



SAFETY DATA SHEET

FUSE

SECTION 1: IDENTIFICATION

Product Name: FUSE
EPA Registration No.: 53883-328
Recommended Use: Termiticide/Insecticide; See product label for a complete list of uses and use sites.
Restrictions on Use: See product label for any restrictions on the use of this product.
Chemical Family: N/A – Multiple actives
Chemical Name of Active Ingredient(s): Imidacloprid: 1.1-((6-chloro-3-pyridinyl)methyl)-N-nitro-2-imidazolidinimine
 Fipronil: 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-(trifluoromethylsulfinyl)pyrazole-3-carbonitrile
Manufactured for: Control Solutions, Inc.
 5903 Genoa-Red Bluff
 Pasadena, TX 77507

FOR FIRE, SPILL, AND/OR LEAK EMERGENCIES CONTACT: CHEMTREC 1-800-424-9300
FOR MEDICAL EMERGENCIES AND HEALTH AND SAFETY INQUIRIES CONTACT: Safety Call 1-866-897-8050

SECTION 2: HAZARD(S) IDENTIFICATION

EMERGENCY OVERVIEW: White opaque liquid with no odor. Not anticipated to cause immediate acute effects upon short-term exposure.

OSHA HCS CLASSIFICATION (29 CFR 1910.1200)

Acute Inhalation Toxicity	Category 4
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Signal Word: WARNING



Hazard Statement(s): Harmful if inhaled.

Precautionary Statement(s):

- Prevention:** Avoid breathing mist/vapors/spray. Use only outdoors or in a well ventilated area.
- Response:** **IF INHALED:** Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.
- Storage:** No statement required. See section 7 for storage information.
- Disposal:** No statement required. See section 13 for disposal information.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight %
Imidacloprid	138261-41-3	21.4%
Fipronil	120068-37-3	6.6%
Propylene glycol	57-55-6	<10.0%

*Ingredients not listed or listed with a weight % range are considered a trade secret and are withheld under 29 CFR 1910.1200(i).

SECTION 4: FIRST AID MEASURES	
IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15 to 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.
IF ON SKIN:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.
IF INHALED:	Move person to fresh air. If person is not breathing, call 911 or an ambulance; then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
IF INGESTED:	Call a poison control center or doctor immediately for treatment advice. Have 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: 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.

Most important symptoms/effects, acute and delayed: None known

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Foam, dry chemical, carbon dioxide or water spray

Unsuitable Extinguishing Media: Water jet

Hazardous Combustion Products: Thermal decomposition may produce toxic oxides of carbon, nitrogen, phosphorous and potassium. Hydrogen chloride and hydrogen cyanide may also be released.

Special Protective Equipment & Precautions: Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Foam and/or dry chemical are preferred to minimize environmental contamination. If water is used, dike and collect water to prevent run-off. Wear self-contained breathing apparatus and full fire-fighting turn-out gear (Bunker gear).

Unusual Fire & Explosion Hazards: None known

SECTION 6: ACCIDENTAL RELEASE MEASURES
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Personal Precautions: See Section 8 for personal protection equipment.

Environmental Precautions: Keep spilled material and any rinsate from contaminating soil or from entering sewage and drainage systems and bodies of water.

Methods for Containment: Isolate the spill area. Keep unnecessary and unprotected personnel from entering. Absorb small spills with sand, vermiculite or other inert absorbent. Dike large spills using absorbent or impervious material such as clay or sand. Recover and contain as much free liquid as possible for reuse. Allow absorbed material to solidify and scrape up for disposal.

Methods for Clean-up: Place contaminated material in appropriate container for disposal. After removal, flush contaminated area thoroughly with water. Pick up wash liquid

with additional absorbent and place in a disposable container. Do not put spilled material back in the original container.

