

# Material Safety Data Sheet

## CYNOFF® INSECTICIDE DUST

SDS # : 6520-A  
Revision Date: 2012-10-18  
Version 1



This MSDS has been prepared to meet U.S. OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Workplace Hazardous Materials Information System (WHMIS) requirements.

### 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Product name</b>	CYNOFF® INSECTICIDE DUST
<b>Formula code</b>	6520
<b>Active Ingredient(s)</b>	Zeta-cypermethrin, Piperonyl Butoxide
<b>Synonyms</b>	FMC 56701; A mixture of the stereoisomers (S)- $\alpha$ -cyano-3-phenoxybenzyl (1RS,3RS;1RS,3SR)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate where the ratio of the (S);(1RS,3RS) isomeric pair to the (S); (1RS,3SR) isomeric pair lies in the ratio range 45–55 to 55–45; (S)-cyano(3-phenoxyphenyl)methyl ( $\pm$ )-cis-trans-3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate  ; Butylcarbityl(6-propylpiperonyl) ether, 1,3-Benzodioxole, 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-
<b>Chemical Family</b>	Pyrethroid Pesticide
<b>Recommended use</b>	Insecticide formulation
<b>Manufacturer</b> FMC Corporation Agricultural Products Group 1735 Market Street Philadelphia, PA 19103 General Information: Phone: (215) 299-6000 E-Mail: msdsinfo@fmc.com	<b>Emergency telephone number</b>  Medical Emergencies: (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 / 527 3887 (CHEMTREC - Collect - All Other Countries)

### 2. Hazards identification

<b>Appearance</b>	Off-white powder.
<b>Physical state</b>	dry powder
<b>Odor</b>	odorless
<b>Flammable properties</b>	Powdered material may form explosive dust-air mixtures
<b>Potential health effects</b>	
<b>Acute effects</b>	
<b>Eyes</b>	May cause slight irritation.
<b>Skin</b>	Irritating to skin.
<b>Inhalation</b>	May cause irritation of respiratory tract.
<b>Ingestion</b>	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause central nervous system depression.

**Chronic effects** Repeated or prolonged exposure may cause central nervous system effects.

**Environmental hazard** Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 3. Composition/information on ingredients

#### Hazardous ingredients

Chemical Name	CAS-No	Weight %
Calcium carbonate (limestone)	1317-65-3	>90
Piperonyl butoxide	51-03-6	0.15
Zeta-cypermethrin (F2700)	52315-07-8	0.075

### 4. First aid measures

**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 contact** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**Inhalation** Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**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 induce vomiting or give anything by mouth to an unconscious person.

**Notes to physician** This product is a pyrethroid. If large amounts have been ingested, the stomach and intestines should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided.

### 5. Fire-fighting measures

**Flammable properties** Powdered material may form explosive dust-air mixtures

**Sensitivity to Mechanical Impact** not applicable

**Sensitivity to Static Discharge** not applicable

**Suitable extinguishing media** Foam, Carbon dioxide (CO<sub>2</sub>), Dry chemical, Soft stream or water fog only if necessary.

#### NFPA

<b>Health Hazard</b>	1
<b>Flammability</b>	1
<b>Stability</b>	0
<b>Special Hazards</b>	-

### 6. Accidental release measures

**Personal precautions** Isolate and post spill area. Wear suitable protective clothing, gloves and eye/face protection. For personal protection see section 8.

**Environmental precautions** Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds, and sewer drains.

**Methods for cleaning up** Sweep up and shovel into suitable containers for disposal. Clean and neutralize spill area, tools and equipment by washing with bleach water and soap. Absorb rinsate and add to the collected waste. Waste must be classified and labeled prior to recycling or disposal. Dispose of waste as indicated in Section 13.

