SAFETY DATA SHEET
CYNOFF® INSECTICIDE DUST

SDS # : 6520-A
Revision date: 2015-04-13
Format: NA
Version 1.01

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name CYNOFF® INSECTICIDE DUST

Other means of identification

Product Code(s) 6520-A

Synonyms FMC 56701; A mixture of the stereoisomers (S)-α-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 (±)-cis-trans-3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate

PIPERONYL BUTOXIDE: Butylcarbityl(6-propylpiperonyl) ether, 1,3-Benzodioxole, 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-

Active Ingredient(s) Zeta-cypermethrin, Piperonyl Butoxide

Chemical Family Pyrethroid Pesticide

Recommended use of the chemical and restrictions on use

Recommended Use: Insecticide formulation

Restrictions on Use: Use as recommended by the label

Manufacturer Address

FMC Corporation
1735 Market Street
Philadelphia, PA 19103
(215) 299-6000 (General Information)
msdsinfo@fmc.com (E-Mail General Information)

Emergency telephone number

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

Classification

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

GHS Label elements, including precautionary statements

EMERGENCY OVERVIEW

The product contains no substances which at their given concentration, are considered to be hazardous to health

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 Pesticide.

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

Synonyms are provided in Section 1.

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 further treatment advice.

Inhalation 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.

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 by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed None known.

Indication of immediate medical attention and special treatment needed, if necessary Treat symptomatically. 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

Suitable Extinguishing Media Foam, Carbon dioxide (CO_2), Dry chemical, Soft stream or water fog only if necessary.

Specific Hazards Arising from the Chemical Powdered material may form explosive dust-air mixtures

Explosion data
Sensitivity to Mechanical Impact Not sensitive.

Sensitivity to Static Discharge Not sensitive.

Protective equipment and precautions for firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

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.

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

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 Containment Use a wet sweeping compound or water to prevent dust formation.

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.

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. Keep/store only in original container.

Incompatible products No information available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
Calcium carbonate (limestone) 1317-65-3	-	TWA: 15 mg/m³ TWA: 5 mg/m³	TWA: 10 mg/m³ TWA: 5 mg/m³	Mexico: TWA 10 mg/m³ Mexico: STEL 20 mg/m³
Chemical name	**British Columbia**	**Quebec**	**Ontario TWAEV**	**Alberta**
Calcium carbonate (limestone) 1317-65-3	TWA: 10 mg/m³ TWA: 3 mg/m³ STEL: 20 mg/m³	TWA: 10 mg/m³	-	TWA: 10 mg/m³

Appropriate engineering 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.

Individual protection measures, such as personal protective equipment

Eye/Face Protection If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

Skin and Body Protection Wear long-sleeved shirt, long pants, socks, and shoes.

Hand Protection Protective gloves

Respiratory Protection 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.

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.

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

Appearance	Off-white powder
Physical State	Dry powder
Color	Off-white
Odor	Odorless
Odor threshold	No information available
pH	No information available
Melting point/freezing point	Not applicable
Boiling Point/Range	No information available
Flash point	Not applicable
Evaporation Rate	No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	No information available
Vapor density	No information available
Density	1.36 g/mL
Specific gravity	No information available
Water solubility	No information available
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Viscosity, kinematic	No information available
Viscosity, dynamic	No information available
Explosive properties	No information available
Oxidizing properties	No information available
Molecular weight	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity Not applicable

Chemical Stability Stable under recommended storage conditions.

Possibility of Hazardous Reactions None under normal processing.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid Heat, flames and sparks.

Incompatible materials No information available.

Hazardous Decomposition Products Carbon oxides (COx), Hydrogen cyanide, Hydrogen chloride, Chlorine.

11. TOXICOLOGICAL INFORMATION

Product Information

LD50 Oral	> 5,000 mg/kg (rat)
LD50 Dermal	> 2,000 mg/kg (rat)
LC50 Inhalation	Zeta-cypermethrin: 2.47 mg/L 4 hr (rat)
Serious eye damage/eye irritation	Slightly or non-irritating (rabbit).
Skin corrosion/irritation	Moderately irritating.
Sensitization	Non-sensitizer.

Information on toxicological effects

Symptoms 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.

