

MATERIAL SAFETY DATA SHEET

RYGEL CLEARUP BIO 360 HERBICIDE

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

Supplier: Profeng Australia Pty Ltd
ACN: 156 055 533
Street Address: 103 Ordish Road, Dandenong South, Vic 3175
Telephone: (03) 9768 2803
Facsimile: (03) 9768 2804

Emergency telephone number: National Poisons Information Centre:
Phone Australia 13 11 26.

Product name: Rygel ClearUp Bio 360 Herbicide
Poison Schedule: S5
Product Use: Water soluble herbicide for non-selective control of many annual and perennial weeds.

2. HAZARDS IDENTIFICATION

Statement of Hazardous Nature

This product is classified as: Xi, Irritating. N, Dangerous to the environment. Hazardous according to the criteria of SWA. Not a Dangerous Good according to Australian Dangerous Goods (ADG) Code, IATA and IMDG/IMSBC criteria.

Risk Phrases R53, R36/38. May cause long term adverse effects in the aquatic environment. Irritating to eyes and skin.

Safety Phrases S23, S26, S28, S24/25, S36/37. Do not breathe vapour or spray mists. In case of contact with eyes, rinse immediately with plenty of water and contact a doctor or Poisons Information Centre. After contact with skin, wash immediately with plenty of water. Avoid contact with skin and eyes. Wear suitable protective clothing and gloves.

SUSMP Classification S5

ADG Classification None allocated. Not a Dangerous Good under the ADG Code.

UN Number None allocated

Pictogram





Profeng Australia Pty Ltd

Address: 103 Ordish Road Dandenong South Victoria 3175
Phone: +61 3 9768 2803 Fax: +61 3 9768 2804
Email: info@profeng.com.au www.profeng.com.au
A.C.N.: 156 055 533 A.B.N.: 37 178 790 573

Signal word	Warning
Hazard statement(s)	
H315	Causes skin irritation
H320	Causes eye irritation
Precautionary statement(s)	
P262	Do not get in eyes, on skin, or on clothing
P402+P404	Store in a dry place. Store in a closed container
P501	Dispose of contents/ container to an approved waste disposal plant

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Entity	CAS No	Conc. %
Glyphosate, (present as the isopropylamine salt)	1071-83-6	360g/L
Other Non hazardous ingredients		to 100%

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

4. FIRST AID MEASURES

Ingestion: If swallowed do NOT induce vomiting; seek medical advice immediately and show this container or label or contact the Poisons Information Centre on 13 11 26 (Aust).

Make every effort to prevent vomit from entering the lungs by careful placement of the patient. Do not give anything by mouth to a semi-conscious or unconscious person.

Give a glass of water.

Eye contact: If product in eyes, wash material from them with running water. If they begin watering or reddening, take special care in washing thoroughly

Skin contact: If skin contact occurs, thoroughly wash contacted areas. No further measures should normally be required unless irritation is noticed. If irritation persists, seek medical attention.

Inhalation: No first aid measures normally required. However, if vapours or mists have been inhaled, and irritation has developed, remove to fresh air and observe until recovered.

Notes to physician: Treat symptomatically. Note the nature of this product.



5. FIRE-FIGHTING MEASURES

Fire & Explosion Hazards:

The product is not flammable. If involved in a fire, use extinguishing agent suitable for the material on fire.

Suitable extinguishing media: Water spray, foam, dry chemical, carbon dioxide and/or any Class B extinguishing agent.

Precautions for Firefighters and Special Protective Equipment:

When fighting fires involving significant quantities of this product, wear safety boots, non-flammable overalls, gloves, hat, goggles and respirator. All skin areas should be covered.

Unusual Fire & Explosion Hazards: This product, or spray solutions of this product, may react with galvanized steel or unlined steel (except stainless steel) containers and tanks, to produce hydrogen gas, which may form a highly combustible gas mixture.

