

MATERIAL SAFETY DATA SHEET

Maxforce® Gold Gel Insecticide

Date of Issue: September 18th, 2006

1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND SUPPLIER

Product name: Maxforce® Gold Gel Insecticide
Other names: None
Product code: 4309757 (35 g)
Chemical group: Nitrile
Recommended use: For use in the control of cockroaches in domestic and commercial situations.
Formulation: Gel
Supplier: Bayer Environmental Science – A Business Group of Bayer CropScience Pty Ltd
ABN 87 000 226 022
Address: 391 - 393 Tooronga Road, East Hawthorn
Victoria 3123, Australia
Telephone: (03) 9248 6888
Facsimile: (03) 9248 6800
Website: www.bayercropscience.com.au
Contact: Technical Manager (03) 9248 6854
Emergency Telephone Number: 1800 033 111 – Orica SH&E Shared Services

2. HAZARDS IDENTIFICATION

NON-HAZARDOUS SUBSTANCE - NON-DANGEROUS GOOD

May irritate eyes and skin. Not flammable.

Hazard designation: Non-hazardous (National Occupational Health and Safety Commission - NOHSC)
Risk phrases: Not applicable
Safety phrases: See sections 4, 5, 6, 7, 8, 9, 13
ADG classification: This product is not classified as a Dangerous Good under the Australian Code for the Transport of Dangerous Goods by Road and Rail.
SUSDP classification: Exempt

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients:	CAS Number:	Concentration (g/kg):
Fipronil	[120068-37-3]	0.3
1,2 - Benzisothiazalin	[2634-33 5]	2.5 approx
2-(2-Butoxyethoxy)ethanol	[112-34-5]	5.0
Other ingredients	(non hazardous)	992.2

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4. FIRST AID MEASURES

If poisoning occurs, immediately contact a doctor or Poisons Information Centre (telephone 13 11 26), and follow the advice given. Show this Material Safety Data Sheet to a doctor.

- Inhalation:** Due to the nature of this product inhalation is unlikely.
- Skin contact:** If product gets on skin wash affected areas with plenty of soap and water. Seek medical advice if irritation occurs.
- Eye contact:** Immediately irrigate with copious quantities of water for at least 15 minutes. Seek medical assistance.
- Ingestion:** If swallowed immediately contact a doctor or Poisons Information Centre (telephone: 13 11 26) and follow the advice given. Keep under medical supervision.
- First Aid Facilities:** Ensure washing facilities are available.
- Symptoms:** Signs and symptoms observed in the few cases of human poisoning in literature include nausea, vomiting, profuse sweating, drowsiness, agitation, coma, and seizures (severe cases). From animal experiments, hyperactivity, irritability and tremors can be expected.
- Medical attention:** Treatment
Elementary aid, decontamination and symptomatic treatment.

Notes to physician

Fipronil is an insecticide inhibiting GABA_A-gated chloride channels. A high affinity for insect compared to mammalian (also human) GABA receptors results in lower animal toxicity than other insecticides inhibiting the same mechanism.

Gastric lavage should be performed in cases of significant ingestions, followed by administration of activated charcoal and sodium sulfate. Fipronil has a significant enterohepatic circulation. Thus the repeated oral application of activated charcoal (e.g. 50 – 100 g, 6 times in 24 hours or by drip via gastral tube) should be considered, though clinical experience does not seem to clearly prove a beneficial effect. Additionally, cholestyramine 12-16 g/day distributed to 4-6 doses may be given to assist elimination in severe cases. As there is no antidote for fipronil the treatment has to be supportive and symptomatic.

In severe poisoning cases tonic-clonic seizures have been observed. Diazepam at 10-15 mg IV terminated these fits. Thus seizure management should follow standard practice using benzodiazepines (with oxygen and airway protection), if insufficiently effective followed by Phenobarbital infusion as required for status epilepticus. A suggested regimen would be 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 the anti-convulsive drug based on the patient's clinical response. This is necessary due to the

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4. FIRST AID MEASURES CONTINUED

slow elimination of fipronil. Patients who have had seizures need to be monitored until anti-convulsive treatment can be completely stopped.

Note:

Onset of symptoms may be delayed due to slow absorption of the compound. Thus, in the event of a large amount (more than one mouthful) being ingested, the patient must be hospitalised for at least 48 hours for observation and treatment.

5. FIRE FIGHTING MEASURES

Extinguishing media: Extinguish fire using: Carbon dioxide, Dry agent, Water spray, Foam

Hazards from combustion products: In the event of fire, carbon monoxide (CO), carbon dioxide (CO₂), nitrogen oxides (NO_x), sulphur oxides, hydrogen chloride (HCl) and hydrogen fluoride (HF) may be released.

Precautions for fire fighters: Fire fighters should wear full protective gear, including self-contained breathing apparatus (AS/NZS 1715/1716). Keep unnecessary people away and move all other personnel to windward side of fire. Bund area with sand or earth to prevent contamination of drains or waterways. Dispose of fire control water or other extinguishing agent and spillage safely later.

