Acute (Immediate); Chronic (Delayed)
Section 313 – 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 Number	Weight %	SARA 313 – Threshold Values (lbs)
None listed			

CERCLA – This product contains the following chemicals which have a reportable quantity (RQ) under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Chemical Name	CAS Number	RQ	Quantity of Finished Product
None listed			

CALIFORNIA PROPOSITION 65:

Chemical Name	CAS Number	Prop 65 Category(ies)
Crystalline quartz	14808-60-7	Cancer

U.S. STATE RIGHT-TO-KNOW REGULATIONS:

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Calcium carbonate		X	X
Crystalline silica		X	X

SECTION 16: OTHER INFORMATION

NFPA	Health Hazards 1	Flammability 0	Instability 0	Special Hazards – None
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