



CHIPCO TOPCHOICE™ Insecticide

MSDS Version 1.3

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name CHIPCO TOPCHOICE™ Insecticide, EXP 61748A
Chemical Name FIPRONIL: 5-amino-1-(2,6-dichloro-4-(trifluoromethyl) phenyl)-4-((1,R,S)-(trifluoromethyl)sulfinyl)-1-H-pyrazole-3-carbonitrile
Synonym FIPRONIL
MSDS Number 1611
Chemical Family
Chemical Formulation C12H4Cl2F6N4OS
EPA Registration No. 432-1217
Canadian Registrat. No.

Bayer Environmental Science
 95 Chestnut Ridge Road
 Montvale, NJ 07645
 USA

For Product Use Information: (800)331-2867 Monday through Friday(CRLF) 8:00AM-4:30PM(CRLF) For Medical Emergency contact DART: (800) 334-7577 24 Hours/Day(CRLF) For Transportation Emergency CHEMTREC: (800) 424-9300 24 Hours/Day

Product Use Description CHIPCO TopChoice is to control imported fire ants in turfgrass and landscape beds. In addition, mole crickets, fleas, ticks, and nuisance ants are controlled for a limited time by the fire ant treatment.

FIFRA regulated use only.

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component Name</u>	<u>CAS No.</u>	<u>Concentration % by Weight</u>	
		<u>Minimum</u>	<u>Maximum</u>
FIPRONIL	120068-37-3	0.0143	
Other ingredients (Trade secret)		99.9857	

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SECTION 3. HAZARDS IDENTIFICATION

NOTE: Please refer to Section 11 for detailed toxicological information.

Emergency Overview

CAUTION!

HAZARD TO HUMANS AND DOMESTIC ANIMALS

Harmful if absorbed through skin. Causes eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

Physical State

granular solid

Odor

odorless.

Appearance

grey

Immediate Effects

Eye

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

Skin

Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. May produce symptoms similar to those from ingestion.

Ingestion

Harmful if swallowed. Wash thoroughly with soap and water after handling. May cause shortness of breath, involuntary shaking, convulsions, excitement.

Inhalation

Harmful if inhaled. Avoid breathing in dust. May produce symptoms similar to those from ingestion. Remove contaminated clothing and wash clothing before reuse. May cause shortness of breath, excitement, involuntary shaking, convulsions, irritability.

Chronic or Delayed Long-Term

This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

Medical Conditions Aggravated by Exposure

Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

Signs and Symptoms

In severe cases of overexposure by oral ingestion, lethargy, muscle tremors, and, in extreme cases, possibly convulsions, may occur.

SECTION 4. FIRST AID MEASURES

Eye

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin

Take off contaminated clothing. Rinse skin immediately with plenty of water for

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15-20 minutes. Call a poison control center or doctor for treatment advice.

Ingestion

Call a poison control center or doctor immediately for treatment advice. Have a 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.

Inhalation

Remove victim from immediate source of exposure and assure that the victim is breathing. If breathing is difficult, administer oxygen, if available. If victim is not breathing, administer CPR (cardio-pulmonary resuscitation). Seek medical attention.

Note to Physician

There is no specific antidote. All treatment should be based on observed signs and symptoms of distress in the patient.

SECTION 5. FIRE FIGHTING MEASURES

Flash Point

Not Applicable

Fire and Explosion Hazards

Product will burn under fire conditions.

Suitable Extinguishing Media

Recommended (small fires): dry chemical, carbon dioxide,
Recommended (large fire): foam, water spray.

Fire Fighting Instructions

Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Keep unnecessary people away, isolate hazard area and deny entry. Evacuate residents who are downwind of fire. Persons who may have been exposed to contaminated smoke should be immediately examined by a physician and checked for symptoms of poisoning. The symptoms should not be mistaken for heat exhaustion or smoke inhalation.

SECTION 6. ACCIDENTAL RELEASE MEASURES

General and Disposal

Evacuation Procedures and Safety:
Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Cleanup and Disposal of Spill:
Sweep up spilled granules, transfer to a marked container, and dispose of wastes on site or at an approved waste disposal facility.

