

SAFETY DATA SHEET
Proaxis Insecticide

SDS # : FO002177-A
Revision date: 2016-05-25
Format: NA
Version 1.01



1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Proaxis Insecticide

Other means of identification

Product Code(s) FO002177-A

Legacy Product Code 15F/1526

Synonyms GAMMA-CYHALOTHRIN:
(S)-cyano(3-phenoxyphenyl)methyl(1R,3R)-3-[(1Z)-2-chloro-3,3,3-trifluoro-1-propenyl]-2,2-dimethylcyclopropanecarboxylate (CAS name);
(S)- α -cyano-3-phenoxybenzyl(1R,3R)-3-[(Z)-2-chloro-3,3,3-trifluoropropenyl]-2,2-dimethylcyclopropanecarboxylate (IUPAC name)

Active Ingredient(s) Gamma-cyhalothrin

Formula C₂₃H₁₉ClF₃NO₃ (gamma-cyhalothrin)

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

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)

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

2. HAZARDS IDENTIFICATION

Classification


OSHA Regulatory Status

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

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin sensitization	Category 1B
Carcinogenicity	Category 2

GHS Label elements, including precautionary statements

EMERGENCY OVERVIEW

<p>Warning</p> <p>Hazard Statements H305 - May be harmful if swallowed and enters airways H317 - May cause an allergic skin reaction H320 - Causes eye irritation H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled H350 - May cause cancer H410 - Very toxic to aquatic life with long lasting effects</p> 
--

Precautionary Statements - Prevention

P202 - Do not handle until all safety precautions have been read and understood
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray
 P285 - In case of inadequate ventilation wear respiratory protection
 P272 - Contaminated work clothing should not be allowed out of the workplace
 P280 - Wear protective gloves and protective clothing

Precautionary Statements - Response

P308 + P313 - If exposed or concerned: Get medical advice/attention
 P302 + P352 - IF ON SKIN: Wash with plenty of water and soap
 P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
 P363 - Wash contaminated clothing before reuse
 P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
 P310 - Immediately call a POISON CENTER or doctor

Precautionary Statements - Storage

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

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

Toxic to aquatic life with long lasting effects. May be harmful in contact with skin.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Family Pyrethroid Pesticide.

Chemical name	CAS-No	Weight %
Gamma-cyhalothrin	76703-62-3	5.9
Naphtha (petroleum), heavy aromatic	64742-94-5	1-5

Ethylendiamine	107-15-3	<1
Microcrystalline cellulose	9004-34-6	<1

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	Remove contaminated clothing and shoes. Do not start with flushing with water, but wipe off with dry cloth or using talcum powder, followed by washing with water and soap. Thereafter apply vitamin E cream or fatty skin care oil or cream. Call a poison control center or doctor for further treatment advice.
Inhalation	Move to fresh air. Remove from exposure, lie down. Call a poison control center or doctor for further treatment advice. 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.
Ingestion	Call a poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed	Gamma-cyhalothrin can cause feelings of burning, tingling or numbness in exposed areas (paraesthesia).
Indication of immediate medical attention and special treatment needed, if necessary	. Induced vomiting as first aid for this substance may result in increased risk of chemical pneumonia or pulmonary edema caused by aspiration of the hydrocarbon solvent. Vomiting should be induced only under professional supervision.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Dry chemical, Carbon dioxide (CO ₂), Water spray, Foam. Avoid heavy hose streams.
Specific Hazards Arising from the Chemical	None known
Hazardous Combustion Products	The essential breakdown products are volatile, toxic, irritant and inflammable compounds such as: Nitrogen oxides (NO _x), Hydrogen chloride, Hydrogen fluoride, Hydrogen cyanide, Carbon monoxide, Carbon dioxide (CO ₂), various chlorinated and fluorinated organic compounds.
Explosion data	
Sensitivity to Mechanical Impact	No information available.
Sensitivity to Static Discharge	No information available.
Protective equipment and precautions for firefighters	As in any fire, wear self-contained breathing apparatus and full protective gear. Approach fire from upwind to avoid hazardous vapours and toxic decomposition products.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	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.
Other	For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.
Environmental Precautions	Contain the spill to prevent any further contamination of surface, soil or water. Keep material out of lakes, streams, ponds, and sewer drains. Local authorities should be

advised if significant spillages cannot be contained. Keep people and animals away from and upwind of spill/leak.