6. ACCIDENTAL RELEASE MEASURES

Dealing with spills and disposals may result in the potential for increased personal exposure. Protective clothing and equipment as described in the PERSONAL PROTECTION section should be worn. Avoid contact with spilled material or contaminated surfaces. Keep people and animals away. Contain spill, sweep up or shovel and place in properly labelled sealed drums for safe disposal. Deal with all spillages immediately. If contamination of drains, streams, watercourses etc. is unavoidable, warn the local water authority.

7. HANDLING AND STORAGE

Handling: Keep out of reach of children. Avoid contact with eyes, skin and clothing. Wear long sleeved overalls and gloves while handling. After handling and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

Storage: Store in the closed original container in a cool, well ventilated, locked place out of the reach of children. Do not store in direct sunlight.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure standards: No occupational exposure standards have been established for the product or its ingredients.

Engineering controls: Control process conditions to avoid contact.

Personal Protective Equipment:

Eyes:	Not normally required. Avoid touching eyes while handling product.
Clothing:	Avoid skin contact; full-length work clothes should be worn when using this product.
Gloves:	Avoid contact with skin; wear waterproof gloves.
Respiratory:	Not required.
Other:	None

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Solid, brown with small dark specks gel.
Odour: Odourless
Vapour pressure: 2.8×10^{-9} mm Hg at 25°C (technical fipronil)
Vapour density: Not available
Boiling point: Not available
Freezing/melting point: 195.5 - 203°C (technical fipronil)
Solubility: ~2 mg/L (technical fipronil)
Density: 1.64 at 20°C (technical fipronil)
pH: 6.5 (1% suspension in water)
Flash Point: Not available – not flammable
Flammability (explosive) limits: Not determined
Auto-ignition temperature: Not available
Octanol/water partition coefficient: Not available
Formulation: Gel for use as an insecticidal bait for the control of cockroaches

10. STABILITY AND REACTIVITY

Chemical stability: Stable under normal conditions of use. No dangerous reaction known under normal conditions.
Hazardous polymerisation: None
Conditions to avoid: Extreme heat and fire
Incompatible materials: None known
Hazardous decomposition products: In the event of fire, carbon monoxide (CO), carbon dioxide (CO₂), nitrogen oxides (NO_x), sulphur oxides, hydrogen chloride (HCl) and hydrogen fluoride (HF) may be released.

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11. TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

Inhalation:	Not applicable
Skin contact:	May irritate the skin – not classified as an irritant.
Eye contact:	May irritate the eyes – not classified as an irritant.
Ingestion:	The product exhibits low toxicity by the oral route.
Other:	None

ANIMAL TOXICITY DATA – PRODUCT:

Acute:

Goliath Cockroach Gel (similar product)

Oral toxicity:	LD ₅₀ rat: >5000 mg/kg
Dermal toxicity:	LD ₅₀ rat: >5000 mg/kg
Inhalation toxicity:	LC ₅₀ (4 h) rat: 0.682 mg/L (technical fipronil)
Skin irritation:	Not available
Eye irritation:	Not available
Sensitisation:	Not available

Chronic:

In a chronic toxicity study, rats receiving the highest dose of fipronil showed an increased incidence of thyroid tumours. The rat thyroid gland is very sensitive to chemicals and functions differently from the human thyroid, and therefore, fipronil is not considered to pose an increased risk of cancer to humans. Similar studies in mice and dogs did not show an increased incidence of thyroid tumours. Fipronil is not mutagenic and not teratogenic.

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12. ECOLOGICAL INFORMATION

Harmful to aquatic life. DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

Fish toxicity: LC₅₀ (96h): 85 mg/L bluegill sunfish; 248 mg/L rainbow trout (technical fipronil)

Daphnia toxicity: LC₅₀ (48h): 0.19 mg/L daphnia (technical fipronil)

Toxicity to algae: EC₅₀ (96h): 0.068 mg/L *Scenedesmus subspicatus* (technical fipronil)

Bird toxicity: LD₅₀: >2000 mg/kg mallard duck (technical fipronil)

Bee toxicity: Highly toxic to honeybees both by direct contact and by ingestion

Other: Non-toxic to earthworms.

Environmental fate, persistence and degradation: Fipronil is readily degraded in soil.

13. DISPOSAL CONSIDERATIONS

Dispose of empty container by wrapping in paper, placing in plastic bag and putting in the garbage. DO NOT burn empty containers or product.

14. TRANSPORT INFORMATION

UN number: Not applicable

Proper shipping name:

Not applicable

Class and

Subsidiary Risk:

This product is not classified as a Dangerous Good under the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Packing Group:

Not applicable

EPG:

Not applicable

Hazchem code:

Not applicable

Marine pollutant:

No

15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Act 1988

Australian Pesticides and Veterinary Authority Approval Number: 55553

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16. OTHER INFORMATION

Trademark

information: Maxforce® is a Registered Trademark of Bayer

Preparation

information: Replaces October 15, 2002 edition.
Reason for update: Formulation composition, First aid measures, Firefighting measures, Ecological information.

Data sources: Bayer CropScience Pty Ltd product safety data and published data

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

END OF MSDS