Land Spill or Leaks

Containment of Spill:
Follow procedure described below under Cleanup and Disposal of Spill.

Environmental and Regulatory Reporting:
If spilled on the ground, the affected area should be scraped clean and placed in a appropriate container for disposal. Prevent material from entering public sewer

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system or any waterways.

SECTION 7. HANDLING AND STORAGE

Handling Procedures Avoid direct or prolonged contact with skin and eyes. Avoid breathing dusts.

Storing Procedures Do not contaminate water, food, or feed by storage or disposal.

Do not store in or around the home. Store unused product in original container only, out of reach of children and animals. NEVER TRANSFER THIS PRODUCT TO ANOTHER CONTAINER FOR STORAGE.

Work/Hygienic Procedures Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material:

(1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.

(2) Wash hands and face carefully before eating, drinking, chewing gum, using tobacco, applying cosmetics, or using the toilet.

(3) Wash exposed skin promptly to remove accidental splashes of contact with this material.

(4) Remove clothing immediately if pesticide gets inside. Then wash body thoroughly and put on clean clothing.

(5) Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

(6) Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

(7) Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Min/Max Storage Temperatures Not Available

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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures: local exhaust ventilation at point of generation.

Eye/Face Protection

Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.

It is generally regarded as good practice to wear a minimum of safety glasses with side shields when working in industrial environments.

Body Protection

Skin contact should be minimized through use of gloves and suitable long-sleeved clothing (i.e., shirts and pants). Consideration must be given both to durability as well as permeation resistance.

Respiratory Protection

When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.

Under conditions immediately dangerous to life or health, or emergency conditions with unknown concentrations, use a full-face positive pressure air-supplied respirator equipped with an emergency escape air supply unit or use a self-contained breathing apparatus unit.

General Protection

These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from these procedures should be handled in accordance with Section 13: Disposal Considerations.

Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

Applicators, mixers, loaders and persons cleaning application equipment must wear:

- Longsleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

When handlers use closed system or enclosed cabs, in a manner that meets the requirements listed in the Worker Protection Standard (WPS) or agricultural practices (40 CFR 170.240 (d) (4-6), the handler PPE requirement may be reduced or modified as specified in the WPS.

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When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for applicators and other handlers, and such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

AGRICULTURAL USE REQUIREMENTS

Use this product in accordance with its labeling and with the Worker Protection, 40 CFR 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. The requirements only apply to sodfarm uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

PPE requirement for entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- coveralls
- waterproof gloves
- shoes plus socks

NON AGRICULTURAL USE REQUIREMENTS

These requirements apply to uses of this product that are not within the scope of the Worker Protection Standard (WPS) for agricultural pesticides (40CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Always wear protective clothing and use appropriate equipment during application and handling. Avoid contact with granules. Avoid breathing dust.

Exposure Limits

None Established

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	grey
Physical State	granular solid
Odor	odorless.
pH	4.7 at 1 wt/wt%.
Vapor Pressure	Not available

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Vapor Density (air = 1)	Not available
Specific Gravity	Not Available
Density	1.79 g/ml at 20 °C
Boiling Point	Not available
Melting/Freezing Point	Not available
Solubility (in water)	dispersible
Decomposition Temperature	240 °C
Other Information	Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product Information phone number in Section 1 for its exact specifications.

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability	This material is stable under normal handling and storage conditions described in Section 7.
Conditions to Avoid	direct sunlight extreme heat
Incompatibility	strong bases strong acids strong oxidizing agents
Hazardous Products of Decomposition	Decomposition Type: thermal hydrogen chloride hydrogen fluoride oxides of nitrogen oxides of sulfur oxides of carbon

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Hazardous Polymerization (Conditions to avoid) Will Not Occur.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity	Rat: 5,000 mg/kg
Acute Dermal Toxicity	Rabbit: 2,000 mg/kg
Acute Inhalation Toxicity	Acute Respiratory Irritation: No test data available for this product.
Skin Irritation	Rabbit - Non irritating Primary Irritation Index: 0
Eye Irritation	Rabbit - Mild irritant
Sensitization	Guinea pig - Not sensitizing.
Chronic Toxicity	The EPA has classified fipronil as a Category C carcinogen based on thyroid tumors in rats only. These tumors are produced by a mechanism which is not relevant to human cancer. Fipronil did not produce an increase in tumor incidence in mice. Fipronil is not mutagenic or teratogenic.

