SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name	Previcur® Fungicide
Other names	none
Product code (UVP)	05933765
Chemical Group	carbamate
Recommended use	Fungicide
Chemical Formulation	Soluble concentrate (SL)
Company	Bayer Cropscience Pty Ltd –ABN 87 000 226 022 391-393 Tooronga Road, East Hawthorn Victoria 3123, Australia
Telephone	(03) 9248 6888
Technical Information Service	1800 804 479
Facsimile	(03) 9248 6800
Website	www.bayercropscience.com.au
Emergency telephone no.	1800 033 111 Orica SH&E Shared Services

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

HAZARDOUS SUBSTANCE NON-DANGEROUS GOODS

Hazardous classification	Hazardous (National Occupational Health and Safety Commission - NOHSC)
R-phrase(s)	R43 - May cause sensitisation by skin contact.
S-phrase(s)	See sections 4, 5, 6, 7, 8, 10, 12, 13.
ADG Classification	Not “dangerous goods” for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. - See Section 14.
SUSMP classification (Poison Schedule)	Schedule 5 (Standard for the Uniform Scheduling of Medicines and Poisons)

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature
Propamocarb hydrochoride 722 g/l (600g/l propamocarb)

Chemical Name	CAS-No.	Concentration [%]
Propamocarb hydrochloride	25606-41-1	66.50
Other ingredients (non-hazardous) to 100%		

SECTION 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 Safety Data Sheet to the doctor.

Inhalation
Keep patient warm and at rest. If symptoms persist, call a physician.

Skin contact
Wash off with soap and water. If symptoms persist, call a physician.

Eye contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation develops and persists.

Ingestion
Do NOT induce vomiting. Rinse mouth. Call a physician or poison control center immediately.

Notes to physician

Symptoms
The following symptoms may occur:, Lethargy, Ataxia, Spasm

Risks
This product, although being a carbamate, is NOT a cholinesterase inhibitor.

Treatment
Treat symptomatically.
Gastric lavage is not normally required. However, if a significant amount (more than a mouthful) has been ingested, administer activated charcoal and sodium sulphate.
Contraindication: atropine.

SECTION 5. FIRE FIGHTING MEASURES

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazards from combustion products
In the event of fire the following may be released:
Carbon monoxide (CO)
Hydrogen chloride (HCl)
Nitrogen oxides (NOx)

Precautions for fire-fighting
Wear self-contained breathing apparatus and protective suit.
Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat.
Avoid contact with spilled product or contaminated surfaces.
Whenever possible, contain fire-fighting water by diking area with sand or earth.
Do not allow run-off from fire fighting to enter drains or water courses.

Hazchem Code not applicable

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Avoid contact with spilled product or contaminated surfaces.
When dealing with a spillage do not eat, drink or smoke.
Keep people away from and upwind of spill/leak.

Environmental precautions

Do not allow to get into surface water, drains and ground water.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods for cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Collect and transfer the product into a properly labelled and tightly closed container.
Clean contaminated floors and objects thoroughly, observing environmental regulations.

Reference to other sections

Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.

SECTION 7. HANDLING AND STORAGE

Handling

Hygiene measures

Keep away from food, drink and animal feedingstuffs.
Remove soiled clothing immediately and clean thoroughly before using again.
Avoid contact with skin, eyes and clothing.
Wash hands immediately after work, if necessary take a shower.

Advice on protection against fire and explosion

No special precautions required.

Storage

Requirements for storage areas and containers

Keep out of the reach of children.
Store in original container.
Keep away from direct sunlight.
Keep containers tightly closed in a dry, cool and well-ventilated place.
Protect from frost.

Advice on common storage

Keep away from food, drink and animal feedingstuffs.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Biological limit values

none

Components with workplace control parameters

Not established.

