

Product Name: TERMIDOR® 80 WG INSECTICIDE
Product Code: 264569
MSDS Number : 99233
Version Date: February 21, 2001

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Material Safety Data Sheet

----- 1. CHEMICAL PRODUCT and COMPANY IDENTIFICATION -----

Product Name: TERMIDOR® 80 WG INSECTICIDE
Product Code: 264569
MSDS Number : 99233

Chemical Formula: C₁₂H₄Cl₂F₆N₄O₅

Chemical Name: FIPRONIL:

5-amino-1-(2,6-dichloro-4-(trifluoromethyl)
phenyl)-4-((1R,S)-(trifluoromethyl)sulfinyl)-1H-pyrazole-3
-carbonitrile

EPA REGISTRY NUMBER: 432-900

AVENTIS ENVIRONMENTAL SCIENCE USA LP
95 CHESTNUT RIDGE ROAD
MONTVALE, NJ 07645
UNITED STATES

----- 2. COMPOSITION / INFORMATION on INGREDIENTS -----

COMPONENT	CAS REG NUMBER	%
FIPRONIL	120068-37-3	80%
INERT INGREDIENTS		20%


SYNONYMS: FIPRONIL

----- 3. HAZARDS IDENTIFICATION -----

EMERGENCY OVERVIEW:

Physical Appearance and Odor: A brown powder, with a slight odor.

- WARNING STATEMENT: WARNING!!! MAY BE FATAL IF SWALLOWED, ABSORBED THROUGH THE SKIN, OR INHALED.
- HAZARDOUS TO HUMANS AND DOMESTIC ANIMALS.
- CAUSES SUBSTANTIAL BUT TEMPORARY EYE INJURY.
- DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING.
- DO NOT BREATHE IN SPRAY MIST.

 For Product Use Information: (800)331-2867 8:00 AM to 4:30 PM During Business Days
For Medical Emergency contact DART: (800)334-7577 24 Hours/Day
For Transportation Emergency contact CHEMTREC: (800)424-9300 24 Hours/Day

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----- **3. HAZARDS IDENTIFICATION (Continued)** -----

POTENTIAL HEALTH EFFECTS

IMMEDIATE EFFECTS

SKIN:

May be fatal if absorbed through skin. May produce symptoms similar to those from ingestion.

EYES:

Causes substantial but temporary eye injury. May cause redness, irritation and tearing.

INHALATION:

May be fatal if inhaled. May produce symptoms similar to those from ingestion. May cause shortness of breath, excitement, involuntary shaking, convulsions, irritability.

INGESTION:

May be fatal if swallowed. May cause shortness of breath, involuntary shaking, convulsions, excitement.

DELAYED/LONG TERM EFFECTS

CARCINOGENIC:

This product does not contain any ingredient designated by the IARC, NTP, ACGIH, or OSHA as probable or suspected human carcinogens (see Section 11 - Toxicological Information).

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.

----- **4. FIRST AID MEASURES** -----

After contact with skin:

Wash with plenty of soap and water. Get medical attention. Remove contaminated clothing and shoes. Clean contaminated clothing and shoes before re-use.

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----- **4. FIRST AID MEASURES (Continued)** -----

After contact with eyes:

Flush with plenty of water. Call a physician if irritation persists.

After inhalation:

Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

After ingestion:

Give 1 or 2 glasses of water, and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person. Call a physician or Poison Control Center. Do not leave victim unattended. Vomiting may occur spontaneously. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. If vomiting occurs and the victim is conscious, give water to further dilute the chemical.

GENERAL:

Contact a physician immediately in all cases of suspected poisoning. Transport patient to a physician or hospital immediately. If poisoning is suspected in animals, contact a veterinarian.

Hints for the physician:

All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

SYMPTOMS OF POISONING:

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

Treat symptomatically. No specific antidote available.

TREATMENT FOR FIPRONIL OVERDOSE:

Recommendations for treatment are based on anticonvulsant therapy as routinely administered to humans. Phenobarbital or diazepam may be useful in controlling convulsions induced by Fipronil.

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Hints for the physician: (Continued)

Even when symptoms of Fipronil intoxication are rapidly reversed by treatment, the treatment must be continued for several days, gradually decreasing the dose of anticonvulsant based on the patients clinical response. This is necessary due to the slow elimination of the compound.

----- 5. FIRE FIGHTING MEASURES -----

FLAMMABLE PROPERTIES

FLASH POINT: Not applicable

AUTO IGNITION TEMPERATURE: >140°C (284°F)

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Under fire conditions the product will burn and toxic, corrosive fumes emitted.

