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1. Identification

Product identifier used on the label: Fipro Aerosol

Recommended use*: insecticide

* The "Recommended use" identified for this product is provided solely to comply with a US Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Supplier:

Solutions Pest & Lawn 2739 Pasadena Blvd Pasadena, TX 77502 Phone: 713-955-2000

Poison Control Center: 1-800-222-1222

Registrant: Solutions Pest & Lawn

EPA Register number: 87093-7-88746

Synonyms: fipronil

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

Flam. Aerosol

Label elements

Pictogram:



Signal Word: Danger

Hazard Statement:

H222 Extremely flammableaerosol.

Precautionary Statements (Prevention):

P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

Precautionary Statements (Storage):

P410 + P412 Protect from sunlight. Do no expose to temperatures exceeding 50°C/

122°F.

Hazards not otherwise classified

Labeling of special preparations (GHS):

 The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 1 % dermal

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- The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 1 % oral
- The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 8 % Inhalation vapor
- The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 8 % Inhalation - mist

According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Emergency overview

CAUTION:

KEEP OUT OF REACH OF CHILDREN.

May be harmful if inhaled.

May be harmful if swallowed.

May cause moderate but temporary irritation to the eyes.

Avoid contact with the skin, eyes and clothing.

Avoid inhalation of mists/vapors.

Flammable Liquid

Aerosol container contains flammable gas under pressure.

3. Composition/Information on Ingredients

According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

| CAS Number | Content (W/W) | Chemical name |
|-------------------|---------------|-------------------------|
| 120068-37-3 | 0.005 % | fipronil |
| 68476-40-4 | < 10.0 % | Hydrocarbons, C3-4 |
| | > 90.0 % | Proprietary ingredients |

4. First-Aid Measures

Description of first aid measures

General advice:

First aid providers should wear personal protective equipment to prevent exposure. Remove contaminated clothing. 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 physician for treatment advice. Have the product container or label with you when calling a poison control center or doctor or going for treatment.

If inhaled:

Remove the affected individual into fresh air and keep the person calm.

If on skin:

Wash thoroughly with soap and water.

If in eyes:

Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing.

If swallowed:

Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Do not induce vomiting. Have person sip a glass of water if able to swallow.

Most important symptoms and effects, both acute and delayed

Symptoms: No significant reaction of the human body to the product known.

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Indication of any immediate medical attention and special treatment needed

Note to physician:

Treat symptomatically. Anticonvulsant therapy as routinely administered to humans. Based on animal studies, diazepam and phenobarbital prevented convulsions. Due to the slow elimination of the active compound and its metabolites, the treatment must be continued for several days, gradually decreasing the dose of anticonvulsant based on the clinical response.

5. Fire-Fighting Measures

Suitable extinguishing media:

Water, dry powder, foam, carbon dioxide

Special hazards arising from the substance or mixture:

Carbon monoxide, carbon dioxide, nitrogen oxides

The substances/groups of substances mentioned can be released in case of fire. Aerosol container contains flammable gas under pressure.

Protective equipment for fire-fighting/fire fighters:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

Evacuate area of all unnecessary personnel. Contain contaminated water/firefighting water. Do not allow to enter drains or waterways.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Take appropriate protective measures. Clear area. Shut off source of leak only under safe conditions. Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

Environmental precautions:

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up:

Dike spillage. Pick up with suitable absorbent material. Place into suitable containers for reuse or disposal in a licensed facility. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

7. Handling and Storage

Precautions for safe handling:

RECOMMENDATIONS ARE FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS. PESTICIDE APPLICATORS & WORKERS must refer to the Product Label and Directions for Use attached to the product for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard 40 CFR part 170. Ensure adequate ventilation. Provide good ventilation of working area (local exhaust ventilation if necessary). Keep away from sources of ignition - No smoking. Keep container tightly sealed. Protect contents from the effects of light. Protect against heat. Protect from air. Handle and open container with care. Do not open until ready to use. Once container is opened, content should be used as soon as possible. Provide means for controlling leaks and spills. Do not return residues to the storage containers. Follow label warnings even after container is emptied. The substance/ product may be handled only by appropriately trained personnel. Avoid all direct contact with the substance/product. Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts/mists/vapors. Wear suitable personal protective clothing and equipment.

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Protection against fire and explosion:

The relevant fire protection measures should be noted. Fire extinguishers should be kept handy. Avoid all sources of ignition: heat, sparks, and open flame. Sources of ignition should be kept well clear. Avoid extreme heat. Keep away from oxidizable substances. Electrical equipment should conform to national electric code. Ground all transfer equipment properly to prevent electrostatic discharge. Electrostatic discharge may cause ignition.

