

# Safety Data Sheet



## Prosper® 500 EC Fungicide

Version 2 / AUS  
102000007367

Revision Date: 05.08.2019  
Print Date: 06.08.2019

### SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

#### 1.1 Product identifier

**Trade name** Prosper® 500 EC Fungicide  
**Product code (UVP)** 06280714

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Use** Fungicide  
**Restrictions on use** See product label for restrictions.

#### 1.3 Details of the supplier of the safety data sheet

**Supplier** Bayer Cropscience Pty Ltd  
ABN 87 000 226 022  
Level 1, 8 Redfern Road  
3123 Hawthorn East  
Victoria  
Australia

**Telephone** (03) 9248 6888  
**Telefax** (03) 9248 6800  
**Responsible Department** 1800 804 479 Technical Information Service  
**Website** [www.crop.bayer.com.au](http://www.crop.bayer.com.au)

#### 1.4 Emergency telephone no.

**Emergency telephone no.** 1800 033 111 IXOM Operations Pty Ltd

### SECTION 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

##### Classification in accordance with Australian GHS Regulation

Acute toxicity: Category 4  
H302 Harmful if swallowed.

Acute toxicity: Category 4  
H332 Harmful if inhaled.

Skin corrosion/irritation: Category 2  
H315 Causes skin irritation.

Serious eye damage: Category 1  
H318 Causes serious eye damage.

Skin sensitisation: Category 1  
H317 May cause an allergic skin reaction.

Reproductive toxicity: Category 2  
H361d Suspected of damaging the unborn child.

Specific target organ toxicity - repeated exposure: Category 2  
H373 May cause damage to organs (Eye) through prolonged or repeated exposure.

Acute aquatic toxicity: Category 1

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- H400 Very toxic to aquatic life.  
Chronic aquatic toxicity: Category 1  
H410 Very toxic to aquatic life with long lasting effects.

### 2.2 Label elements

Hazard label for supply/use required.

#### Hazardous components which must be listed on the label:

Spiroxamine

**Signal word:** Danger

#### Hazard statements

- H302 Harmful if swallowed.  
H332 Harmful if inhaled.  
H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H317 May cause an allergic skin reaction.  
H361d Suspected of damaging the unborn child.  
H373 May cause damage to organs (Eye) through prolonged or repeated exposure.

#### Precautionary statements

- P202 Do not handle until all safety precautions have been read and understood.  
P260 Do not breathe mist.  
P264 Wash hands thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.  
P330 Rinse mouth.  
P302 + P352 IF ON SKIN: Wash with plenty of water/ soap.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.  
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P312 Call a POISON CENTER/doctor/physician if you feel unwell.  
P305 + P351 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
+ P338  
P310 Immediately call a POISON CENTER/doctor/ physician.  
P308 + P313 IF exposed or concerned: Get medical advice/ attention.  
P362 Take off contaminated clothing and wash before reuse.  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local regulation.

### 2.3 Other hazards

No other hazards known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Chemical nature

Spiroxamine 500 g/l  
Emulsifiable concentrate (EC)

Chemical name	CAS-No.	Concentration [%]
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Spiroxamine	118134-30-8	49.80
Benzyl alcohol	100-51-6	>= 20.00 - <= 30.00
Dodecylbenzenesulphonic acid, compound with 2-aminoethanol (1:1)	26836-07-7	> 5.00 - < 20.00
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.**

#### 4.1 Description of first aid measures

<b>General advice</b>	Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely.
<b>Inhalation</b>	Move to fresh air. Keep patient warm and at rest. Call a physician or poison control center immediately.
<b>Skin contact</b>	Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water. If symptoms persist, call a physician.
<b>Eye contact</b>	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. Call a physician or poison control center immediately.
<b>Ingestion</b>	Rinse mouth. Do NOT induce vomiting. Call a physician or poison control center immediately.

#### 4.2 Most important symptoms and effects, both acute and delayed

**Symptoms** No symptoms known or expected.

#### 4.3 Indication of any immediate medical attention and special treatment needed

**Treatment** Treat symptomatically. In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable. There is no specific antidote.