**Other** For further clean-up instructions call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.

**7. Handling and storage**

**Handling** Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

**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. Store in original container only.

**8. Exposure controls/personal protection**

Exposure guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
Calcium carbonate (limestone) 1317-65-3		TWA: 15 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	
Chemical Name	British Columbia	Quebec	Ontario TWAEV	Alberta
Calcium carbonate (limestone) 1317-65-3	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>		TWA: 10 mg/m <sup>3</sup>

Occupational exposure 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.

Personal Protective Equipment

**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.

**Respiratory protection** For dust, splash, mist or spray exposures wear a filtering mask.

**Eye/face protection** For dust, splash, mist or spray exposure, wear chemical protective goggles or a face-shield.

**Skin and body protection** Wear long-sleeved shirt, long pants, socks, shoes, and gloves.

**Hand protection** Rubber/latex/neoprene or other suitable chemical resistant gloves.

**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.

**9. Physical and chemical properties**

<b>Appearance</b>	Off-white powder.
<b>Color</b>	off-white
<b>Physical state</b>	dry powder
<b>Odor</b>	odorless
<b>pH</b>	7.0 ( 1 % aqueous dispersion)
<b>Melting Point/Range</b>	No information available.
<b>Freezing point</b>	No information available
<b>Boiling Point/Range</b>	not applicable
<b>Flash Point</b>	not applicable
<b>Evaporation rate</b>	not applicable
<b>Autoignition Temperature</b>	not applicable
<b>Flammable properties</b>	Powdered material may form explosive dust-air mixtures
<b>Vapor pressure</b>	No information available
<b>Vapor density</b>	No information available
<b>Density</b>	1.57 g/mL
<b>Water solubility</b>	No information available
<b>Percent volatile</b>	No information available
<b>Partition coefficient:</b>	not applicable
<b>Viscosity</b>	No information available
<b>Oxidizing properties</b>	not applicable

**10. Stability and reactivity**

<b>Stability</b>	Stable.
<b>Conditions to avoid</b>	Heat, flames and sparks.
<b>Hazardous decomposition products</b>	Carbon oxides, Hydrogen cyanide, Hydrogen chloride, Chlorine.
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.

**11. Toxicological information****Acute Toxicity**

Large doses of zeta-cypermethrin, ingested by laboratory animals, may produce signs of toxicity including tremors, incoordination, convulsions, staggered gait, and oral discharge.

Large oral doses of piperonyl butoxide ether may cause vomiting and diarrhea, while repeated skin contact may cause slight irritation. Clinical signs of piperonyl butoxide poisoning include nausea, vomiting, diarrhea, loss of appetite, and mild CNS depression. Reported effects on the blood include pancytopenia, thrombocytopenia, leukopenia, polycythemia, and anemias.

**Eye contact** Slightly or non-irritating (rabbit).

**Skin contact** Moderately irritating (rabbit).

**LD50 Dermal** > 2,000 mg/kg (rat)

**LD50 Oral** > 5,000 mg/kg (rat)

**LC50 Inhalation:** No data available for the formulation. Zeta-cypermethrin: 2.5 mg/L 4 hr (rat)

**Sensitization** Sensitizer

**Chronic Toxicity - Other Ingredient(s)**

**Chronic Toxicity** Repeated or prolonged exposure may cause central nervous system effects.

**Carcinogenicity** Cypermethrin caused an increase in benign lung tumors in mice, but not in rats, and was negative for genotoxicity. EPA has classified zeta-cypermethrin as a possible human carcinogen based on this information, but does not regulate based on its low cancer risk. Not recognized as carcinogenic by Research Agencies (IARC, NTP, OSHA, ACGIH). Piperonyl Butoxide: Not carcinogenic.