HAZARDOUS DECOMPOSITION MATERIALS (UNDER FIRE CONDITIONS):

Hydrogen Flouride
Oxides of Nitrogen
Oxides of Sulfur
Oxides of Carbon
Hydrochloric Acid

Advice on protection against fire and explosion:

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. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later. 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.

Suitable extinguishing media:

Dry Chemical, Foam, Water, Carbon Dioxide

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----- 6. ACCIDENTAL RELEASE MEASURES -----

Environmental precautions:

Shovel up into an appropriate closed container (see Section 7: Handling and Storage). Decontaminate tools and equipment following cleanup. Avoid creation of dust conditions.

Methods for cleaning up/taking up:

EVACUATION PROCEDURES AND SAFETY:

Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

In case of spill, clean up dust spillage resulting from container or pak breakage by sweeping material into a pile and avoid dust generation. Ensure adequate decontamination of tools and equipment following cleanup.

If spilled on the ground, the affected area should be scraped clean and placed in a appropriate container for disposal.

----- 7. HANDLING and STORAGE -----

Handling:

- Do not get on skin or in eyes, or on clothing.
- Do not breathe dust.
- Do not ingest.
- Minimum/Maximum Storage Temperatures not available.

Storage:

- Do not contaminate water, food, or feed by storage or disposal.
- Store in an area that is away from foodstuffs or animal feed.
- Store unused product in original container only, out of reach of children and animals.

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----- **8. EXPOSURE CONTROLS / PERSONAL PROTECTION** -----

INTRODUCTORY REMARKS:

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.

Additional advice on system design:

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 the point of generation.

Hygiene measures:

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 thoroughly with soap and water 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 contaminated clothing. Then wash body thoroughly with soap and water and put on clean clothing.
- (5) Wash clothing with detergent and hot water before reusing. Contaminated clothing should not be taken home or laundered with other clothing.

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----- **8. EXPOSURE CONTROLS / PERSONAL PROTECTION (Continued)** -----

Personal protective equipment

Body protection:

All pesticide handlers (mixers, loaders, and applicators) must wear a long-sleeved shirt and long pants, socks, shoes, and chemical-resistant gloves. Consideration must be given both to durability as well as permeation resistance.

Eye protection:

All pesticide handlers must wear protective eyewear (goggles, a face shield, or safety glasses with front, brow, and temple protection) when working in a non-ventilated space, including but not limited to crawl-spaces and basements or when applying termiticide by rodding or sub-slab injection. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.

Respiratory protection:

All pesticide handlers must wear a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any N, R, P, or HE filter when working in a non-ventilated space, including but not limited to crawl-spaces and basements.

EXPOSURE GUIDELINES:

Exposure limits represent regulated or recommended worker breathing zone concentrations measured by validated sampling and analytical methods, meeting the regulatory requirements. The following limits apply to this material, where, if indicated, S=skin and C=ceiling limit:

FIPRONIL:	Notes	TWA	STEL
Aventis Int.	S	0.03 mg/cu m	
Aventis Int.	S	0.1 mg/cu m (<3 m/y)	

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----- **9. PHYSICAL and CHEMICAL PROPERTIES** -----

Physical and Chemical properties here represent typical properties of this product.

PHYSICAL APPEARANCE: A brown powder.
ODOR: Slight odor

BASIC PHYSICAL PROPERTIES

pH: 5.63 at 1 wt/wt%
SPECIFIC GRAVITY: Not available
WATER SOLUBILITY: Dispersible
MELTING POINT RANGE: 200°C (392°F)
BOILING POINT RANGE: Not available
VAPOR PRESSURE: Not available
VAPOR DENSITY: Not available
OCTANOL/WATER PARTITION COEFFICIENT: 4
MOLECULAR WEIGHT: 437.15

----- **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 DECOMPOSITION PRODUCTS:

Decomposition Temperature Range: 240°C (464°F)
Decomposition Type: thermal
Hydrogen Fluoride
Oxides of Nitrogen
Oxides of Sulfur
Oxides of Carbon
Hydrochloric Acid

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----- **10. STABILITY and REACTIVITY (Continued)** -----

HAZARDOUS POLYMERIZATION:

Hazardous Polymerization Will Not Occur

----- **11. TOXICOLOGICAL INFORMATION** -----

ACUTE EYE IRRITATION:

TOXICOLOGICAL INFORMATION AND INTERPRETATION

Eye - eye irritation, rabbit

Moderately irritating.

ACUTE SKIN IRRITATION:

TOXICOLOGICAL INFORMATION AND INTERPRETATION

Skin - skin irritation, rabbit

Minimally irritating

Skin - sensitization, 0.4 NAP, guinea pig

Not sensitizing

ACUTE DERMAL TOXICITY:

TOXICOLOGICAL INFORMATION AND INTERPRETATION

LD50 - lethal dose 50% of test species, 374 mg/kg, rabbit

ACUTE RESPIRATORY IRRITATION:

No test data found for product.