Other Information: None known

SECTION 7: HANDLING AND STORAGE

Handling: RECOMMENDATIONS ARE INTENDED FOR MANUFACTURING, PACKAGING AND COMMERCIAL BLENDING WORKERS. PESTICIDE APPLICATORS AND 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. Handle and open container in a manner as to prevent spillage. Do not eat, drink or smoke while handling this product. Immediately wash off accidental splashes of the concentrate or spray mixture from skin, clothing and out of eyes.

Storage: See pesticide label for full information on product storage. Do not contaminate water, food or feed by storage of this product. Store away from sources of heat, out of direct sunlight and away from incompatible materials. Pesticides should be stored in secured areas away from children and animals.

Storage Temperature (Min/Max): Not determined

Product Incompatibilities: None known

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Users of a pesticide product must refer to the product label for personal protective equipment requirements.

Exposure Guidelines:

COMPONENT	OSHA PEL	ACGIH TLV	NIOSH REL
No components listed			

Engineering Controls: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs or other specified exposure limits. Local exhaust ventilation is preferred.

Respiratory Protection: In areas of poor ventilation, use a NIOSH approved respirator with cartridges/canisters approved for pesticides.

Eye Protection: Chemical goggles or safety glasses and full-face shield.

Protective Gloves: Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile, neoprene rubber, polyvinyl chloride (PVC) or Viton.

Other Protective Clothing: Long-sleeved shirt, long pants and chemical resistant footwear plus socks.

General Safety Measures: Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately after handling this product. Wash outside of gloves before removing. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. 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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White opaque liquid	Upper/Lower Flammability Limits:	Not determined
Odor:	None	Vapor Pressure:	Not determined
Odor Threshold:	Not determined	Vapor Density:	Not determined
pH (1% dispersion):	6.25 @ 25°C	Relative Density (@24°C):	1.134 (typical)
Melting /Freezing Point:	Not determined	Solubility:	Not determined
Boiling Point/Range:	Not determined	Partition Coefficient:	Not determined
Flash Point:	Not applicable	Auto-ignition Temperature:	Not determined
Evaporation Rate:	Not determined	Decomposition Temperature:	Not determined
Flammability:	Not applicable	Viscosity:	140.22 cSt @ 20°C

SECTION 10: STABILITY AND REACTIVITY

Reactivity:	No hazardous chemical reactions known.
Chemical Stability:	Stable under normal storage and handling conditions.
Possibility of Hazardous Reactions:	No potential for hazardous reactions known.
Conditions to Avoid:	Excessive heat
Incompatible Materials:	None known
Hazardous Decomposition Products:	Thermal decomposition may produce toxic oxides of carbon, nitrogen, phosphorous and potassium. Hydrogen chloride and hydrogen cyanide may also be released.

SECTION 11: TOXICOLOGICAL INFORMATION

Likely Routes of Exposure:	Eye contact, Skin contact, Inhalation, Ingestion
Symptoms of Exposure:	
Oral LD₅₀:	2,772 mg/kg (rat)
Dermal LD₅₀:	>5,050 mg/kg (rat)
Inhalation LC₅₀:	>2.11 mg/L (4-hour)(rat)
Eye Irritation/Damage:	No positive effects at any time after treatment based upon a study in rabbits.
Skin Corrosion/Irritation:	No erythema or edema observed at any time after treatment based upon a study in rabbits.
Skin Sensitization:	Non-sensitizer
Chronic/Subchronic Toxicity:	<u>Imidacloprid Technical:</u> 2-year feeding study in rats resulted in an NOEL of 100 ppm; 1-year feeding study in dogs resulted in an NOEL of 1,250 ppm.
Mutagenicity:	<u>Imidacloprid Technical:</u> In a battery of 23 laboratory mutagenicity assays, imidacloprid tested negative for mutagenic effects in all but two of the assays. It did test positive for causing changes in chromosomes in human lymphocytes, as well as testing positive for genotoxicity in Chinese hamster ovary cells. Taken collectively, the data demonstrate that imidacloprid is not mutagenic.
Reproductive Toxicity:	<u>Imidacloprid Technical:</u> NOEL 100 ppm (8 mg/kg/day)(rat)
Neurotoxicity:	No data available
Target Organs:	<u>Imidacloprid Technical:</u> Thyroid lesions at very high doses in rats.
Aspiration Hazard:	Not anticipated to be an aspiration hazard.

