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# **Material Safety Data Sheet**

Print date -- September 12th, 2000 10:42 a.m. (E) PS PSA PSFHV -- 1.1 (1/14)

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

Product Name: TERMIDOR® SC TERMITICIDE/INSECTICIDE

Product Code: 264598
MSDS Number : 99232
Chemical Name: FIPRONIL:

5-amino-1-(2,6-dichloro-4-(trifluoromethyl)

 $\verb|phenyl|)-4-((1,R,S)-(trifluoromethyl)sulfinyl)-1-H-pyrazole-3|$ 

-carbonitrile

Chemical Formula: C12H4Cl2F6N4OS

EPA Registry Number: 432-901

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 9.1%
Inert ingredients 90.9%

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

#### EMERGENCY OVERVIEW:

Physical Appearance and odor: A light brown viscous liquid, odorless.

- HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN!
- CAUSES EYE IRRITATION.
- THIS PRODUCT IS TOXIC TO BIRDS, FISH, AND AQUATIC INVERTEBRATES.



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

### POTENTIAL HEALTH EFFECTS

#### IMMEDIATE EFFECTS

#### SKIN:

Harmful if absorbed through the skin. Do not get on skin or clothing. May produce symptoms similar to those from ingestion. May cause irritation, redness, swelling.

#### EYES:

Causes eye irritation. May cause redness, tearing. Do not get in eyes.

#### INHALATION:

Harmful if inhaled. Do not breathe spray mist. May produce symtoms similar to those from ingestion. May cause shortness of breath, excitement, involuntary shaking, irritability.

#### **INGESTION:**

Harmful if ingested. May cause shortness of breath, drowsiness, involuntary shaking, muscle weakness, convulsions.

### DELAYED/LONG TERM EFFECTS

#### CARCINOGENIC:

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



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#### After contact with skin:

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

## After contact with eyes:

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

#### After inhalation:

Move person to fresh air. If person is not breathing, call 911 or ambulance, then give artificial respiration, preferably mouth to mouth, if possible. Call a poison control center or doctor for further treatment advice.

#### After 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 by a poison control center or doctor.

#### Hints for the physician:

There is no specific antidote. All treatment should be based on observed signs and symptoms of distress in the patient. Overexposure to materials other than this product may have occurred.

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

#### 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.

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.



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## 

## FLAMMABLE PROPERTIES

FLASH POINT: > 93°C (199°F).
Flammability Class: WILL BURN

METHOD USED: Closed Cup

FLAMMABILITY LIMITS (VOL/VOL%):

Lower: Upper: Data No Data

#### UNUSUAL FIRE AND EXPLOSION HAZARDS:

Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.

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:

Foam, Water Spray, Carbon Dioxide, Dry Chemical



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

#### Environmental precautions:

CONTAINMENT OF SPILL:

Stop leak if it can be done so without risk. Follow procedures described below under Cleanup and Disposal of Spill.

### Methods for cleaning up/taking up:

EVACUATION PROCEDURES AND SAFETY:

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

#### CLEANUP & DISPOSAL OF SPILL:

Pump any free liquid into an appropriate closed container (see Section 7: Handling and Storage). Recover as much liquid product as possible. Absorb with an inert absorbent. Wash spill site with a 2-5% caustic soda (sodium hydroxide) solution.

If spilled on the ground, the affected area should be scraped clean and placed in an appropriate container for disposal (see Section 7: Handling and Storage). Decontaminate tools and equipment following cleanup. Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies. Collect washings for disposal. Ventilate area.

Note: Caustic soda (sodium hydroxide) in contact with certain metals will produce hydrogen gas, which is undesirable in an enclosed space. An alternative is 1 part sodium hypochlorite to 9 parts water and left in contact with the spill for ten minutes prior to mopping or shoveling up the residue.

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

#### Handling:

- Do not breathe vapors or spray mists.
- Do not get on skin, in eyes or on clothing.
- Do not ingest.



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## ------ 7. HANDLING and STORAGE (Continued) -------

#### Storage:

- Do not contaminate water, food, or feed by storage or disposal.
- Store unused product in original container only, out of reach of children and animals.
- Keep out of direct sunlight.
- Store in an area that is cool, away from ignition sources, away from food, feedstuffs, fertilizers, seed, and water sources.
- Store in closed containers.
- Minimum/Maximum Storage Temperatures not available.

## ------ 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:

WORK PRACTICE CONTROLS:

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:



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## Hygiene measures: (Continued)

- (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. Wash clothing with detergent and hot water before reusing. Contaminated clothing should not be taken home or laundered with other clothing.
- (5) Remove PPE immediately after handling this product. Wash outside of gloves before removing. Wash PPE before reusing.

#### Personal protective equipment

### Body protection:

All pesticide handlers (mixers, loaders, and applicators) must wear long-sleeved shirt and long pants, socks, shoes, and chemical-resistant gloves.

#### Eye protection:

All pesticide handlers must wear protective eyewear (goggles, a faceshield, 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.

Under conditions immediately dangerous to life or health, or emergency conditions with unknown concentrations, use a full-face positive pressure air-supplied respirator equipped



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## Respiratory protection: (Continued)

with an emergency escape air supply unit or use a self-contained breathing apparatus unit.

#### **EXPOSURE GUIDELINES:**

Exposure limits represent regulated or recommended worker breathing zone concentrations measured by validating 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)

PROPANEDIOL:

Notes: TWA STEL

AIHA 10 mg/cu m AIHA 50 ppm

# ----- 9. PHYSICAL and CHEMICAL PROPERTIES ---

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

#### APPEARANCE:

A light brown viscous liquid.

