CHIPCO® CHOICE™ INSECTICIDE

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name  CHIPCO® CHOICE™ INSECTICIDE
Chemical Name  Fipronil
Synonym
MSDS Number  42
Chemical Family
Chemical Formulation  C12H4Cl2F6N4OS
EPA Registration No.  432-896
Canadian Registrat. No.

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

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

Product Use Description  Slit application of CHIPCO CHOICE Insecticide is intended for long-term control of mole crickets. Broadcast Application of CHIPCO CHOICE Insecticide is intended for long-term control of imported fire ants. In addition, mole crickets, fleas, ticks and nuisance ants are controlled for a limited time by the broadcast fire ant treatment.

FIFRA regulated use only.

SECTION 2. COMPOSITION INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component Name</th>
<th>CAS No.</th>
<th>Concentration % by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIPRONIL</td>
<td>120068-37-3</td>
<td>0.1000</td>
</tr>
<tr>
<td>1,2-Propylene glycol</td>
<td>57-55-6</td>
<td></td>
</tr>
<tr>
<td>Other ingredients (Trade secret)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION 3. HAZARDS IDENTIFICATION

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

Emergency Overview
Caution. Keep out of the reach of children. Hazard to humans and domestic animals. Harmful if absorbed through the skin. Causes eye irritation. Avoid contact with skin, eyes and clothing. Wash thoroughly with soap and water after handling.

Physical State
solid granules

Odor
odorless

Appearance
grey

Immediate Effects

Eye
May causes redness, irritation, tearing.

Skin
Harmful if absorbed through skin. May produce symptoms similar to those from ingestion. May cause irritation, redness, swelling.

Ingestion
Harmful if ingested. May cause drowsiness, involuntary shaking, shortness of breath, convulsions, excitement.

Inhalation
Harmful if inhaled. May produce symptoms similar to those from ingestion. May cause shortness of breath, upper respiratory tract irritation, excitement, involuntary shaking, convulsions, irritability.

Chronic or Delayed

Long-Term
This product does not contain any ingredients 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 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.

**Note to Physician**

All treatment 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. There is no specific antidote.

**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.

For phenobarbital: Start with 10 to 20 mg/kg of phenobarbital in rapid intravenous perfusion (about 60 mg/minute in adults) and continue according to the patient's response.

For diazepam: Start with 10 to 30 mg diazepam by intravenous injection according to body weight. This dose is to be repeated every 10 to 30 minutes according to the patient's response.

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 patient's clinical response. This is necessary due to the slow elimination of the compound.

### SECTION 5. FIRE FIGHTING MEASURES

<table>
<thead>
<tr>
<th>Flash Point</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire and Explosion Hazards</td>
<td>Product will burn under fire conditions.</td>
</tr>
<tr>
<td>Suitable Extinguishing Media</td>
<td>Small Fires: dry chemical, carbon dioxide (CO2)</td>
</tr>
<tr>
<td></td>
<td>Large Fires: foam, water spray</td>
</tr>
<tr>
<td>Fire Fighting Instructions</td>
<td>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.</td>
</tr>
</tbody>
</table>

### SECTION 6. ACCIDENTAL RELEASE MEASURES

| General and Disposal | Evacuation Procedures and Safety: Wear appropriate gear for the situation. See |

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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 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 an appropriate container for disposal. Prevent material from entering public sewer system or any waterway.

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**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 in original container. Keep out of reach of children and domestic animals. Never transfer this product to another container for storage.

**Work/Hygienic Procedures**

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

Remove Personal Protective Equipment (PPE) immediately after handling this product. Wash the outside of gloves before removing. Then wash thoroughly and put on clean clothing.

Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

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

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. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

**Min/Max Storage Temperatures**

Not Available
### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls**

Where engineering controls are indicated by use conditions of a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures: general area dilution/exhaust ventilation

When handlers used closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [(40 CFR 170.240(d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

**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.

Applicators and other handlers must wear: Long-sleeved shirt and long pants waterproof gloves shoes plus socks