### SECTION 5. FIRE FIGHTING MEASURES

#### 5.1 Extinguishing media

<b>Suitable</b>	Water spray, Carbon dioxide (CO <sub>2</sub> ), Foam, Sand
<b>Unsuitable</b>	High volume water jet

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<b>5.2 Special hazards arising from the substance or mixture</b>	In the event of fire the following may be released: Hydrogen cyanide (hydrocyanic acid), Carbon monoxide (CO), Nitrogen oxides (NOx)
<b>5.3 Advice for firefighters</b>	
<b>Special protective equipment for firefighters</b>	In the event of fire and/or explosion do not breathe fumes. Wear self-contained breathing apparatus and protective suit.
<b>Further information</b>	Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting to enter drains or water courses.  Evacuate personnel to safe areas. Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Whenever possible, contain fire-fighting water by diking area with sand or earth. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
<b>Hazchem Code</b>	•3Z

### SECTION 6. ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and emergency procedures

**Precautions** Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.

**6.2 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.

#### 6.3 Methods and materials for containment and cleaning up

**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. Keep in suitable, closed containers for disposal.

**6.4 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

#### 7.1 Precautions for safe handling

**Advice on safe handling** Handle and open container in a manner as to prevent spillage. Use only in area provided with appropriate exhaust ventilation.

**Hygiene measures** Avoid contact with skin, eyes and clothing. Keep working clothes separately. Wash hands immediately after work, if necessary take a shower. Remove soiled clothing immediately and clean thoroughly before using again. Garments that cannot be cleaned must be destroyed (burnt).



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### 7.2 Conditions for safe storage, including any incompatibilities

**Requirements for storage areas and containers** Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Store in a place accessible by authorized persons only. Keep away from direct sunlight.

**Advice on common storage** Keep away from food, drink and animal feedingstuffs.

## SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Spiroxamine	118134-30-8	0.6 mg/m <sup>3</sup> (SK-SEN)		OES BCS*

\*OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"

### 8.2 Exposure controls

<b>Respiratory protection</b>	<p>If product is handled while not enclosed, and if contact may occur: Wear respirator with an organic vapours and gas filter mask (protection factor 10) conforming to EN140 type A or equivalent. Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.</p>										
<b>Hand protection</b>	<p>Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.</p> <p>Wash gloves when contaminated. Dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet.</p> <table> <tbody> <tr> <td>Material</td> <td>Nitrile rubber</td> </tr> <tr> <td>Rate of permeability</td> <td>&gt; 480 min</td> </tr> <tr> <td>Glove thickness</td> <td>&gt; 0.4 mm</td> </tr> <tr> <td>Protective index</td> <td>Class 6</td> </tr> <tr> <td>Directive</td> <td>Protective gloves complying with EN 374.</td> </tr> </tbody> </table>	Material	Nitrile rubber	Rate of permeability	> 480 min	Glove thickness	> 0.4 mm	Protective index	Class 6	Directive	Protective gloves complying with EN 374.
Material	Nitrile rubber										
Rate of permeability	> 480 min										
Glove thickness	> 0.4 mm										
Protective index	Class 6										
Directive	Protective gloves complying with EN 374.										
<b>Eye protection</b>	<p>Wear goggles (conforming to EN166, Field of Use = 5 or equivalent) and faceshield (conforming to EN166, Field of Use = 3 or equivalent).</p>										
<b>Skin and body protection</b>	<p>Wear standard coveralls and Category 3 Type 4 suit. If there is a risk of significant exposure, consider a higher protective type suit.</p> <p>Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.</p> <p>If chemical protection suit is splashed, sprayed or significantly</p>										



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contaminated, decontaminate as far as possible, then carefully remove and dispose of as advised by manufacturer.

**General protective measures** In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the above mentioned recommendations would apply.

