

# Safety Data Sheet



## Roundup Ready® PL Herbicide with Plantshield® Technology

Version 2 / AUS  
102000056966

1/11  
Revision Date: 11.01.2024  
Print Date: 11.01.2024

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

#### 1.1 Product identifier

**Trade name** Roundup Ready® PL Herbicide with Plantshield® Technology  
**Product code (UVP)** 87314022

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

**Use** Herbicide

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

**Supplier** Bayer Cropscience Pty Ltd  
ABN 87 000 226 022  
Level 4, 109 Burwood Rd  
Hawthorn 3122  
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  
H332 Harmful if inhaled.

Eye irritation: Category 2B  
H320 Causes eye irritation.

Acute aquatic toxicity: Category 1  
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

##### Labelling according to specific Australian legislation

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Hazard label for supply/use required.

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

Potassium salt of glyphosate

**Signal word:** Warning

### Hazard statements

H332 Harmful if inhaled.  
H320 Causes eye irritation.

### Precautionary statements

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
P264 Wash hands thoroughly after handling.  
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 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.

### 2.3 Other hazards

No additional hazards known beside those mentioned.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Chemical nature

Potassium salt of Glyphosate 660 g/l  
Soluble concentrate (SL)

Chemical name	CAS-No.	Concentration [%]
Potassium salt of glyphosate	70901-12-1	48.81
Amines, tallow alkyl, ethoxylated	61791-26-2	> 1.00 - < 10.00
Bis (2-hydroxyethyl) cocoalkylamine	61791-31-9	> 1.00 - < 10.00
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

**General advice** Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely.

**Inhalation** Move to fresh air. Keep patient warm and at rest. Call a physician or poison control center immediately.



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<b>Skin contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. Get medical attention if irritation develops and persists.
<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. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.

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

**Symptoms** To date no symptoms are known.

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

**Risks** This product is not a cholinesterase inhibitor.

**Treatment** Treatment with atropine and oximes is not indicated. Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.

## SECTION 5. FIRE FIGHTING MEASURES

### 5.1 Extinguishing media

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

**Unsuitable** High volume water jet

**5.2 Special hazards arising from the substance or mixture** In the event of fire the following may be released: Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Nitrogen oxides (NO<sub>x</sub>), Oxides of phosphorus

### 5.3 Advice for firefighters

**Special protective equipment for firefighters** In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.

**Further information** Contain the spread of the fire-fighting media. Do not allow water to come into direct contact with the product.

**Hazchem Code** •3Z

## SECTION 6. ACCIDENTAL RELEASE MEASURES

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

**Precautions** Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment.



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**6.2 Environmental precautions** Do not allow to get into surface water, drains and ground water.

### 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.

**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** Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.

**Hygiene measures** Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.  
Remove Personal Protective Equipment (PPE) immediately after handling this product. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing. Keep working clothes separately. Garments that cannot be cleaned must be destroyed (burnt).

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

**Requirements for storage areas and containers** Store in original container. Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in a place accessible by authorized persons only. Reacts with galvanised steel or unlined mild steel to produce hydrogen, a highly flammable gas that could explode. Protect from freezing. Partial crystallization may occur on prolonged storage below the minimum storage temperature. Freezing will affect the physical condition but will not damage the material. Thaw and mix before using.

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

## SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

No known occupational limit values.

### 8.2 Exposure controls

**Respiratory protection** Respiratory protection is not required under anticipated



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circumstances of exposure.

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.

Suitable respiratory equipment:

Wear respirator with an organic vapours and gas filter mask (protection factor 10) conforming to EN140 type A or equivalent.

### Hand protection

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.

Wash gloves when contaminated. Dispose of when contaminated inside, when perforated or when contamination outside cannot be removed.

Material	Nitrile rubber
Rate of permeability	> 480 min
Glove thickness	> 0.4 mm
Directive	Protective gloves complying with EN 374.

### Eye protection

Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).

### Skin and body protection

Wear standard coveralls and Category 3 Type 6 suit.

If there is a risk of significant exposure, consider a higher protective type suit.

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.

If chemical protection suit is splashed, sprayed or significantly 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** Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Form	Liquid, clear
Colour	light yellow to light brown
Odour	No data available
Odour Threshold	No data available



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<b>pH</b>	4.5 - 4.9 (6.77 %) (23 °C) (deionized water)
<b>Melting point/range</b>	No data available
<b>Boiling Point</b>	No data available
<b>Flash point</b>	does not flash
<b>Flammability</b>	No data available
<b>Auto-ignition temperature</b>	No data available
<b>Thermal decomposition</b>	No data available
<b>Minimum ignition energy</b>	No data available
<b>Self-accelarating decomposition temperature (SADT)</b>	No data available
<b>Upper explosion limit</b>	No data available
<b>Lower explosion limit</b>	No data available
<b>Vapour pressure</b>	No data available
<b>Evaporation rate</b>	No data available
<b>Relative vapour density</b>	No data available
<b>Relative density</b>	1.36 (20 °C) Water at 15.6 °C
<b>Density</b>	ca. 1.36 g/cm <sup>3</sup> (20 °C)
<b>Water solubility</b>	soluble
<b>Partition coefficient: n-octanol/water</b>	Potassium salt of glyphosate: log Pow: < -3.2 (25 °C)
<b>Viscosity, dynamic</b>	No data available
<b>Viscosity, kinematic</b>	No data available
<b>Oxidizing properties</b>	No data available
<b>Explosivity</b>	No data available
<b>9.2 Other information</b>	Further safety related physical-chemical data are not known.