ACUTE INHALATION TOXICITY:

TOXICOLOGICAL INFORMATION AND INTERPRETATION

LC50 - lethal concentration 50% of test species, 0.63 mg/l/4, rat. Nose exposure only.

ACUTE ORAL TOXICITY:

TOXICOLOGICAL INFORMATION AND INTERPRETATION

LD50 - lethal dose 50% of test species, 296 mg/kg, rat.

CHRONIC TOXICITY:

This product does not contain any substances that are considered by OSHA, NTP, IARC, or ACGIH to be probable or suspected human carcinogens.

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----- **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. Care must be taken to avoid runoff. Do not contaminate water by cleaning equipment or disposal of wastes. Do not contaminate water when disposing of equipment washwaters.

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

ECOTOXICOLOGICAL INFORMATION AND INTERPRETATION:

LC50 - Lethal concentration 50% of test species, > 5,000 mg/kg/8 days, Mallard duck (*Anas platyrhynchos*)
Dietary concentrations. Mean concentration.

LC50 - Lethal concentration 50% of test species, 48 mg/kg/8 days, Bobwhite quail (*Colinus virginianus*)
Dietary concentrations. Mean concentration.

EC50 - Effective concentration 50% of test species, 248 ug/l/48 hr, *Daphnia magna*
Mean concentration. Flow through.

LC50 - Lethal concentration 50% of test species, 248 ug/l/96 hr, Rainbow trout (*Oncorhynchus mykiss*)
Mean concentration. Flow through.

LC50 - Lethal concentration 50% of test species, 85 ug/l/96 hr, Bluegill sunfish (*Lepomis macrochirus*)
Mean concentration. Flow through.

Data on elimination (persistence and degradability):

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

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Data on elimination (persistence and degradability): (Continued)

CHEMICAL FATE INFORMATION:

For chemical fate data call the product use information phone number listed at the bottom of every page.

----- 13. DISPOSAL CONSIDERATIONS -----

WASTE DISPOSAL METHOD:

Water soluble packages should be placed directly into spray tanks containing some water. Then dispose of empty overpackaging bag in a sanitary landfill or, if allowed by government regulations, by burning or incineration. If bag is burned, stay out of smoke.

Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate, or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.

EPA Hazardous Waste - NO

----- 14. TRANSPORT INFORMATION -----


PROPER SHIPPING NAME: Pesticides, Solid, Toxic, N.O.S.
(Fipronil), 6.1, UN2588, PG III

----- 15. REGULATORY INFORMATION -----

STATE REGULATIONS

This product does not contain any components that are regulated under California Proposition 65.

The following chemicals associated with the product are subject to the right-to-know regulations in these states:
No components regulated

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----- **15. REGULATORY INFORMATION (Continued)** -----

U.S. FEDERAL REGULATIONS

SARA TITLE III HAZARD CLASSES:

FIRE HAZARD: NO
REACTIVE HAZARD: NO
RELEASE OF PRESSURE: NO
ACUTE HEALTH HAZARD: YES
CHRONIC HEALTH HAZARD: YES

TSCA inventory status

These components are not listed:

FIPRONIL 80% (120068-37-3)

INERT INGREDIENTS 20%

SARA 313 : No components listed

----- **16. OTHER INFORMATION** -----

KEY LEGEND INFORMATION:

ACGIH: American Conference of Governmental Industrial Hygienists

OSHA: Occupational Safety and Health Administration

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

TWA: Time Weighted Average

STEL: Short Term Exposure Limit

NTP: National Toxicology Program

IARC: International Agency for Research on Cancer

ND: Not Determined

HAZARD RATINGS

NATIONAL FIRE PROTECTION ASSOCIATION HAZARD RATINGS (NFPA):

2 Health Hazard Rating: Moderate

1 Flammability Rating: Minimal Hazard

1 Instability Rating: Slight


NATIONAL PAINT AND COATING HAZARDOUS MATERIALS

IDENTIFICATION:

2 Health Hazard Rating: Moderate

1 Flammability Rating: Slight

1 Flammability Rating: Slight

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----- **16. OTHER INFORMATION (Continued)** -----


REVISED SECTIONS:

MSDS REVISED INDICATOR: Changes made to Product Use Information,
Business hours.

PREPARED BY: Dept. of Regulatory Affairs
PHONE: 800-438-5837
SUPERSEDES MSDS DATED: 08/09/2000

DISCLAIMER:

The information is provided in good faith but without
express or implied warranty. Buyer assumes all
responsibility for safety and use not in accordance with
label instructions.

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