### Engineering Controls

**Advice on safe handling** Handle and open container in a manner as to prevent spillage. Use only in area provided with appropriate exhaust ventilation.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

<b>Form</b>	Liquid, clear to slightly turbid
<b>Colour</b>	yellow to brown
<b>Odour</b>	aromatic
<b>pH</b>	9.4 (ca.) (1 %) (23 °C) (deionized water)
<b>Flash point</b>	108 °C
<b>Ignition temperature</b>	265 °C
<b>Auto-ignition temperature</b>	The product is not self-ignitable.
<b>Density</b>	ca. 1.00 g/cm <sup>3</sup> ( 20 °C)
<b>Water solubility</b>	emulsifiable
<b>Partition coefficient: n-octanol/water</b>	Spiroxamine: log Pow: 2.8 - 3.0 (20 °C) (pH 7)
<b>Viscosity, dynamic</b>	82 mPa.s ( 20 °C) Velocity gradient 150 /s
<b>Viscosity, kinematic</b>	82 mm <sup>2</sup> /s ( 20 °C)
<b>Oxidizing properties</b>	No oxidizing properties
<b>Explosivity</b>	Not explosive 92/69/EEC, A.14 / OECD 113

**9.2 Other information** Further safety related physical-chemical data are not known.

## SECTION 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

**Thermal decomposition** No data available

**10.2 Chemical stability** Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions** No hazardous reactions when stored and handled according to prescribed instructions.



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- 10.4 Conditions to avoid** Extremes of temperature and direct sunlight.
- 10.5 Incompatible materials** Strong oxidizing agents, Strong acids
- 10.6 Hazardous decomposition products** No decomposition products expected under normal conditions of use.

### SECTION 11. TOXICOLOGICAL INFORMATION

#### 11.1 Information on toxicological effects

- Acute oral toxicity** LD50 (Rat) > 500 - < 1,000 mg/kg  
Test conducted with a similar formulation.
- Acute inhalation toxicity** LC50 (Rat) 2.323 mg/l  
Exposure time: 4 h  
Determined in the form of a respirable aerosol.  
Test conducted with a similar formulation.
- Acute dermal toxicity** LD50 (Rat) > 2,000 mg/kg  
Test conducted with a similar formulation.
- Skin corrosion/irritation** Irritating to skin. (Rabbit)  
Test conducted with a similar formulation.
- Serious eye damage/eye irritation** Severe eye irritation. (Rabbit)  
Test conducted with a similar formulation.
- Respiratory or skin sensitisation** Skin: Non-sensitizing. (Guinea pig)  
OECD Test Guideline 406, Buehler test  
Skin: Sensitising (Mouse)  
OECD Test Guideline 429, local lymph node assay (LLNA)  
Test conducted with a similar formulation.

#### Assessment mutagenicity

Spiroxamine was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

#### Assessment carcinogenicity

Spiroxamine was not carcinogenic in lifetime feeding studies in rats and mice.

#### Assessment toxicity to reproduction

Spiroxamine caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Spiroxamine is related to parental toxicity.

#### Assessment developmental toxicity

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

#### Assessment STOT Specific target organ toxicity – single exposure

Spiroxamine: Based on available data, the classification criteria are not met.

#### Assessment STOT Specific target organ toxicity – repeated exposure

Spiroxamine caused specific target organ toxicity in experimental animal studies in dogs in the following organ(s): Eyes.

#### Aspiration hazard

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Based on available data, the classification criteria are not met.

### Information on likely routes of exposure

Harmful if inhaled.  
Irritating to skin., Harmful if absorbed through skin., Skin sensitiser  
Severe eye irritation.  
Harmful if swallowed.

### Early onset symptoms related to exposure

Refer to Section 4

### Delayed health effects from exposure

Refer to Section 11

### Exposure levels and health effects

Refer to Section 4

### Interactive effects

Not known

### When specific chemical data is not available

Not applicable

### Mixture of chemicals

Refer to Section 2.1

### Further information

No further toxicological information is available.