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

Chronic toxicity	Zeta-cypermethrin: Long-term exposure caused neurotoxicity (body tremors, decreased motor activity), decreased body weight and increased liver weight.
Mutagenicity	Piperonyl Butoxide, Zeta-cypermethrin: Not genotoxic in laboratory studies
Carcinogenicity	Piperonyl Butoxide: No evidence of carcinogenicity from animal studies. Cypermethrin caused an increase in benign lung tumors in mice, but not in rats. EPA has classified cypermethrin as a possible human carcinogen based on this information, but does not regulate based on its low cancer risk.
Neurological effects	Zeta-cypermethrin: Causes neurotoxicity (tremors and decreased motor activity) following acute, subchronic or chronic exposure.
Reproductive toxicity	Piperonyl Butoxide, Zeta-cypermethrin: No toxicity to reproduction in animal studies.
Developmental toxicity	Piperonyl Butoxide, Zeta-cypermethrin: Not teratogenic in animal studies.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Target organ effects	Zeta-cypermethrin: Central Nervous System, blood. 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.
Neurological effects	Zeta-cypermethrin: Causes neurotoxicity (tremors and decreased motor activity) following acute, subchronic or chronic exposure.
Aspiration hazard	No information available.

Chemical name	ACGIH	IARC	NTP	OSHA
Piperonyl butoxide 51-03-6		Group 3		

12. ECOLOGICAL INFORMATION

Ecotoxicity

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	48 h EC50	Crustacea	0.14	µg/L
	96 h LC50	Fish	0.69	µg/L
	72 h EC50	Algae	>1	mg/L
	21 d NOEC	Crustacea	0.01	µg/L
	21 d NOEC	Fish	0.015	µg/L

Persistence and degradability Zeta-cypermethrin: Non-persistent. Readily hydrolyzed. Not readily biodegradable.

Bioaccumulation Zeta-cypermethrin: The substance does not have a potential for bioconcentration.

Mobility Zeta-cypermethrin: 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.

Contaminated Packaging 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 Not regulated for transportation if shipped in Non Bulk packaging. The classification below pertains to the shipment in Bulk packaging.

- **UN/ID no** UN3077
- **Proper Shipping Name** Environmentally hazardous substance, solid, n.o.s.
- **Hazard class** 9
- **Packing Group** III
- **Marine Pollutant** Zeta-cypermethrin.
- **Description** UN3077, Environmentally hazarouds substance, solid, n.o.s. (zeta-cypermethrin), 9, III, Marine Pollutant

TDG Classification below is only applicable when shipped by vessel and is not applicable when shipped by road or rail only.

- **UN/ID no** UN3077
- **Proper Shipping Name** Environmentally hazardous substance, solid, n.o.s.
- **Hazard class** 9
- **Packing Group** III
- **Marine Pollutant** Zeta-cypermethrin.
- **Description** UN3077, Environmentally hazarouds substance, solid, n.o.s. (zeta-cypermethrin), 9, III, Marine Pollutant

ICAO/IATA

- **UN/ID no** UN3077
- **Proper Shipping Name** Environmentally hazardous substance, solid, n.o.s.
- **Hazard class** 9
- **Packing Group** III
- **Description** UN3077, Environmentally hazarouds substance, solid, n.o.s. (zeta-cypermethrin), 9, III

IMDG/IMO

- **UN/ID no** UN3077
- **Proper Shipping Name** Environmentally hazardous substance, solid, n.o.s.
- **Hazard class** 9
- **Packing Group** III
- **EmS No.** F-A, S-F
- **Marine Pollutant** Zeta-cypermethrin

Description UN3077, Environmentally hazarouds 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	51-03-6	0.15	1.0

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic health hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	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 absorbed through skin.
This product is extremely toxic to fish and aquatic invertebrates

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Piperonyl butoxide 51-03-6	X		
Zeta-cypermethrin (F2700) 52315-07-8		X	
Calcium carbonate (limestone) 1317-65-3	X	X	X

International Inventories

Component	TSCA (United States)	DSL (Canada)	EINECS/ELINCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Piperonyl butoxide 51-03-6 (0.15)	X	X	X	X	X	X	X	X
Zeta-cypermethrin (F2700) 52315-07-8 (0.075)			X		X	X	X	X
Calcium carbonate (limestone) 1317-65-3 (>90)	X	X	X	X	X	X	X	X

Mexico - Grade Slight risk, Grade 1

WHMIS Hazard Class Non-controlled

16. OTHER INFORMATION

NFPA	**Health Hazards** 1	**Flammability** 0	**Instability** 0	**Special Hazards** -
HMIS	**Health Hazards** 1	**Flammability** 0	**Physical hazard** 0	**Personal Protection** X

Revision date: 2015-04-13
Revision note Format Change

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End of Safety Data Sheet