

MATERIAL SAFETY DATA SHEET



Date of Issue: March 23, 2004

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name **Confidor® 200 SC Insecticide**

Other names None

Product codes 4952897 (1 L), 4952900 (10 L)

Chemical group Chloronicotinyl

Recommended use Agricultural insecticide

Formulation Suspension concentrate

Supplier Bayer CropScience Pty Ltd ABN 87 000 226 022

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2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
HAZARDOUS SUBSTANCE (see Risk phrase below) – NON DANGEROUS GOOD
Harmful to aquatic organisms

Hazard classification Hazardous (National Occupational Health and Safety Commission - NOHSC)

Risk phrases R22 – Harmful if swallowed.

Safety phrases See Sections 4, 5, 6, 7, 8, 10, 12, 13

ADG classification Not classified as a "Dangerous good" for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail:

SUSDP classification Schedule 5 (Standard for the Uniform Scheduling of Drugs and Poisons)

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS Number	Concentration (g/L)
Imidacloprid	[138261-41-3]	200
Glycerin	[56-81-5]	115
Other ingredients, including emulsifiers, stabilizers, antifungal agents and water	(non-hazardous)	785

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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 the doctor.

Inhalation	If inhaled, remove to fresh air and keep warm and at rest. Seek medical advice if at all worried.
Skin contact	Carefully remove contaminated clothing. Wash affected areas with soap and water. Seek medical advice if at all worried.
Eye contact	Rinse eyes immediately with clean water for at least 15 minutes. Obtain medical advice.
Ingestion	Obtain immediate medical advice as above. Do not induce vomiting unless advised to do so by doctor or Poisons Information Centre. Do not give anything by mouth to an unconscious or semi conscious person.
First Aid Facilities	Provide washing facilities in the workplace.
Medical attention	<p><u>Information for the physician:</u> The active ingredient, imidacloprid belongs to the chemical group, chloronicotinyl or neonicotinoid. Therapeutic measures: Basic aid, decontamination, symptomatic treatment.</p> <p><u>Symptoms</u> <i>Local:</i> None expected. <i>Systemic:</i> Apathetic state, depressed muscular tone, respiratory disturbances and trembling. Muscular cramps are also possible in severe cases of poisoning.</p> <p><u>Treatment</u> <i>Local:</i> See First Aid Measures above. <i>Systemic:</i> Symptomatic (nicotine-like effects). Check blood pressure and pulse rate frequently, as bradycardia and hypotonia are possible. Provide supportive measures for respiratory function and cardiac action. Give artificial respiration if signs of paralysis appear. Additional therapeutic measures involve elimination of the substance from the body or acceleration of its excretion (gastric lavage, saline laxatives, activated charcoal).</p> <p><i>Antidote:</i> None known.</p> <p><i>Contraindications:</i> Absorption promoting agents such as alcoholic beverages and milk. Oils and fats are of no particular use, as the active ingredient has low liposolubility.</p>

5. FIRE FIGHTING MEASURES

Extinguishing media	Water, foam, extinguishing powder, carbon dioxide, sand.
Hazards from combustion products	In a fire, formation of hydrogen chloride, hydrogen cyanide, carbon monoxide and nitrogen oxides can be expected.
Precautions for fire fighters	Firefighters should wear full protective gear, including self-contained breathing apparatus (AS/NZS 1715/1716). Keep unnecessary people away. If it can be done safely, remove intact containers from the fire. Otherwise, use water spray to cool them. 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. Do not release contaminated water into the environment.

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5. FIRE FIGHTING MEASURES - continued

Hazchem code Not applicable

6. ACCIDENTAL RELEASE MEASURES

Avoid contact with the spilled material or contaminated surfaces. When dealing with spills do not eat, drink or smoke and wear protective clothing and equipment as described in Section 8 - PERSONAL PROTECTION. Keep people and animals away. Prevent spilled material from entering drains or watercourses. Contain spill and absorb with earth, sand, clay, or other absorbent material. Collect and store 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 and skin. Wash hands after use. After each day's use, wash gloves, goggles and contaminated clothing.

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

Flammability Not flammable – water based product.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure standards The NOHSC exposure standard (TWA) for glycerin mist is: 10 mg/m³
Exposure standard – Time Weighted Average (TWA) means the average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.

Biological limit values None allocated

Engineering controls Control process conditions to avoid contact. Use in a well-ventilated area only.