Carcinogenicity:

Imidacloprid Technical: There were no carcinogenic effects in a 2-year carcinogenicity study in rats fed up to 1,800 ppm imidacloprid.

Fipronil Technical: The EPA has classified fipronil as a Group C – Possible Human Carcinogen based upon laboratory animal studies (increased thyroid tumors in male and female rats). Humans and rats have the same mechanism of action which produced fipronil-induced thyroid tumors in the rat; however, the rat appears to be more highly sensitive than humans. Therefore, the fipronil-induced rat thyroid tumors are not considered suggestive of a human health risk.

Chemical Name	ACGIH	IARC	NTP	OSHA
No components listed				

SECTION 12: ECOLOGICAL INFORMATION

Environmental Hazards Statement from FIFRA Regulated Pesticide Label:

This product is toxic to birds and fish and highly toxic to 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. Do not contaminated water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops/plants or weeds. Do not apply this product or allow it to drift to blooming crops/plants or weeds if bees are foraging in the treatment area.

This chemical demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

ECOTOXICITY DATA:

Data presented below is on the fipronil technical product.

Fish Toxicity:

Zebra fish: 96-hour LC₅₀ = 0.071 mg/L

Aquatic Invertebrate Toxicity:

Daphnia magna: 96-hour EC₅₀ <0.1 mg/L

Aquatic Plant Toxicity:

P. subcapitata: EC₅₀ = 3.0 mg/L

Avian Toxicity:

Japanese quail: LD₅₀ = 148.5 mg/kg

Honeybee Toxicity:

Oral LD₅₀ = 0.003 µg/bee

ENVIRONMENTAL EFFECTS:

Persistence and Degradability: No data available

Bioaccumulation: No data available

Mobility: No data available

Other Adverse Effects: No data available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal: Refer to the pesticide label for full information on disposal. Pesticide wastes are toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal law. If these wastes cannot be used 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 in proper disposal methods.

Container Disposal: Refer to the pesticide label for full information on disposal. When possible, triple rinse the container and offer for recycling if available.

RCRA Characteristics: It is the responsibility of the individual disposing of this product to determine the RCRA classification and hazard status of the waste.

SECTION 14: TRANSPORTATION INFORMATION

DOT (Ground): Not regulated

IMDG (Sea): UN3082, Environmentally hazardous substance, liquid, n.o.s. (Fipronil), 9, PGIII

IATA (Air): UN3082, Environmentally hazardous substance, liquid, n.o.s. (Fipronil), 9, PGIII

SECTION 15: REGULATORY INFORMATION

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

CAUTION

Harmful if swallowed, absorbed through skin or inhaled. Do not get in eyes, on skin or on clothing. Do not breathe spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

TSCA Inventory: This product is exempt from TSCA inventory listing requirements as it is solely for FIFRA regulated use.

SARA Title III Information:

Section 302 – Extremely hazardous substances: None

Section 311/312 – Hazard Categories: Acute (Immediate)

Section 313 – This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS Number	Weight %	SARA 313 – Threshold Values (lbs)
None listed			

CERCLA – This product contains the following chemicals which have a reportable quantity (RQ) under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Chemical Name	CAS Number	RQ	Quantity of Finished Product
None listed			

CALIFORNIA PROPOSITION 65:

Chemical Name	CAS Number	Prop 65 Category(ies)
None listed		

U.S. STATE RIGHT-TO-KNOW REGULATIONS:

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Propylene glycol	X		X

SECTION 16: OTHER INFORMATION

NFPA	Health Hazards 2	Flammability 1	Instability 0	Special Hazards – None
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Revision Date: October 14, 2015
Document Superseded: December 20, 2013
Revision Note: Update to SDS format