Personal protective equipment - End user

Respiratory protection	AS/NZS 1715/1716 approved respirator
Hand protection	Elbow-length PVC or nitrile gloves
Eye protection	Goggles
Skin and body protection	Cotton overall buttoned to the neck and wrist

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Form	liquid, clear
Colour	colourless to light yellow
Odour	slightly perceptible
Safety data	
pH	2.0 - 4.0 at 100 % (23 °C)
Boiling point/boiling range	ca. 100 °C
Flash point	> 100 °C No flash point - Determination conducted up to the boiling point.
Ignition temperature	no data available
Autoignition temperature	The product is not self-ignitable.
Upper explosion limit	no data available
Lower explosion limit	no data available
Vapour pressure	no data available
Relative vapour density	no data available
Density	ca. 1.09 g/cm³ at 20 °C
Water solubility	completely miscible
Partition coefficient: n-octanol/water	no data available
Viscosity, dynamic	34.23 mPa.s at 20 °C
Other information	Further safety related physical-chemical data are not known.

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid	Extremes of temperature and direct sunlight.
Materials to avoid	Metals
Hazardous Decomposition Products	Thermal decomposition can lead to release of: Carbon oxides Nitrogen oxides (NOx)
Hazardous reactions	No hazardous reactions known. No dangerous reaction known under conditions of normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Inhalation	Low acute inhalation toxicity.

Skin	Irritating to skin. Skin sensitiser
Eye	Causes eye irritation.
Ingestion	Low acute oral toxicity. Ingestion of large amounts may be harmful (see Signs and Symptoms).
Acute oral toxicity	LD50 (rat) > 5,000 mg/kg
Acute inhalation toxicity	LC50 (rat) > 4.95 mg/l Exposure time: 4 h
Acute dermal toxicity	LD50 (rat) > 5,000 mg/kg
Skin irritation	No skin irritation (rabbit)
Eye irritation	No eye irritation (rabbit)
Sensitisation	Non-sensitizing. (guinea pig) OECD Test Guideline 406, Buehler test
Sensitisation	Sensitising (mouse) OECD Test Guideline 429, local lymph node assay (LLNA) May cause sensitisation by skin contact.
Chronic toxicity	Propamocarb hydrochloride did not cause specific target organ toxicity in experimental animal studies.

Assessment Mutagenicity
Propamocarb hydrochloride was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment Carcinogenicity
Propamocarb hydrochloride was not carcinogenic in lifetime feeding studies in rats and mice.

Assessment Toxicity to Reproduction
Propamocarb hydrochloride did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity
Propamocarb hydrochloride caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Propamocarb hydrochloride are related to maternal toxicity.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish	LC50 (Lepomis macrochirus (Bluegill sunfish)) > 92 mg/l static test Exposure time: 96 h The value mentioned relates to the active ingredient propamocarb-hydrochloride.

Toxicity to aquatic invertebrates	EC50 (Water flea (Daphnia magna)) > 106 mg/l static test Exposure time: 48 h The value mentioned relates to the active ingredient propamocarb-hydrochloride.
Toxicity to aquatic plants	IC50 (Pseudokirchneriella subcapitata) > 85 mg/l Exposure time: 72 h The value mentioned relates to the active ingredient propamocarb-hydrochloride.
Toxicity to other organisms	LD50 (Anas platyrhynchos (Mallard duck)) > 1,842 mg/kg The value mentioned relates to the active ingredient propamocarb-hydrochloride.
Toxicity to other organisms	LD50 (Colinus virginianus (Bobwhite quail)) > 1,842 mg/kg The value mentioned relates to the active ingredient propamocarb-hydrochloride.

Additional ecological information
No other effects to be mentioned.

Biodegradability	Readily biodegradable. The value mentioned relates to the active ingredient propamocarb-hydrochloride.
Stability in soil	In upper soil layer (4 - 20 cm) : DT50 < 30 d. Not leached. The value mentioned relates to the active ingredient propamocarb-hydrochloride. In upper soil layer (4 - 20 cm) : DT90 < 70 d. Not leached. The value mentioned relates to the active ingredient propamocarb-hydrochloride.
Bioaccumulation	no data available
Additional Environmental Information	no data available

SECTION 13. DISPOSAL CONSIDERATIONS

Metal drums and plastic containers:
Triple 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.

SECTION 14. TRANSPORT INFORMATION

According to national and international transport regulations not classified as dangerous goods.

SECTION 15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Code Act 1994

Australian Pesticides and Veterinary Medicines Authority approval number: 30487

See also Section 2.

SECTION 16. OTHER INFORMATION

Trademark information Previcur® is a registered trademark of the Bayer Group.

This SDS 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 SDS 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.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

END OF SDS