# 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-phenoxy benzyl (1RS,3RS;1RS,3SR)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropane carboxylate 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-dichloro ethenyl)-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
2929 Walnut Street
Philadelphia, PA 19104
(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.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piperonyl butoxide</td>
<td>51-03-6</td>
<td>0.15</td>
</tr>
<tr>
<td>Zeta-cypermethrin (F2700)</td>
<td>52315-07-8</td>
<td>0.075</td>
</tr>
<tr>
<td>Calcium carbonate (limestone)</td>
<td>1317-65-3</td>
<td>&gt;90</td>
</tr>
</tbody>
</table>

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 (within the U.S. and Canada) 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 (CO₂), 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
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

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium carbonate (limestone) (1317-65-3)</td>
<td>-</td>
<td>TWA: 15 mg/m³ TWA: 5 mg/m³</td>
<td>TWA: 10 mg/m³ TWA: 5 mg/m³</td>
<td>Mexico: TWA 10 mg/m³ Mexico: STEL 20 mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>British Columbia</th>
<th>Quebec</th>
<th>Ontario TWAEV</th>
<th>Alberta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium carbonate (limestone) (1317-65-3)</td>
<td>TWA: 10 mg/m³ TWA: 3 mg/m³ STEL: 20 mg/m³</td>
<td>TWA: 10 mg/m³</td>
<td>-</td>
<td>TWA: 10 mg/m³</td>
</tr>
</tbody>
</table>

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

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

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

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 Oral</td>
<td>&gt; 5,000 mg/kg (rat)</td>
</tr>
<tr>
<td>LD50 Dermal</td>
<td>&gt; 2,002 mg/kg (rat)</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piperonyl butoxide</td>
<td></td>
<td>Group 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>51-03-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zeta-cypermethrin (F2700)</td>
<td></td>
<td>Group 2A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>52315-07-8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

Ecotoxicity

<table>
<thead>
<tr>
<th>Piperonyl butoxide (51-03-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Ingredient(s)</td>
</tr>
<tr>
<td>Piperonyl Butoxide</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Zeta-cypermethrin (F2700) (52315-07-8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Ingredient(s)</td>
</tr>
<tr>
<td>Zeta-cypermethrin F2700</td>
</tr>
</tbody>
</table>
### Persistence and degradability


### 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 hazardous 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 hazardous 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 hazardous 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 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:

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piperonyl butoxide - 51-03-6</td>
<td>51-03-6</td>
<td>0.15</td>
<td>1.0</td>
</tr>
</tbody>
</table>

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 the 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

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piperonyl butoxide - 51-03-6</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zeta-cypermethrin (F2700) 52315-07-8</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Calcium carbonate (limestone) 1317-65-3</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

International Inventories
**Chemical name** | **TSCA (United States)** | **DSL (Canada)** | **EINECS/ELINCS (Europe)** | **ENCS (Japan)** | **China (IECSC)** | **KECL (Korea)** | **PICCS (Philippines)** | **AICS (Australia)**
--- | --- | --- | --- | --- | --- | --- | --- | ---
Piperonyl butoxide 51-03-6 | X | X | X | X | X | X | X | X
Zeta-cypermethrin (F2700) 52315-07-8 | | X | X | X | X | X | X | X
Calcium carbonate (limestone) 1317-65-3 | X | X | X | X | X | X | X | X

**Mexico - Grade**

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Carcinogen Status</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium carbonate (limestone)</td>
<td></td>
<td>Mexico: TWA 10 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mexico: STEL 20 mg/m³</td>
</tr>
</tbody>
</table>

**WHMIS Hazard Class**

Non-controlled

**16. OTHER INFORMATION**

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>-</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical hazard</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

**Revision date:** 2016-05-26

**Reason for revision:** Format Change

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**Prepared By:**

FMC Corporation

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End of Safety Data Sheet