

**SAFETY DATA SHEET**  
**CYNOFF® EC INSECTICIDE**

**SDS # : 1167-A**  
**Revision date: 2016-06-28**  
**Format: NA**  
**Version 1.05**



**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Identifier**

**Product Name** CYNOFF® EC INSECTICIDE

**Other means of identification**

**Product Code(s)** 1167-A

**Synonyms** CYPERMETHRIN (FMC 30980); (RS)- $\alpha$ -cyano-3-phenoxybenzyl (1RS,3RS;1RS,3SR)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate (CAS name); cyano(3-phenoxyphenyl)methyl 3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate (IUPAC name)

**Active Ingredient(s)** Cypermethrin

**Chemical Family** Pyrethroid Pesticide

**Recommended use of the chemical and restrictions on use**

**Recommended Use:** Insecticide

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


Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2

**GHS Label elements, including precautionary statements**

**EMERGENCY OVERVIEW**

**Warning**

**Hazard Statements**  
 H302 - Harmful if swallowed  
 H313 - May be harmful in contact with skin  
 H332 - Harmful if inhaled  
 H373 - May cause damage to organs through prolonged or repeated exposure  
 H335 - May cause respiratory irritation  
 H336 - May cause drowsiness or dizziness



**Precautionary Statements - Prevention**

P264 - Wash face, hands and any exposed skin thoroughly after handling  
 P270 - Do not eat, drink or smoke when using this product  
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray

**Precautionary Statements - Response**

P314 - Get medical advice/ attention if you feel unwell  
 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 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell  
 P330 - Rinse mouth

**Precautionary Statements - Storage**

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed  
 P405 - Store locked up

**Precautionary Statements - Disposal**

P501 - Dispose of contents/container to an approved waste disposal plant

**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 %
Cypermethrin	52315-07-8	24.81

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 (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.
<b>Ingestion</b>	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.
<b>Most important symptoms and effects, both acute and delayed</b>	Central nervous system effects.
<b>Indication of immediate medical attention and special treatment needed, if necessary</b>	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**

<b>Suitable Extinguishing Media</b>	Carbon dioxide (CO <sub>2</sub> ), Dry chemical, Alcohol-resistant foam, Water spray.
<b>Specific Hazards Arising from the Chemical</b>	None known
<b><u>Explosion data</u></b>	
<b>Sensitivity to Mechanical Impact</b>	Not sensitive.
<b>Sensitivity to Static Discharge</b>	Not sensitive.
<b>Protective equipment and precautions for firefighters</b>	Wear self-contained breathing apparatus and protective suit.

**6. ACCIDENTAL RELEASE MEASURES**

<b>Personal Precautions</b>	Isolate and post spill area. Remove all sources of ignition. Wear suitable protective clothing, gloves and eye/face protection. For personal protection see section 8.
<b>Other</b>	For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.
<b>Environmental Precautions</b>	See Section 12 for additional Ecological Information.
<b>Methods for Containment</b>	Dike to prevent runoff. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.
<b>Methods for cleaning up</b>	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**

<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**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**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**

<b>Appearance</b>	Amber Liquid
<b>Physical State</b>	Liquid
<b>Color</b>	Amber
<b>Odor</b>	Soapy
<b>Odor threshold</b>	No information available
<b>pH</b>	5.5
<b>Melting point/freezing point</b>	0 °C / 32 °F
<b>Boiling Point/Range</b>	No information available
<b>Flash point</b>	115 °C / 239 °F Closed cup
<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>Density</b>	No information available
<b>Specific gravity</b>	0.96 @ 20 °C
<b>Water solubility</b>	Emulsifies
<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

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	7.99 lb/gal

**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>	Thermal decomposition can lead to release of irritating and toxic gases and vapors: Carbon oxides (COx), Hydrogen cyanide, Chlorine, Hydrogen chloride,

**11. TOXICOLOGICAL INFORMATION**

Product Information

<b>LD50 Oral</b>	1105 mg/kg (rat)
<b>LD50 Dermal</b>	> 2000 mg/kg (rabbit)
<b>LC50 Inhalation</b>	1.8 mg/L (rat) 4 hr
<b>Serious eye damage/eye irritation</b>	Minimally irritating.
<b>Skin corrosion/irritation</b>	Minimally irritating.
<b>Sensitization</b>	Non-sensitizing.