Hazards from combustion products: Not combustible, however after evaporation of aqueous component residual material may burn. Product of combustion may include carbon dioxide, carbon monoxide, smoke and fumes.

6. ACCIDENTAL RELEASE MEASURES

Spills & Disposal Contain spill and absorb with clay, sand, soil or proprietary absorbent (such as vermiculite). Collect in sealed open top containers for disposal.

Final clean-up with degreasing agent or detergent is advised.

Environmental Precautions

Prevent from entering drains, waterways or sewers.

7. HANDLING AND STORAGE

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this MSDS for details of personal protective measures, and make sure that these measures are followed.

No special storage and transport requirements. This product has no UN classification.

Storage: This product is a S5 Poison. Store in the closed, original container in a dry, well ventilated area out of direct sunlight. Keep container tightly sealed and do not store with seed, fertilisers or foodstuffs.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National occupational exposure limits:

Exposure limits have not been established by NOHSC Australia for any of the significant ingredients in this product.

The ADI (Acceptable Daily Intake) for Glyphosate is set at 0.3mg/kg/day. The corresponding



Profeng Australia Pty Ltd

Address: 103 Ordish Road Dandenong South Victoria 3175
Phone: +61 3 9768 2803 Fax: +61 3 9768 2804
Email: info@profeng.com.au www.profeng.com.au
A.C.N.: 156 055 533 A.B.N.: 37 178 790 573

NOEL (No-observable-effect-level) is set at 30mg/kg/day. Values taken from Australian ADI List, January 2001.

Engineering Controls:

Use good occupational work practice with adequate ventilation. Natural ventilation should be adequate under normal use conditions.

Personal Protection:

Respiratory Protection: It is usually safe to not use a dust mask or respirator protection on account of this product. However, if the product is being used in dusty or confined conditions, use of a mask or respirator may be preferred.

Protective Gloves: Impermeable elbow length PVC gloves should be worn when you are using this product, to prevent irritation.

Eye Protection: When preparing product for use, wear face shield or goggles.

Clothing: When using controlled droplet applicator, wear protective waterproof clothing and impervious footwear.

After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, face shield and goggles.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Yellow coloured liquid
Odour:	Odourless to slight amine odour
Melting/softening point:	Approximately 0°C
Boiling point:	Approximately 100°C at 100kPa
Volatile materials:	Water component. Active ingredient is considered non volatile
Vapour pressure:	2.37 kPa at 20 °C (water vapour pressure)
Flashpoint:	Does not burn
Solubility in water:	Completely soluble
Flash Point:	None
Flammability:	Non combustible material
Ignition Temperature:	N/A
Corrosiveness:	Not corrosive

10. STABILITY AND REACTIVITY

Reactivity: This product is unlikely to react or decompose under normal storage conditions.

Conditions to Avoid: This product should be kept in a cool place, preferably below 30 °C.

Incompatibilities: Strong oxidising agents.

Fire Decomposition: If involved in a strong fire can release nitrogen oxides and oxides of phosphorus.



Profeng Australia Pty Ltd

Address: 103 Ordish Road Dandenong South Victoria 3175
Phone: +61 3 9768 2803 Fax: +61 3 9768 2804
Email: info@profeng.com.au www.profeng.com.au
A.C.N.: 156 055 533 A.B.N.: 37 178 790 573

Polymerization: Hazardous polymerisation is not possible.

Materials to Avoid Corrosive to mild steel, galvanised and zinc.

Non corrosive to stainless steel, polyethylene and plastics.

Do not mix, store or apply the product or spray solutions of the product in galvanised steel or unlined steel (except stainless steel) containers or spray tanks.

Hazardous Reaction Avoid contact of the concentrate with strong alkalis and alkaline materials such as lime. Such contact may release isopropylamine vapour with a strong fish like odour, which is an irritant to eyes. Isopropylamine is moderately toxic, LD50 (oral, rat) is 820 mg/kg and a TLV of 5 ppm (TWA) has been set.