Assessment Carcinogenicity

ACGIH
None
NTP
None
IARC
None
OSHA
None

SECTION 12. ECOLOGICAL INFORMATION

Environmental Precautions	This pesticide is toxic to birds, fish, and aquatic invertebrates. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Cover, incorporate or clean up granules that are spilled. Do not contaminate water when disposing of equipment washwater or rinsate. Do not apply within 15 feet of bodies of fresh water: lakes, reservoirs, river, permanent streams, marshes, natural ponds, and commercial fish ponds. A 15 feet buffer of uniform groundcover must exist between application zone and bodies of freshwater (uniform ground cover is defined as land which supports vegetation of greater than 2 inches throughout).
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Do not apply within 60 feet of estuarine bodies of water. Estuarine water bodies are brackish, tidal water such as bays, mouths of rivers, salt marshes, and lagoons.

In order to reduce risk to birds, ensure that the application is spread evenly over the treatment area. In Florida, do not use this product within a one-mile radius of scrub oak habitat, which is home to the Florida scrub jay, the sand skink, and the blue tail mole skink.

Ecological Information

The following data is based on the technical grade active ingredient(s) (TGA).

Mallard duck (*Anas platyrhynchos*).

LC50 - lethal concentration 50% of test species, > 5000 mg/kg/8 days
Dietary concentrations. Mean concentration.

Bobwhite quail (*Colinus virginianus*).

LC50 - lethal concentration 50% of test species, 48 mg/kg/8 days
Dietary concentrations. Mean concentration.

Daphnia magna

EC50 - effective concentration 50% of test species, 190 ug/l/48 hr
Mean concentration. Flow-through.

Bluegill sunfish (*Lepomis macrochirus*).

LC50 - lethal concentration 50% of test species, 85 ug/l/96 hr
Mean concentration. Flow-through.

Rainbow trout (*Oncorhynchus mykiss*).

LC50 - lethal concentration 50% of test species, 248 ug/l/96 hr
Mean concentration. Flow-through.

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Environmental Fate For chemical fate data call the product information phone number listed in Section 1.

SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal Guidance Pesticides wastes are acutely hazardous. Improper disposal of excess pesticide is a violation of Federal law.

Contamination with this product will render water, food or feed unfit for human or animal consumption. Wastes resulting from the use of this product may be disposed of onsite or at an approved waste disposal facility.

EPA Hazardous Waste - NO

Container Disposal NEVER REUSE EMPTY CONTAINERS:
Completely empty container into application equipment. Then dispose of empty container in a sanitary landfill or by incineration or if allowed by State and local authorities, by open burning. If container is burned, stay out of smoke.

RCRA Classification

SECTION 14. TRANSPORT INFORMATION

NOT REGULATED FOR TRANSPORTATION

SECTION 15. REGULATORY INFORMATION

US Federal

EPA Registration No. 432-1217

TSCA list

None

TSCA 12b export notification

None

SARA Title III - section 302 - notification and information

None

SARA Title III - section 313 - toxic chemical release reporting

None

US States Regulatory

CA Prop65

This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

US State right-to-know ingredients

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None

Canadian Regulations

Canadian Registrat. No.

Canadian Domestic Substance List

None

Environmental

CERCLA

None

Clean Water Section 307 Priority Pollutants

None

Safe Drinking Water Act Maximum Contaminant Levels

None

International Regulations

EU Classification

None

European Inventory of Existing Commercial Substances (EINECS)

None

SECTION 16. OTHER INFORMATION

Reason for Revisions:

MSDS REVISION INDICATOR: Company name change.

Print Date: 12/10/2002

Supersedes MSDS, which is older than: 12/10/2002

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