

FARM-AG INTERNATIONAL (Pty) Ltd

P.O. Box 1523, Durban 4000

Head Office : 61 Marshall Dr., Old Mill Industrial Park, Mount Edgecombe **South Africa**

Registration Number: 2005/011761/07

Tel + 27 31 003 3486 • Fax + 27 31 502 5825

1. PRODUCT & COMPANY IDENTIFICATION

Substance: Fipronil
Product Name: FarmAg Fipronil 200
Creation Date: January 2015
Revision Date: March 2021

Recommended Use: For the control of various insect pests in bananas, brassicas, cotton, wine grapevines, mushrooms, pasture, potatoes, sorghum and sugarcane as specified in the Directions for Use table on the label.

Other Information: This MSDS describes, to the best of our knowledge, the properties of the concentrated product. The physical properties and some of the assessments do not apply to the properties of the product once it has been diluted for application. Acute health effects of the diluted products are likely to be much less severe.

24 Hr Emergency Number: 082 771 2712

In case of poisoning:

Poison Information Centre: 082 446 8946
 Tygerberg Hospital: (021) 931 6129
 Poison Emergency Enquiries (021) 689 5227

In case of Spillage:

HAZMAT: 0800 147 112

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Liquid

Characterization:**Ingredients:**

Name	CAS	Proportion
Fipronil	120068-37-3	200 g/L
Vegetable Oil	-----	30-60 %
Water	-----	10-30%
Dispersants	N/A	0-10 %

3. HAZARD IDENTIFICATION

Hazard: Hazardous substance

Classification: Non-dangerous goods.

Hazard classification according to the criteria of NOHSC. Dangerous goods classification according to the Australia Dangerous Goods Code.

Risk phrase(s): R22 Harmful if swallowed

R23 Toxic by inhalation.

R48/ 25 Toxic: danger of serious damage to health by prolonged exposure if swallowed.

Safety S1/ 2 Keep locked up and out of reach of children.

Phrases(s): S13 Keep away from food, drink and animal feeding stuffs.

S36 Wear suitable protective clothing.

S45 In case of accident or if you feel unwell seek medical advice immediately.

S63 In case of accident by inhalation, remove casualty to fresh air and keep at rest.

Other information: Poisons Schedule S6

4. FIRST AID MEASURES AND PRECAUTIONS

Inhalation: Remove affected person to fresh air until recovered. If symptoms develop or persist, seek medical advice.

Ingestion: If swallowed, do NOT induce vomiting; seek medical advice immediately and show this container or label or contact the Poisons Information Centre. Make every effort to prevent vomit from entering the lungs by careful placement of the patient. The above first aid instructions are mandated by the Commonwealth Department of Health and Ageing via the National Drugs and Poison Schedule. These instructions are suitable for ingestion of spray solution and small amounts of swallowed (more than about 15ml or one tablespoon) AND if medical assistance is more than 30 minutes away, the induction of vomiting should be CONERED, preferably based on

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MEDICAL ADVICE if a physician can be contacted by phone. All care must be taken to prevent vomit from being inhaled. Do not give anything by mouth to a semi-conscious or unconscious person.

Skin: If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water.

Eye: If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes.

Advice for Doctor: Seek medical advice immediately. Fipronil is a reversible gamma-amino butyric (GABA) receptor inhibitor. During intoxication it will induce neurological stimulation with possible convulsions. Treat symptoms. No specific antidote known. Phenobarbital, and to a lesser extent, benzodiazepines, have been shown experimentally to be effective in preventing convulsions induced by Fipronil. Due to slow absorption of Fipronil through the gut, symptoms of intoxication may be delayed several hours to one day. Absorption may be decreased by the use of gastric lavage, saline purgative and activated charcoal (possible enter hepatic recirculation). Continue monitoring – due to slow elimination of the compound.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media If involved in a fire, the product will not burn. Choose extinguishing media to suit the burning material.

Hazards from Combustion Products: If involved in a fire, the dehydrated components may emit oxides of carbon, nitrogen and Sulphur and compounds of chlorine and fluorine.

Special Protective Equipment for fire fighters: Breathable air apparatus should be worn when fighting a fire in which the product is involved.

Specific Hazards: Considered low risk due to water content, however upon evaporation of water the product is combustible.

Other Information: STOP FIRE WATER FROM ENTERING DRAINS OR WATE BODIES.

6. ACCIDENTAL RELEASE MEASURES (SPILLAGE)**Spills and disposal**

Contain spill and absorb with clay, sand, soil or proprietary absorbent (such as vermiculite). Collect spilled material and waste in sealable open-top type containers for disposal.

7. HANDLING AND STORAGE REQUIREMENTS

Conditions for Safe Storage Store in the closed, original container in a cool, well ventilated area. Do not store for prolonged periods in direct sunlight.

Other information Always read the label and any attached leaflet before use.