### SECTION 10. STABILITY AND REACTIVITY

<b>10.1 Reactivity</b>	Stable under normal conditions.
<b>10.2 Chemical stability</b>	Stable under recommended storage conditions.
<b>10.3 Possibility of hazardous reactions</b>	Reacts with galvanised steel or unlined mild steel to produce hydrogen, a highly flammable gas that could explode.



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- 10.4 Conditions to avoid** Extremes of temperature and direct sunlight.
- 10.5 Incompatible materials** Galvanised steel, Carbon steel, Unlined mild steel  
Store only in the original container.
- 10.6 Hazardous decomposition products** Hazardous products of combustion: see section 5.

### SECTION 11. TOXICOLOGICAL INFORMATION

#### 11.1 Information on toxicological effects

- Acute oral toxicity** LD50 (Rat) > 5,000 mg/kg  
Test conducted with a similar formulation.
- Acute inhalation toxicity** LC50 (Rat) > 1.20 - < 2.21 mg/l  
Test conducted with a similar formulation.
- Acute dermal toxicity** LD50 (Rat) > 5,000 mg/kg  
Test conducted with a similar formulation.
- Skin corrosion/irritation** Slight irritant effect - does not require labelling. (Rabbit)  
Test conducted with a similar formulation.
- Serious eye damage/eye irritation** No eye irritation (Rabbit)  
Test conducted with a similar formulation.
- Respiratory or skin sensitisation** Skin: Non-sensitizing. (Guinea pig)  
OECD Test Guideline 406, Buehler test

#### Assessment mutagenicity

Potassium salt of glyphosate is not considered mutagenic.

#### Assessment carcinogenicity

Potassium salt of glyphosate: Based on available data, the classification criteria are not met.

#### Assessment toxicity to reproduction

Potassium salt of glyphosate: Based on available data, the classification criteria are not met.

#### Assessment developmental toxicity

Potassium salt of glyphosate: Based on available data, the classification criteria are not met.

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

Potassium salt of glyphosate: Based on available data, the classification criteria are not met.

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

Potassium salt of glyphosate did not cause specific target organ toxicity in experimental animal studies.

#### Aspiration hazard

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

#### Information on likely routes of exposure



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Harmful if inhaled.  
May cause skin irritation.  
Causes 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

#### Toxicity to fish

LC50 (Oncorhynchus mykiss (rainbow trout)) 3.13 mg/l  
Test conducted with a similar formulation.

#### Chronic toxicity to fish

Oncorhynchus mykiss (rainbow trout)  
flow-through test  
NOEC:  $\geq$  9.63 mg/l  
The value mentioned relates to the active ingredient glyphosate.

#### Toxicity to aquatic invertebrates

EC50 (Daphnia (water flea)) 8.0 mg/l  
Test conducted with a similar formulation.

#### Chronic toxicity to aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 12.5 mg/l  
Exposure time: 21 d  
The value mentioned relates to the active ingredient glyphosate.

#### Toxicity to aquatic plants

ErC50 (Raphidocelis subcapitata (freshwater green alga)) 0.294 mg/l  
Test conducted with a similar formulation.  
NOEC (Raphidocelis subcapitata (freshwater green alga)) 0.047 mg/l  
Test conducted with a similar formulation.

### 12.2 Persistence and degradability

#### Biodegradability

Potassium salt of glyphosate:  
Not readily biodegradable.





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**Koc** Potassium salt of glyphosate: Koc: 884

### 12.3 Bioaccumulative potential

**Bioaccumulation** Potassium salt of glyphosate: Bioconcentration factor (BCF) < 1

### 12.4 Mobility in soil

**Mobility in soil** Potassium salt of glyphosate: Variable, depends on temperature, soil type, soil moisture, soil pH and organic matter content.

### 12.5 Other adverse effects

**Additional ecological information** No further ecological information is available.

## 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. (GLYPHOSATE POTASSIUM SALT SOLUTION)
Hazchem Code	•3Z

AU01: Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in;

- a) packagings that do not incorporate a receptacle exceeding 500 kg(L); or
- b) IBCs

### 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. (GLYPHOSATE POTASSIUM SALT SOLUTION)



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### IATA

UN number	<b>3082</b>
Transport hazard class(es)	9
Subsidiary Risk	None
Packaging group	III
Environm. Hazardous Mark	YES
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (GLYPHOSATE POTASSIUM SALT SOLUTION )

### SECTION 15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Code Act 1994  
Australian Pesticides and Veterinary Medicines Authority approval number: 81975

#### SUSMP classification (Poison Schedule)

Schedule 5 (Standard for the Uniform Scheduling of Medicines and Poisons)

### SECTION 16. OTHER INFORMATION

**Trademark information** Roundup Ready® and Plantshield® are Registered Trademarks 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

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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 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.

**Reason for Revision:** The following sections have been revised: Section 3: Composition / Information on Ingredients. Section 8: Exposure Controls / Personal Protection.

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