Methods for Containment

Dike to prevent runoff. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up

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

Handle in accordance with good industrial hygiene and safety practice. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal. Handle product only in closed system or provide appropriate exhaust ventilation at machinery. Remove and wash contaminated clothing before re-use. Wash thoroughly after handling. Refer to Section 8.

Storage

Keep container tightly closed in a dry and well-ventilated place. Keep out of reach of children and animals. Keep away from food, drink and animal feedingstuffs. Keep/store only in original container. Keep in properly labeled containers. Protect against extremes of heat and cold.

Incompatible products

Oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
Ethyldiamine (107-15-3)	TWA: 10 ppm	TWA: 10 ppm TWA: 25 mg/m ³	IDLH: 1000 ppm TWA: 10 ppm TWA: 25 mg/m ³	Mexico: TWA 10 ppm Mexico: TWA 25 mg/m ³ Mexico: STEL 3 mg/m ³
Microcrystalline cellulose (9004-34-6)	TWA: 10 mg/m ³	TWA: 15 mg/m ³ TWA: 5 mg/m ³	TWA: 10 mg/m ³ TWA: 5 mg/m ³	Mexico: TWA 10 mg/m ³ Mexico: STEL 20 mg/m ³
Chemical name	British Columbia	Quebec	Ontario TWAEV	Alberta
Ethyldiamine (107-15-3)	TWA: 10 ppm Skin	TWA: 10 ppm TWA: 25 mg/m ³ Skin	TWA: 10 ppm Skin	TWA: 10 ppm TWA: 25 mg/m ³ Skin
Microcrystalline cellulose (9004-34-6)	TWA: 10 mg/m ³ TWA: 3 mg/m ³	TWA: 10 mg/m ³ TWA: 5 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³ TWA: 5 mg/m ³

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**

For dust, splash, mist or spray exposure, wear chemical protective goggles.

Skin and Body Protection

Wear suitable protective clothing. Protective shoes or boots.

Hand Protection

Use protective gloves made of chemical materials such as nitrile or neoprene. Wash the outside of gloves with soap and water before reuse. Check regularly for leaks.

Respiratory Protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be

required for high airborne contaminant concentrations. 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. Remove and wash contaminated clothing before re-use. Wash skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Beige liquid
Physical State	Suspension
Color	Beige
Odor	Slight
Odor threshold	No information available
pH	5.71 @ 23°C (1% solution in water)
Melting point/freezing point	< 0 °C
Boiling Point/Range	Not applicable (Decomposes)
Flash point	> 100 °C / > 200 °F Seta Closed Cup
Evaporation Rate	No information available
Flammability (solid, gas)	Not applicable (Product is a liquid)
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	1.019 g/mL @ 20 °C
Specific gravity	No information available
Water solubility	Dispersible in water
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	> 400 °C
Decomposition temperature	No information available
Viscosity, kinematic	High viscosity
Viscosity, dynamic	High viscosity
Explosive properties	Not explosive
Oxidizing properties	Non-oxidizing
Molecular weight	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity	None under normal use conditions
Chemical Stability	Decomposes on heating.
Possibility of Hazardous Reactions	None under normal processing.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to avoid	Heating can release hazardous gases
Incompatible materials	Oxidizing agents.
Hazardous Decomposition Products	Carbon monoxide (CO), Hydrogen chloride, Hydrogen fluoride, Nitrogen oxides (NOx), Hydrogen cyanide, various chlorinated and fluorinated organic compounds.

11. TOXICOLOGICAL INFORMATION

Product Information

Proaxis Insecticide

SDS #: FO002177-A
Format: NA
Revision date: 2016-05-25
Version 1.01

LD50 Oral : 3257 mg/kg (rat)
LD50 Dermal : > 5000 (rat) mg/kg
LC50 Inhalation : > 2.31 mg/L 4 hr (rat)

Serious eye damage/eye irritation Moderately irritating to eyes.
Skin corrosion/irritation Slightly irritating.
Sensitization May cause sensitization by skin contact

Information on toxicological effects

Symptoms Gamma-cyhalothrin can cause feelings of burning, tingling or numbness in exposed areas (paraesthesia).