**Mutagenicity** Zeta-cypermethrin: Piperonyl Butoxide: Not genotoxic.

**Reproductive toxicity** Zeta-cypermethrin, Piperonyl Butoxide: No toxicity to reproduction.

**Neurological Effects** Cypermethrin did not cause neurotoxicity in animal experiments.

**Developmental Toxicity** Zeta-cypermethrin, Piperonyl Butoxide: Not teratogenic in animal studies.

**Target Organ Effects** 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.

Chemical Name	ACGIH	IARC	NTP	OSHA	NIOSH - Target Organs
Calcium carbonate (limestone)					eyes, respiratory system, skin

**12. Ecological information**

**Marine pollutant** Zeta-cypermethrin  
**Ecotoxicity**

Active Ingredient(s)				
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	ppm
Zeta-cypermethrin (F2700) (52315-07-8)				
Active Ingredient(s)	Duration	Species	Value	Units:
Zeta-cypermethrin	LC50	Aquatic organisms	0.005 - 0.15	µg/L
	LC50	Fish	0.07 - 2.37	µg/L
	LD50 Oral	Bobwhite quail	>2000	mg/kg
	LD50	Bee	0.0014 - 0.043	µg/bee

**Environmental Fate**

Active Ingredient(s)		
Zeta-cypermethrin (F2700) (52315-07-8)		
Active Ingredient(s)	Type of Test	Result
Zeta-cypermethrin	Bioconcentration factor (BCF) Bluefill sunfish (Lepomis macrochirus)	443
	Half-life in soil	2 - 4 weeks
	log Pow	5
	Mobility in soil	Not expected to reach groundwater
	Stability in water	Hydrolysis unstable at pH 9, half life 20-29 days at pH 5 and 7.

**13. Disposal considerations**

<b>Waste disposal methods</b>	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.
<b>Contaminated packaging</b>	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**

<b><u>DOT</u></b>	Not regulated for transportation if shipped in Non Bulk packaging. The classification below pertains to the shipment in Bulk packaging.
<b>Packaging Type</b>	Bulk
<b>Proper shipping name</b>	Environmentally hazardous substance, solid, n.o.s.
<b>UN/ID No</b>	UN3077
<b>Hazard Class</b>	9
<b>Packing group</b>	III
<b>Marine pollutant</b>	Zeta-cypermethrin
<b>Description</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (zeta-cypermethrin), 9, III, Marine Pollutant
<b><u>TDG</u></b>	Classification below is only applicable when shipped by vessel and is not applicable when shipped by road or rail only.
<b>UN/ID No</b>	UN3077
<b>Proper shipping name</b>	Environmentally hazardous substance, solid, n.o.s.
<b>Hazard Class</b>	9
<b>Packing group</b>	III
<b>Marine pollutant</b>	Zeta-cypermethrin.
<b>Description</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (zeta-cypermethrin), 9, III, Marine Pollutant
<b><u>ICAO/IATA</u></b>	
<b>UN/ID No</b>	UN3077
<b>Proper shipping name</b>	Environmentally hazardous substance, solid, n.o.s.
<b>Hazard Class</b>	9
<b>Packing group</b>	III
<b>Marine pollutant</b>	Zeta-cypermethrin
<b>Description</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (zeta-cypermethrin), 9, III
<b><u>IMDG/IMO</u></b>	
<b>UN/ID No</b>	UN3077
<b>Proper shipping name</b>	Environmentally hazardous substance, solid, n.o.s.
<b>Hazard Class</b>	9
<b>Packing group</b>	III
<b>EmS No.</b>	F-A, S-F
<b>Marine pollutant</b>	Zeta-cypermethrin
<b>Description</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (zeta-cypermethrin), 9, III, Marine Pollutant

**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	0.15	1.0

**SARA 311/312 Hazard Categories**

<b>Acute Health Hazard</b>	yes
<b>Chronic Health Hazard</b>	yes
<b>Fire Hazard</b>	no
<b>Sudden Release of Pressure Hazard</b>	no
<b>Reactive Hazard</b>	no

**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.

**TSCA Inventory (United States of America)****International Regulations****Mexico - Grade**

Moderate risk, Grade 2

**Canada**

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

**WHMIS Hazard Class**

D2B Toxic materials

**16. Other information**

**Revision Date:** 2012-10-18  
**Reason for revision:** (M)SDS sections updated.

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**End of Material Safety Data Sheet**