8. EXPOSURE CONTROL/PERSONAL PROTECTION**National Exposure Standards**

No exposure standards have been set for this product or the active ingredients. Engineering Controls Use in a well ventilated area.

Personal Protective Equipment:

When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and face shield or goggles.

Re-entry period

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Do not enter treated area until spray has dried.

Hygiene Measures

After use and before eating, drinking or smoking, wash hands, face and arms thoroughly with soap and water. After each day's use, wash contaminated clothing and safety equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Liquid
Appearance	Viscous cream to yellow suspension
Odour	Slight vegetable oil odour
Solubility in Water	Very poor
Specific Gravity	1.05-1.07
pH Value	7 – 9 (1% in water)
Vapour Pressure	3.7×10^{-4} mPa @ 25°C
Flammability	Not flammable
Auto-Ignition Temperature	410°C

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions
Hazardous Reactions	Keep away from strong oxidizing agents
Hazardous Polymerization	Hazardous polymerization is not possible

11. TOXICOLOGICAL INFORMATION**Inhalation**

Breathing in high concentrations of aerosols of this material may cause headache, nausea, dizziness and weakness.

Ingestion

Possible symptoms of exposure include: headache, nausea, dizziness and weakness. Ingestion of large quantities of the concentrate may result in convulsions.

Skin

Not a skin irritant or sensitizer and not harmful by dermal exposure.

Eye

No eye irritation.

Reproductive Toxicity

Data indicates no reproductive effects

Mutagenicity

Data indicates no reproductive effects

Carcinogenicity

Data indicated no carcinogenic effects.

Acute Toxicity – Oral – LD₅₀ (rat) 203.40 mg/kg for the formulated product

Acute Toxicity – Dermal – LD₅₀ (rabbit) >2000 mg/kg for the formulated product.

Acute Toxicity – Inhalation – LC₅₀ (rat) (4hr) >1.71 mg/l for the formulated product

Eye Irritation – The product is not eye irritant

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Skin Irritation – Not a skin irritant**Skin Sensitization** – Product is not a skin sensitizer**Other Information**

The Acceptable Daily Intake (ADI) for Fipronil for a human is 0.0002 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 0.02 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (ref: Comm. Dept of Health and Ageing, 'ADI List', TGA, September 2006.

12. ECOLOGICAL INFORMATION

Known Harmful Effects on the Environment	The product is a marine pollutant for sea transport.
Other precautions	Do not contaminate dams, waterways or sewers with this product or the containers which have held this product. Do not spray on vegetation where honeybees are foraging.
Environ. Protection	Spray drift can cause damage, read the label for more information.
ECOTOXICOLOGY	
Acute Toxicity – Fish	The following is data for the active ingredient, Fipronil. LC ₅₀ (96h) for bluegill sunfish is 0.085 mg/l. LC ₅₀ (96h) for rainbow trout is 0.248 mg/l. LC ₅₀ (96 hr) for European carp is 0.430 mg/l.
Acute Toxicity Daphnia	LC ₅₀ (48 hr) for daphnia is 0.19 mg/l for Fipronil.
Acute Toxicity – Algae	EC ₅₀ for (72 hr) Scenedesmus sub spicatus is 0.068 mg/l.
Acute Toxicity – Other Organisms	The following data is for the active ingredient, Fipronil. LD ₅₀ for mallard duck is 5000 mg/kg. LD ₅₀ for bobwhite quail is 48 mg/kg. Highly toxic to bees both by direct contact and by ingestion.

13. DISPOSAL CONSIDERATION

Product Disposal	On site disposal of the concentrated product is not acceptable. Ideally, the product should be used for its intended purpose. If there is need to dispose of the product, approach local authorities who hold periodic collections of unwanted chemicals.
Container Disposal	Do not use this container for any other purpose. Triple rinse containers; add rinsate to the spray tank, then offer the container for recycling/reconditioning, or puncture top, sides and bottom and dispose of in landfill in accordance with local regulations. Drum MUSTER is the national program for the collection and recycling of empty, cleaned, non returnable crop production and on-farm animal health chemical containers. If the label on your container carried the drum muster symbol, triple rinse the container for collection in the program. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and products should not be burnt.

14. TRANSPORT INFORMATION

Storage and Transport	Considered non dangerous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail.
UN Number (Sea Transport)	3082
IMO Class/Packing Group	Class 9

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Tel + 27 31 003 3486 • Fax + 27 31 502 5825**IMO Marine
Pollutant**

Marine Pollutant

**IMO Proper
Shipping Name**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (contains Fipronil)

15. REGULATORY INFORMATION**Poisons Schedule**

S6

**Packaging &
Labeling**POISON KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE
OPENING OR USING**Hazard Category**

Toxic All of the components in this product are listed.

16. OTHER INFORMATION

The information of this MSDS represents the present data and reflects. Precisely, our best knowledge for the appropriate handling of this product according to the specific application in the label and/or literature. Any other use of the product that is not recommended is a responsibility of the user.