## SECTION 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

<b>Toxicity to fish</b>	LC50 (Oncorhynchus mykiss (rainbow trout)) 11.5 mg/l Exposure time: 96 h
<b>Toxicity to aquatic invertebrates</b>	EC50 (Daphnia magna (Water flea)) 10.3 mg/l Exposure time: 48 h
<b>Toxicity to aquatic plants</b>	EC50 (Desmodesmus subspicatus (green algae)) 0.029 mg/l Growth rate; Exposure time: 72 h
<b>Toxicity to bacteria</b>	EC50 (activated sludge) 100 - 1,000 mg/l The value mentioned relates to the active ingredient spiroxamine.
<b>Toxicity to other organisms</b>	LD50 (Colinus virginianus (Bobwhite quail)) 565 mg/kg The value mentioned relates to the active ingredient spiroxamine.

### 12.2 Persistence and degradability

<b>Biodegradability</b>	Spiroxamine: Not rapidly biodegradable
<b>Koc</b>	Spiroxamine: Koc: 2415



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### 12.3 Bioaccumulative potential

**Bioaccumulation** Spiroxamine: Bioconcentration factor (BCF) 87  
Does not bioaccumulate.

### 12.4 Mobility in soil

**Mobility in soil** Spiroxamine: Slightly mobile in soils

### 12.5 Other adverse effects

**Additional ecological information** No other effects to be mentioned.

## SECTION 13. DISPOSAL CONSIDERATIONS

Triple-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 deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. Do not burn empty containers or product. Do not reuse container for any other purpose.

## SECTION 14. TRANSPORT INFORMATION

### ADG

UN number	<b>3082</b>
Transport hazard class(es)	9
Subsidiary Risk	None
Packaging group	III
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SPIROXAMINE, BENZYLALCOHOL SOLUTION)
Hazchem Code	•3Z

According to AU01, Environmentally Hazardous Substances in packagings, IBC or any other receptacle not exceeding 500 kg or 500 L are not subject to the ADG Code.

### IMDG

UN number	<b>3082</b>
Transport hazard class(es)	9
Subsidiary Risk	None
Packaging group	III
Marine pollutant	YES
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SPIROXAMINE, BENZYLALCOHOL SOLUTION)

### IATA

UN number	<b>3082</b>
Transport hazard class(es)	9
Subsidiary Risk	None
Packaging group	III

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Environm. Hazardous Mark	YES
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SPIROXAMINE, BENZYLALCOHOL SOLUTION )

### SECTION 15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Code Act 1994  
Australian Pesticides and Veterinary Medicines Authority approval number: 52817

#### SUSMP classification (Poison Schedule)

Schedule 6 (Standard for the Uniform Scheduling of Medicines and Poisons)

### SECTION 16. OTHER INFORMATION

**Trademark information** Prosper® is a Registered Trademark of the Bayer Group.

#### Abbreviations and acronyms

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute toxicity estimate
AU OEL	Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)
CAS-Nr.	Chemical Abstracts Service number
CEILING	Ceiling Limit Value
Conc.	Concentration
EC-No.	European community number
ECx	Effective concentration to x %
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
EN	European Standard
EU	European Union
IATA	International Air Transport Association
IBC	International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code)
ICx	Inhibition concentration to x %
IMDG	International Maritime Dangerous Goods
LCx	Lethal concentration to x %
LDx	Lethal dose to x %
LOEC/LOEL	Lowest observed effect concentration/level
MARPOL	MARPOL: International Convention for the prevention of marine pollution from ships
N.O.S.	Not otherwise specified
NOEC/NOEL	No observed effect concentration/level
OECD	Organization for Economic Co-operation and Development
OES BCS	OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"
PEAK	PEAK: Exposure Standard - Peak means a maximum or peak airborne concentration

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	of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SK-SEN	Skin sensitiser
SKIN_DES	SKIN_DES: Skin notation: Absorption through the skin may be a significant source of exposure.
STEL	STEL: Exposure standard - short term exposure limit (STEL): A 15 minute TWA exposure which should not be exceeded at any time during a working day even if the eight-hour TWA average is within the TWA exposure standard. Exposures at the STEL should not be longer than 15 minutes and should not be repeated more than four times per day. There should be at least 60 minutes between successive exposures at the STEL.
TWA	TWA: Exposure standard - time-weighted average (TWA): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.
TWA	Time weighted average
UN	United Nations
WHO	World health organisation

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.