11. TOXICOLOGICAL INFORMATION

Toxicology Information

No harmful effects are expected if the precautions on the label and this MSDS are followed.

Inhalation When applying the product as a spray avoid breathing in spray mists. May cause irritation to mucous membranes and respiratory tract.

Ingestion The concentrate is of low toxicity if swallowed. Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury. Possible symptoms of exposure include: nausea, vomiting and gastrointestinal discomfort and diarrhoea. Ingestion of a large quantity of the undiluted product may result in hypotension and pulmonary oedema.

Skin The concentrated product may cause slight irritation on contact. Prolonged contact is likely to result in irritation.

Skin Irritation Slight irritant.

Eye The concentrate may cause irritation of the eyes. Prolonged contact with the concentrate may cause damage to the eye.

Eye Irritation Slight irritant

Acute Toxicity - Oral LD50 (rat) >5000 mg/kg for a similar product

Acute Toxicity – Dermal LD50 (rabbit) >5000 mg/kg for a similar product

Acute Toxicity – Inhalation LC50 (rat) (4hr) >1.3 mg/L

LC50 concentration not reached.

12. ECOLOGICAL INFORMATION

This product is very toxic to aquatic organisms. This product is not readily biodegradable.

Effects on birds: Glyphosate is not harmful to wild birds. The dietary LC50 in both mallards and bobwhite quail is greater than 4500 ppm.

Effects on aquatic organisms: Technical glyphosate acid is practically nontoxic to fish and may be slightly toxic to aquatic invertebrates. The reported 96-hour LC 50 values for other aquatic species include greater than 10 mg/L in Atlantic oysters, 934 mg/L in fiddler crab,



Profeng Australia Pty Ltd

Address: 103 Ordish Road Dandenong South Victoria 3175
Phone: +61 3 9768 2803 Fax: +61 3 9768 2804
Email: info@profeng.com.au www.profeng.com.au
A.C.N.: 156 055 533 A.B.N.: 37 178 790 573

and 281 mg/L in shrimp. The 48-hour LC 50 for glyphosate in Daphnia (water flea), an important food source for freshwater fish, is 780 mg/L. Some formulations may be more toxic to fish and aquatic species due to differences in toxicity between the salts and the parent acid or to surfactants used in the formulation. There is a very low potential for the compound to build up in the tissues of aquatic invertebrates or other aquatic organisms.

Effects on other organisms: Glyphosate is nontoxic to honeybees. Its oral and dermal LD 50 is greater than 0.1 mg/bee. The reported contact LC 50 values for earthworms in soil are greater than 5000 ppm for both the glyphosate trimethylsulfonium salt and formulated product.

Environmental Fate:

Breakdown in soil and groundwater: Glyphosate is moderately persistent in soil, with an estimated average half-life of 47 days. Reported field half-lives range from 1 to 174 days. It is strongly adsorbed to most soils, even those with lower organic and clay content.

Breakdown in water: In water, glyphosate is strongly adsorbed to suspended organic and mineral matter and is broken down primarily by microorganisms. Its half-life in pond water ranges from 12 days to 10 weeks.

Breakdown in vegetation: Glyphosate may be translocated throughout the plant, including to the roots. It is extensively metabolized by some plants, while remaining intact in others.

13. DISPOSAL CONSIDERATIONS

Disposal: Instructions concerning the disposal of this product and its containers are given on the product label. These should be carefully followed.

14. TRANSPORT INFORMATION

UN Number: This product is not classified as a Dangerous Good by ADG, IATA or IMDG/IMSBC criteria. No special transport conditions are necessary unless required by other regulations.

15. REGULATORY INFORMATION

AICS: All of the significant ingredients in this formulation are compliant with NICNAS regulations.

16. OTHER INFORMATION

All information contained in this document is as accurate as possible based on information submitted by raw material suppliers. **Profeng Australia Pty Ltd** will not be responsible for any damages that may result from reliance on the information contained herein.