Conditions for safe storage, including any incompatibilities:

Segregate from foods and animal feeds.

Further information on storage conditions:

Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect containers from physical damage. Protect against contamination. The authority permits and storage regulations must be observed.

Protect from temperatures above: 40 °C

Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

8. Exposure Controls/Personal Protection

Users of a pesticidal product should refer to the product label for personal protective equipment requirements.

Advice on system design:

Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

Personal protective equipment

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) organic vapor/particulate respirator. For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use NIOSH-certified full face piece pressure demand self-contained breathing apparatus (SCBA) or a full face piece pressure demand supplied-air respirator (SAR) with escape provisions.

Hand protection:

Chemical resistant protective gloves, Protective glove selection must be based on the user's assessment of the workplace hazards.

Eye protection:

Safety glasses with side-shields. Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:

Wear long sleeved work shirt and long work pants in addition to other stated personal protective equipment. Work place should be equipped with a shower and an eye wash. Handle in accordance with good industrial hygiene and safety practice. Personal protective equipment should be decontaminated prior to reuse. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks). Take off immediately all contaminated clothing. Store work clothing separately. Hands and/or face should be washed before breaks and at the end of the shift. No eating, drinking, smoking or tobacco use at the place of work. Keep away from food, drink and

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animal feeding stuffs.

9. Physical and Chemical Properties

Form: aerosol Odor: odorless

Odor threshold:

Color: off-white pH value: approx. 5 - 7

Melting point:

approx. -43 - 13 Boiling point:

°C

of the individual components.

(24 °C)

not applicable

no flashback

Flash point: approx. -104 °C

Flammability of Aerosol 0 in

Products:

NFPA 30B flammability:

Level 1 Aerosol

As a result of our experience with this Lower explosion limit:

product and our knowledge of its composition we do not expect any hazard

not applicable, odor not perceivable

The statements are based on the properties

as long as the product is used

The statements are based on the properties of the individual components.

appropriately and in accordance with the

intended use.

Upper explosion limit: As a result of our experience with this product

and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the

intended use.

Auto ignition: approx. 287 °C The product has not been tested. The

> statement has been derived from the properties of the individual components.

Vapor pressure: approx. 70 PSI (21.4 °C) Information applies to the

> solvent. (20°C)

Density: approx. 1 g/cm3

> 8.35 lb/USg (20°C)

not applicable not applicable

Partitioning coefficient n-

Vapor density:

octanol/water (log Pow):

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Thermal decomposition: No decomposition if stored and handled as

prescribed/indicated.

Carbon monoxide, carbon dioxide, nitrogen oxide,

nitrogen dioxide, Hydrocarbons

Stable at ambient temperature. If product is heated above decomposition temperature, toxic vapors will be released.

Viscosity, dynamic: 27.83 cps (24.9 °C)

Solubility in water: dispersible Evaporation rate: dispersible not applicable

Other Information: If necessary, information on other physical and chemical

parameters is indicated in this section.

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Oxidizing properties:

Not fire-propagating

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

The product is chemically stable.

Hazardous polymerization will not occur. No hazardous reactions if stored and handled as prescribed/indicated.

Conditions to avoid

Avoid all sources of ignition: heat, sparks, and open flame. Avoid prolonged storage. Avoid electrostatic discharge. Avoid contamination. Avoid prolonged exposure to extreme heat. Avoid extreme temperatures.

Incompatible materials

Strong acids, strong bases, strong oxidizing agents

Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

Possible thermal decomposition products:

Carbon monoxide, carbon dioxide, nitrogen oxide, nitrogen dioxide, Hydrocarbons

Stable at ambient temperature. If product is heated above decomposition temperature, toxic vapors will be released.

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

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Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.

<u>Oral</u>

Type of value: LD50 Species: rat (female) Value: > 5,000 mg/kg

Inhalation

Type of value: LC50 Species: rat (male/female) Value: > 5.09 mg/l Exposure time: 4 h An aerosol was tested.

Dermal

Type of value: LD50 Species: rat (male/female) Value: > 5,000 mg/kg

<u>Irritation / corrosion</u>

Assessment of irritating effects: Not irritating to the skin. Not irritating to the eyes.