Information on toxicological effects

**Symptoms** Large doses of cypermethrin ingested by laboratory animals produced signs of toxicity including loss of motor control, tremors, decreased activity, urinary incontinence, incoordination, increased sensitivity to sound and convulsions.

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

<b>Chronic toxicity</b>	Cypermethrin: Long-term exposure caused neurotoxicity (body tremors, decreased motor activity), decreased body weight and increased liver and spleen weight.
<b>Mutagenicity</b>	Cypermethrin: Not genotoxic in laboratory studies.
<b>Carcinogenicity</b>	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.
<b>Neurological effects</b>	Cypermethrin: Causes clinical signs of neurotoxicity (body tremors, decreased motor activity and impaired gait) following acute, subchronic or chronic exposure.
<b>Reproductive toxicity</b>	Cypermethrin: No toxicity to reproduction in animal studies.
<b>Developmental toxicity</b>	Cypermethrin: Not teratogenic in animal studies.
<b>STOT - single exposure</b>	May cause respiratory irritation. See listed target organs below.
<b>STOT - repeated exposure</b>	May cause damage to organs through prolonged or repeated exposure. See listed target organs below.
<b>Target organ effects</b>	Cypermethrin: Central Nervous System.
<b>Neurological effects</b>	Cypermethrin: Causes clinical signs of neurotoxicity (body tremors, decreased motor activity and impaired gait) following acute, subchronic or chronic exposure.
<b>Aspiration hazard</b>	No information available.

Chemical name	ACGIH	IARC	NTP	OSHA
Cypermethrin 52315-07-8		Group 2A		

Legend:

*IARC (International Agency for Research on Cancer)  
 Group 2A - Probably Carcinogenic to Humans*

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

<b>Cypermethrin (52315-07-8)</b>				
Active Ingredient(s)	Duration	Species	Value	Units
Cypermethrin	48 h EC50	Crustacea	0.3	µg/L
	96 h LC50	Fish	2.8	µg/L
	72 h EC50	Algae	> 0.1	mg/L
	21 d NOEC	Crustacea	0.04	µg/L
	21 d NOEC	Fish	0.03	µg/L
	96 h NOEC	Algae	1.3	mg/L

**Persistence and degradability**      Cypermethrin: Moderately persistent. Does not readily hydrolyze. Not readily biodegradable.

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

**Mobility**                                 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**                                    UN3082  
**Proper Shipping Name**                Environmentally hazardous substance, liquid, n.o.s.  
**Hazard class**                              9  
**Packing Group**                          III  
**Marine Pollutant**                        Cypermethrin.  
**Description**                                UN3082, Environmentally hazardous substance, liquid, toxic (Cypermethrin), 9, PGIII, 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**                                    UN3082  
**Proper Shipping Name**                Environmentally hazardous substance, liquid, n.o.s.  
**Hazard class**                              9  
**Packing Group**                          III  
**Marine Pollutant**                        Cypermethrin.  
**Description**                                UN3082, Environmentally hazardous substance, liquid, toxic (Cypermethrin), 9, PGIII, Marine Pollutant

**ICAO/IATA**  
**UN/ID no**                                    UN3082  
**Proper Shipping Name**                Environmentally hazardous substance, liquid, n.o.s.

**Hazard class** 9  
**Packing Group** III  
**Description** UN3082, Environmentally hazardous substance, liquid, toxic (Cypermethrin), 9, PGIII, Marine Pollutant

**IMDG/IMO**

**UN/ID no** UN3082  
**Proper Shipping Name** Environmentally hazardous substance, liquid, n.o.s.  
**Hazard class** 9  
**Packing Group** III  
**EmS No.** F-A, S-F  
**Marine Pollutant** Cypermethrin  
**Description** UN3082, Environmentally hazardous substance, liquid, toxic (Cypermethrin), 9, PGIII, 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 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>	No
<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, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

*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 inhaled, swallowed or absorbed through the skin. Causes moderate eye irritation.  
 This product is extremely toxic to fish and other aquatic organisms.*

**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
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Cypermethrin 52315-07-8		X	
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**International Inventories**

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINC S (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Cypermethrin 52315-07-8			X		X	X	X	X

**Mexico - Grade** Serious risk, Grade 3

**WHMIS Hazard Class** D1B - Toxic materials  
 D2A - Very toxic materials



**16. OTHER INFORMATION**

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

\*Indicates a chronic health hazard.

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

**Revision date:** 2016-06-28  
**Reason for revision:** (M)SDS sections updated

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**End of Safety Data Sheet**