Personal Protective Equipment

Eyes:	Wear goggles.
Clothing:	Wear cotton overalls buttoned to the neck and wrist and a washable hat.
Gloves:	Wear elbow-length PVC gloves.
Respiratory:	Wear a disposable mask if inhalation is likely.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White to slightly beige liquid suspension
Odour:	Slight characteristic
pH:	7.0 – 8.5
Vapour pressure:	4 x 10 ⁻⁷ mPa at 20° C (imidacloprid)
Vapour density:	Not available
Boiling point:	Not available
Freezing/melting point:	Not available
Solubility:	Miscible with water
Specific Gravity:	1.10 at 20° C

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9. PHYSICAL AND CHEMICAL PROPERTIES – continued

Flash Point:	No flash point up to 100° C
Flammability (explosive) limits:	Not applicable
Auto-ignition temperature:	Not available
Partition coefficient (octanol/water):	<i>Imidacloprid</i> : Log P _{ow} = 0.57 (21° C)

10. STABILITY AND REACTIVITY

Chemical stability	Stable under normal conditions of use.
Conditions to avoid	Avoid extreme heat.
Incompatible materials	Avoid acids, alkalis, strong oxidising agents.
Hazardous decomposition products	None under normal conditions. In a fire, formation of hydrogen chloride, hydrogen cyanide, carbon monoxide and nitrogen oxides can be expected.
Hazardous reactions	None

11. TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

Inhalation	May be harmful if inhaled.
Skin contact	May irritate skin.
Eye contact	May irritate eyes.
Ingestion	Harmful if swallowed. Symptoms of poisoning include: Apathetic state, depressed muscular tone, respiratory disturbances and trembling. Muscular cramps are also possible in severe cases of poisoning.

ANIMAL TOXICITY DATA – PRODUCT

Acute:

Oral toxicity	LD ₅₀ rat (female): approximately 1218 mg/kg LD ₅₀ rat (male): approximately 1684 mg/kg
Dermal toxicity	LD ₅₀ rat: > 4000 mg/kg
Inhalation toxicity	LC ₅₀ rat (4 hour): > 2.238 mg/L – aerosol (highest attainable concentration) (<i>similar product</i>)
Skin irritation	Not irritating (rabbit)

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11. TOXICOLOGICAL INFORMATION - continued

Mucous membrane irritation Not irritating (rabbit)

Sensitisation Non-sensitising (guinea pig)

Chronic:

Animal studies with imidacloprid showed no evidence of oncogenic effects, no evidence of carcinogenic effects and no teratogenic potential.

12. ECOLOGICAL INFORMATION

Imidacloprid is toxic to certain aquatic species. Dangerous to bees.
DO NOT contaminate streams, rivers or waterways with Confidor 200 SC Insecticide or the used containers.

Ecotoxicity

Imidacloprid:

Fish toxicity:

LC₅₀: 237 mg/L (96 h); golden orfe (*Leuciscus idus melanotis*)

LC₅₀: 211 mg/L (96 h); rainbow trout (*Oncorhynchus mykiss*)

LC₅₀: 280 mg/L (96 h); carp (*Cyprinus carpio*)

Aquatic invertebrate toxicity:

EC₅₀: 0.055 mg/L (48 h); *Hyalella azteca*

EC₅₀: 85 mg/L (48 h) *Daphnia magna*

Algae toxicity:

EC₅₀: > 100 mg/L (72 h); green alga (*Pseudokirchneriella subcapitata*)

Bacteria toxicity:

EC₅₀: > 10000 mg/L; activated sludge (OECD 209)

Bird toxicity:

Acute oral LD₅₀: 31 mg/kg; Japanese quail

Acute oral LD₅₀: 152 mg/kg; bobwhite quail

Environmental fate, persistence and degradability, mobility

Imidacloprid shows a medium adsorption to soil. Classified as immobile in soil. Not expected to leach.

13. DISPOSAL CONSIDERATIONS

Triple rinse or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt. Dispose of waste product through a reputable waste contractor.

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14. TRANSPORT INFORMATION

UN number	Not applicable
Proper shipping name	Not applicable
Class and Subsidiary Risk	Not applicable
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 Medicines Authority approval number: 50548

See also Section 2.

16. OTHER INFORMATION

Trademark information Confidor® is a Registered Trademark of Bayer.

Preparation information Replaces 01/08/02 MSDS.
Reasons for revision: Updated MSDS to 16 heading format, change from "not hazardous" to "hazardous" according to NOHSC criteria, addition of R phrase.

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