ODOR:

Odorless

BASIC PHYSICAL PROPERTIES

pH: 7.22 at 1 wt/wt%

SPECIFIC GRAVITY: 1.24 at 25°C (77°F)

WATER SOLUBILITY: Dispersible

MELTING POINT RANGE: Not available BOILING POINT RANGE: Not available

VAPOR PRESSURE: Not available VAPOR DENSITY: Not available

VISCOSITY (centipoises): 300 to 400 cps at 24°C

(750F)



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## ------ 10. STABILITY and REACTIVITY ------- 10.

#### CHEMICAL STABILITY:

This material is stable under normal handling and storage conditions described in Section 7.

### CONDITIONS TO AVOID:

Direct Sunlight Extreme Heat Open Flame Spark

#### INCOMPATIBILITY:

MATERIALS/CHEMICALS TO BE AVOIDED:

Strong bases Strong acids

Strong oxidizing agents

#### HAZARDOUS DECOMPOSITION PRODUCTS:

DECOMPOSITION TYPE: Thermal

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

### HAZARDOUS POLYMERIZATION:

Hazardous Polymerization Will Not Occur

## 

ACUTE EYE IRRITATION:

TOXICOLOGICAL INFORMATION AND INTERPRETATION

Eye - eye irritation, rabbit

Mildly irritating

ACUTE SKIN IRRITATION:

TOXICOLOGICAL INFORMATION AND INTERPRETATION

Skin - skin irritation, rabbit

Slightly irritating

Skin - sensitization, guinea pig

Not sensitizing



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# ------ 11. TOXICOLOGICAL INFORMATION (Continued)

#### ACUTE DERMAL TOXICITY:

TOXICOLOGICAL INFORMATION AND INTERPRETATION LD50 - lethal dose 50% of test species, > 2,000 mg/kg, rabbit

### ACUTE RESPIRATORY IRRITATION:

No data found for product

#### ACUTE INHALATION TOXICITY:

TOXICOLOGICAL INFORMATION AND INTERPRETATION LC50 - lethal concentration 50% of test species, > 1.7  $\,\mathrm{mg}/1/4~\mathrm{hr}$ , rat

#### ACUTE ORAL TOXICITY:

TOXICOLOGICAL INFORMATION AND INTERPRETATION LD50 - lethal dose 50% of test species, > 1,999 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.

## ------ 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.

#### ECOTOXICOLOGICAL INFORMATION:

The following data is for similar or related products.

## ECOTOXICOLOGICAL INFORMATION AND INTERPRETATION:

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



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## ------ 12. ECOLOGICAL INFORMATION (Continued)

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, 190  $ug/1/48 \ hr$ , Daphnia magna. Mean concentration. Flow through.

LC50 - lethal concentration 50% of test species, 85 ug/1/96 hr, bluegill sunfish (Lepomis macrochirus). Mean concentration. Flow through.

LC50 - lethal concentration 50% of test species, 248 ug/1/96 hr, rainbow trout (Oncorhynchus mykiss). Mean concentration. Flow through.

### CHEMICAL FATE INFORMATION:

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

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### WASTE DISPOSAL METHOD:

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.

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.

### CONTAINER HANDLING AND DISPOSAL:



 $\mbox{ Product Name: $\tt TERMIDOR} \mbox{ } \mbox{SC TERMITICIDE/INSECTICIDE}$ 

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# ------ 13. DISPOSAL CONSIDERATIONS (Continued)

Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state or local authorities, by burning. If burned, stay out of smoke. Consult state and local regulations regarding the proper disposal of container.

EPA HAZARDOUS WASTE: No

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

Proper Shipping Name: Not regulated for transportation.

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

#### STATE REGULATIONS

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

### U.S. FEDERAL REGULATIONS

SARA Title III Hazard Classes:
Fire Hazard Yes
Reactivity Hazard No
Release of Pressure No
Acute Health Hazard Yes
Chronic Health Hazard Yes

TSCA inventory status

These components are not listed: FIPRONIL 9.1% (120068-37-3)

SARA 313 : No components listed



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

#### INTERNATIONAL REGULATIONS

INVENTORY STATUS:

Canada (DSL) N
Europe (EINECS/ELINCS) N
Australia (AICS) N
Japan (MITI) N
South Korea (KECL) N

Y = All ingredients are on the inventory.

 ${\tt E} = {\tt All}$  ingredients are on the inventory or exempts from listing.

P = One or more ingredients fall under the polymer exemption or are on the no longer polymer list. All other ingredients are on the inventory or exempt from listing.

N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing.

## ------ 16. OTHER INFORMATION ------

### NATIONAL FIRE PROTECTION ASSOCIATION HAZARD RATINGS(NFPA):

- 2 Health Hazard Rating -- Moderate
- 1 Flammability Rating -- Slight
- 0 Instability Rating -- Minimal

## NATIONAL PAINT & COATING HAZARDOUS MATERIALS IDENTIFICATION:

- 2 Health Hazard Rating -- Moderate
- 1 Flammability Rating -- Slight
- 0 Reactivity Rating -- Minimal

#### 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



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

#### REVISED SECTIONS:

MSDS REVISED INDICATOR: Change made to Section 11:

Toxicological Information.

PREPARED BY: Dept. of Regulatory Affairs.

PHONE: 800-438-5837 SUPERSEDES: 04/26/2000

#### 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.