<u>Skin</u>

Species: rabbit Result: non-irritant

<u>Eye</u>

Species: rabbit Result: non-irritant

Sensitization

Assessment of sensitization: There is no evidence of a skin-sensitizing potential.

Buehler test

Species: guinea pig

Result: Skin sensitizing effects were not observed in animal studies.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Fipronil

Assessment of repeated dose toxicity: Causes mortality and signs of neurotoxicity through prolonged or repeated exposure.

Genetic toxicity

Assessment of mutagenicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Fipronil

Assessment of mutagenicity: Results from a number of mutagenicity studies with microorganisms, mammalian cell culture and mammals are available. Taking into account all of the information, there is no indication that the substance is mutagenic.

Carcinogenicity

Assessment of carcinogenicity: The product has not been tested. The statement has been derived from the properties of the individual components.

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Information on: Fipronil

Assessment of carcinogenicity: In long-term studies in rats the substance induced thyroid tumors. The effect is caused by an animal specific mechanism that has no human counterpart. In long-term studies in mice in which the substance was given by feed, a carcinogenic effect was not observed.

Reproductive toxicity

Assessment of reproduction toxicity: The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

Teratogenicity

Assessment of teratogenicity: The product has not been tested. The statement has been derived from the properties of the individual components. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

Other Information

Misuse can be harmful to health.

Symptoms of Exposure

No significant reaction of the human body to the product known.

12. Ecological Information

Toxicity

Toxicity to fish

Information on: Fipronil LC50 (96 h) 0.0852 mg/l, Lepomis macrochirus

Aquatic invertebrates

Information on: Fipronil EC50 (48 h) 0.19 mg/l, Daphnia magna LC50 (96 h) 0.00014 mg/l, Mysidopsis bahia

Aquatic plants

Information on: Fipronil

EC50 (96 h) 0.068 mg/l (biomass), Scenedesmus subspicatus

Persistence and degradability

Assessment biodegradation and elimination (H2O)

Information on: Fipronil

Not readily biodegradable (by OECD criteria).

Bio accumulative potential

Bioaccumulation potential

Information on: Fipronil

Bio concentration factor: 321, Lepomis macrochirus Accumulation in organisms is not to be expected.

Mobility in soil

Assessment transport between environmental compartments

The product has not been tested. The statement has been derived from the properties of the

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individual components.

Information on: Fipronil

Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

13. Disposal considerations

Waste disposal of substance:

Pesticide wastes are regulated. Improper disposal of excess pesticide, spray mix or rinsate is a violation of federal law. If pesticide wastes cannot be disposed of according to label instructions, contact the State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container disposal:

Do not cut, puncture, crush, or incinerate empty aerosol containers. Consult state or local disposal authorities for approved alternative procedures such as container recycling. Empty aerosol cans may meet the definition of RCRA D003. Consult local and/or regional EPA for further guidance.

RCRA:

This product is not regulated by RCRA.

14. Transport Information

Land transport

USDOT

Hazard class: 2.1
ID number: UN 1950
Hazard label: 2.1. EHSM

Proper shipping name: AEROSOLS (contains FIPRONIL, HYDROCARBON

PROPELLENT)

Sea transport

IMDG

Hazard class: 2.1
ID number: UN 1950
Hazard label: 2.1, EHSM

Marine pollutant: YES

Proper shipping name: AEROSOLS (contains FIPRONIL, HYDROCARBON

PROPELLENT)

Air transport

IATA/ICAO

Hazard class: 2.1

ID number: UN 1950

Hazard label: 2.1

Proper shipping name: AEROSOLS, FLAMMABLE (contains FIPRONIL, HYDROCARBON

PROPELLENT)

Further information

DOT: This product may be classified as ORM-D (Consumer Commodity) or Limited Quantity. After 12/31/2020, ORM-D will not apply.

15. Regulatory Information

Federal Regulations

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Registration status:

Crop Protection TSCA, US released / exempt

Chemical TSCA, US blocked / not listed

EPCRA 311/312 (Hazard categories): Not hazardous

State regulations

CA Prop. 65:

WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

Labeling requirements under FIFRA:

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 workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

CAUTION:

KEEP OUT OF REACH OF CHILDREN.

HARMFUL IF INHALED.

HARMFUL IF SWALLOWED.

May cause moderate but temporary irritation to the eyes.

Avoid contact with the skin, eyes and clothing.

Avoid inhalation of mists/vapors.

Flammable Liquid Aerosol container contains flammable gas under pressure.

16. Other Information

IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK. END OF DATA SHEET.