**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.

**Exposure Limits**
1,2-Propylene glycol 57-55-6

WEEL TWA Form of Exposure Total vapor and aerosol. 50 ppm
WEEL TWA Form of Exposure Aerosol. 10 mg/m³
ACGIH TWA Form of Exposure Respirable. 3 mg/m³
US CA OEL TWA PEL Form of Exposure Respirable fraction. 5 mg/m³
US CA OEL TWA PEL Form of Exposure Total dust. 10 mg/m³
US CA OEL TWA PEL Form of Exposure Respirable fraction. 5 mg/m³
US CA OEL TWA PEL Form of Exposure Respirable fraction. 5 mg/m³
US CA OEL TWA PEL Form of Exposure Total dust. 10 mg/m³
US CA OEL TWA PEL Form of Exposure Total dust. 10 mg/m³
ACGIH TWA Form of Exposure Inhalable particulate.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>grey</td>
</tr>
<tr>
<td>Physical State</td>
<td>solid granules</td>
</tr>
<tr>
<td>Odor</td>
<td>odorless</td>
</tr>
<tr>
<td>pH</td>
<td>4.7  at 1 wt/wt%</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not Available</td>
</tr>
<tr>
<td>Vapor Density (air = 1)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Not Available</td>
</tr>
<tr>
<td>Density</td>
<td>1.79 g/ml at 20 °C</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not Available</td>
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<tr>
<td>Melting/Freezing Point</td>
<td>Not available</td>
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<tr>
<td>Solubility (in water)</td>
<td>dispersible</td>
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<tr>
<td>Decomposition Temperature</td>
<td>240 °C</td>
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</tbody>
</table>
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
carbon oxides

Hazardous Polymerization
(Conditions to avoid)
not applicable

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity
Rat: LD50: > 5,000 mg/kg

Acute Dermal Toxicity
Rabbit: LD50: > 2,000 mg/kg

Acute Inhalation Toxicity
Rat: LC50: > 5.16 mg/l 4 h
Whole body exposure.

Acute Respiratory Irritation:
No test data found for product.

Skin Irritation
Rabbit: Slightly irritating

Eye Irritation
Rabbit: Moderately irritating

Sensitization
Guinea pig: Non-sensitizing

Assessment Carcinogenicity
ACGIH
None
SECTION 12. ECOLOGICAL INFORMATION

Acute and Prolonged Toxicity to Fish
The following data is based on the technical grade active ingredient(s) (TGAI).
- Rainbow trout
  - LC50: 248 ug/l
  - Exposure Time: 96 h
  - Mean concentration. Flow through.

The following data is based on the technical grade active ingredient(s) (TGAI).
- Bluegill sunfish
  - LC50: 85 ug/l
  - Exposure Time: 96 h
  - Mean concentration. Flow through.

Acute Toxicity to Aquatic Invertebrates
The following data is based on the technical grade active ingredient(s) (TGAI).
- Daphnia
  - EC50: 190 ug/l
  - Exposure Limit: 48 h
  - Mean concentration. Flow through.

Toxicity Other Non Mammal Terr. Species
The following data is based on the technical grade active ingredient(s) (TGAI).
- Mallard duck
  - LD50: > 5,000 mg/kg
  - Exposure Time: 8 d
  - Dietary concentrations. Mean concentration.

The following data is based on the technical grade active ingredient(s) (TGAI).
- Bobwhite quail
  - LC50: 48 mg/kg
  - Exposure Time: 8 d
  - Dietary concentrations. Mean concentration.

Environmental Precautions
This pesticide is toxic to birds, fish and aquatic invertebrates. Do not apply directly to water, 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.
Environmental Fate
For chemical fate data call the product information phone number listed in Section 1.

SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal 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.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate 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 use of this product may be disposed of on site or at an approved waste disposal facility.

EPA Hazardous Waste - No

Container Disposal
Do not reuse 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 burning. If burned, stay out of smoke.

RCRA Classification
Not Regulated under this Statute

SECTION 14. TRANSPORT INFORMATION

NOT REGULATED FOR TRANSPORTATION.

SECTION 15. REGULATORY INFORMATION

US Federal
EPA Registration No. 432-896
TSCA list 1,2-Propylene glycol 57-55-6
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
1,2-Propylene glycol 57-55-6 PA, RI

Canadian Regulations
Canadian Registrat. No.
Canadian Domestic Substance List
1,2-Propylene glycol 57-55-6

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)
1,2-Propylene glycol 57-55-6

SECTION 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th></th>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMIS</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>NFPA</td>
<td>1</td>
<td>1</td>
<td>0</td>
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Reason for Revisions: Company name change.

Print Date: 12/04/2002
Supersedes MSDS, which is older than: 12/03/2002

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