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

Mutagenicity Gamma-cyhalothrin: Not mutagenic
Carcinogenicity Gamma-cyhalothrin: Limited evidence of a carcinogenic effect
Neurological effects Gamma-cyhalothrin: No information available
Reproductive toxicity Gamma-cyhalothrin: No toxicity to reproduction in animal studies.
STOT - single exposure None known.
STOT - repeated exposure Central Nervous System.
Neurological effects Gamma-cyhalothrin: No information available
Aspiration hazard Potential for aspiration if swallowed. Risk of serious damage to the lungs (by aspiration).

Chemical name	ACGIH	IARC	NTP	OSHA
Gamma-cyhalothrin 76703-62-3		Group 2A		

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

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

Persistence and degradability Gamma-cyhalothrin. Not readily biodegradable.

Bioaccumulation Gamma-cyhalothrin: The substance has a potential for bioconcentration.

Mobility Gamma-cyhalothrin: Is not likely mobile in the environment.

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. Proper personal protective equipment, as described in Sections 7 and 8, must be worn while handling materials for waste disposal.

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

TDG

Proaxis Insecticide

SDS # : FO002177-A
Format: NA
Revision date: 2016-05-25
Version 1.01

UN/ID no UN3082
Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s.
Hazard class 9
Packing Group III
Marine Pollutant Gamma-cyhalothrin.
Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (gamma-cyhalothrin), 9, III, 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, n.o.s. (gamma-cyhalothrin), 9, III, 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 Gamma-cyhalothrin
Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (gamma-cyhalothrin), 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 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

Acute health hazard Yes
Chronic health hazard Yes
Fire hazard Yes
Sudden release of pressure hazard No
Reactive Hazard No

Clean Water Act

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Aluminum Sulfate 10043-01-3	5000 lb			X
Ethylendiamine 107-15-3	5000 lb			X
Sodium Hydroxide 1310-73-2	1000 lb			X

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):

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Aluminum Sulfate	5000 lb	

Proaxis Insecticide

SDS # : FO002177-A
 Format: NA
 Revision date: 2016-05-25
 Version 1.01

10043-01-3	2270 kg	
Methylene bisphenyl isocyanate (MDI) 101-68-8	5000 lb 2270 kg	
Ethylendiamine 107-15-3	5000 lb 2270 kg	5000 lb
Sodium Hydroxide 1310-73-2	1000 lb 454 kg	

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

Causes moderate eye irritation. Harmful if swallowed. Avoid contact with eyes, skin, or clothing. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.

This pesticide is extremely toxic to fish and aquatic organisms and toxic to wildlife.

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
Ethylendiamine 107-15-3	X	X	X
Microcrystalline cellulose 9004-34-6	X	X	X

International Inventories

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Gamma-cyhalothrin 76703-62-3			X					
Naphtha (petroleum), heavy aromatic 64742-94-5	X	X	X	X	X	X	X	X
Ethylendiamine 107-15-3	X	X	X	X	X	X	X	X
Microcrystalline cellulose 9004-34-6	X	X	X	X	X	X	X	X

Mexico - Grade

Moderate risk, Grade 2

Chemical name	Carcinogen Status	Mexico
Ethylendiamine		Mexico: TWA 10 ppm Mexico: TWA 25 mg/m ³ Mexico: STEL 3 mg/m ³
Microcrystalline cellulose		Mexico: TWA 10 mg/m ³ Mexico: STEL 20 mg/m ³

Chemical name	Mexico - Pollutant Release and Transfer Register - Reporting Emissions for Fabrication, Process or Use -Threshold Quantities	Pollutant Release and Transfer Register - Reporting Emissions - Threshold Quantities
Methylene bisphenyl isocyanate (MDI)	100 5000 kg/yr	100 kg/yr

WHMIS Hazard Class D1B - Toxic materials



16. OTHER INFORMATION

NFPA	Health Hazards 2	Flammability 1	Instability 0	Special Hazards -
HMIS	Health Hazards 2	Flammability 1	Physical hazard - 0	Personal Protection -

Revision date: 2016-05-25
 Reason for revision: Initial Release

Disclaimer

FMC Corporation believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specified product designated and may not be applicable where such product is used in combination with any other materials or in any process. Use of this product is regulated by the U.S. Environmental Protection Agency (EPA). It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Further, since the conditions and methods of use are beyond the control of FMC Corporation, FMC corporation expressly disclaims any and all liability as to any results obtained or arising from any use of the products or reliance on such information.

Prepared By:

FMC Corporation

FMC Logo - Trademark of FMC Corporation

© 2016 FMC Corporation. All Rights Reserved.

End of Safety Data Sheet