

Infosafe No™ 3NU2J	Issue Date : February 2012	ISSUED by NUFARM
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Product Name **Roundup Biactive**

Not classified as hazardous

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name	Roundup Biactive
Product Code	0554
Product Type	Group M Herbicide
Company Name	NUFARM AUSTRALIA LIMITED. (ABN 80 004 377 780)
Address	103-105 Pipe Road Laverton North Victoria 3026 Australia
Emergency Tel.	1800 033 498 (24hr Australia)
Telephone/Fax Number	Tel: +61 3 9282-1000 Fax: +61 3 9282-1001
Recommended Use	Water soluble herbicide for non selective control of many annual and perennial weeds in certain situations.
Other Information	This MSDS describes, to the best of our knowledge, the properties of the concentrated product. The physical properties and some of the assessments do not apply to the properties of the product once it has been diluted for application. Acute health effects of the diluted product are likely to be much less severe.

2. HAZARDS IDENTIFICATION

Hazard Classification	Not classified as hazardous NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. Hazard classification according to the criteria of NOHSC. Dangerous goods classification according to the Australia Dangerous Goods Code.
Other Information	Poisons Schedule S5

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization	Liquid		
Ingredients	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Glyphosate (present as the isopropylamine salt)	1071-83-6	360 g/L
	Alkyl polyglycoside surface active agent		5-15 %w/v
	Water		Balance

4. FIRST AID MEASURES

Inhalation	Remove affected person to fresh air until recovered.
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.
Skin	Wash affected areas thoroughly with soap and water. If irritation persists, seek medical advice.
Eye	If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes. Seek medical advice.
First Aid Facilities	If poisoning occurs, contact a doctor or the Poisons Information Centre (Australia) on 13 11 26.
Advice to Doctor	Treat symptomatically.

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5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	If involved in a fire, the product will not burn. Choose extinguishing media to suit the burning material.
Hazards from Combustion Products	Water, foam, carbon dioxide or dry chemical. Keep upwind. This product, or spray solutions of this product, react with galvanised steel or unlined steel (except stainless steel) containers and tanks, to produce hydrogen gas which may form a highly flammable or explosive gas mixture. If involved in a major fire, could evolve oxides of nitrogen or phosphorus.
Special Protective Equipment for fire fighters	Breathable air apparatus may have to be worn if material is involved in fires especially in confined spaces.
Other Information	STOP FIRE WATER FROM ENTERING DRAINS OR WATER BODIES.

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

Precautions for Safe Handling	For personal protective equipment (PPE) and hygiene advice, refer Section 8.
Conditions for Safe Storage	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.
Other Information	Always read the label and any attached leaflet before use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards	No exposure standard has been established for this product.
Engineering Controls	No special ventilation required.
Personal Protective Equipment	When preparing product for use wear elbow-length PVC gloves and face shield or goggles. When using controlled droplet applicator, wear protective waterproof clothing and impervious footwear.
Hygiene Measures	After each day's use, wash contaminated clothing and safety equipment. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.
Requirements Concerning Special Training	Check State or Territory regulations that require people who use pesticides in their job or business to have training in the application of the materials.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Liquid
Appearance	Green coloured liquid
Melting Point	-10°C
Boiling Point	>100°C (water only)
Solubility in Water	Soluble in water.
Specific Gravity	1.17
Vapour Pressure	Active ingredient is considered not volatile
Vapour Density (Air=1)	Water only

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Volatile Component ~50% (water only)
Flash Point None
Flammability Non combustible material.

10. STABILITY AND REACTIVITY

Incompatible Materials 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 Reactions 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.

Hazardous Polymerization Hazardous polymerisation is not possible.

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 mist.
 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.

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

Chronic Effects No information available, no chronic effects expected.

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.

Eye Irritation Slight irritant

Skin Irritation Slight irritant.

Other Information The Australian Acceptable Daily Intake (ADI) for glyphosate for a human is 0.3 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 30 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Comm. Dept. of Health and Ageing Office of Chemical Safety and Environmental Health, 'ADI List', June 2011).

12. ECOLOGICAL INFORMATION

Persistence / Degradability Adsorption studies indicate that glyphosate has very low mobility.
 Average field half life of glyphosate is 47 days.

Other Precautions Do not spray in high winds.
 Do not contaminate dams, waterways or sewers with this product.

Environ. Protection Glyphosate is a non-selective contact herbicide.
 Spray drift can cause damage.

Acute Toxicity - Fish Not toxic to fish.
 LC50 (96hr) for rainbow trout is >989 mg/l.
 LC50 (96hr) for carp is >895 mg/l.

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Acute Toxicity - Daphnia	The above data is for the formulated product. EC50 (48hr) for daphnia is 675 mg/l for the formulated product.
Acute Toxicity - Algae	EC50 (72hr) for algae 150 mg/l.
Acute Toxicity - Other Organisms	Birds: Not toxic to birds. LD50 for mallard ducks and bobwhite quail (diet) is >5620 mg/kg Bees: Not toxic to bees. LD50 >100 µg/bee. LC50 (96hr) for leopard frog tadpole is >1040 mg/l

13. DISPOSAL CONSIDERATIONS

Product Disposal	On site disposal of the concentrated product is not acceptable. Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, approach local authorities who hold periodic collections of unwanted chemicals (ChemClear®).
Container Disposal	Do not use this container for any other purpose. Triple or preferably pressure rinse inner bladder or containers before disposal. Add rinsings to the 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 for appropriate disposal at an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500mm 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. Returnable containers: empty contents fully into application equipment. Replace cap, close all valves and return to the point of supply for refill or storage. drumMUSTER is the national program for the collection and recycling of empty, cleaned, non returnable crop production and on-farm animal health chemical containers. If the label on your container carries the drumMUSTER symbol, triple rinse the container, ring your local Council, and offer the container for collection in the program. DO NOT burn empty containers or product.

14. TRANSPORT INFORMATION

Transport Information	It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs.
Storage and Transport	Considered non dangerous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail.

15. REGULATORY INFORMATION

Poisons Schedule	S5
Packaging & Labelling	CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
Other Information	This product is registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA). APVMA product number: 48518.

16. OTHER INFORMATION

Date of preparation or last revision of MSDS	Revised 13/02/2012 This SDS replaces document dated November 2008.
Contact Person/Point	Normal Hours: Mrs Kathleen Marsh Phone: +61 3 9282 1000 After Hours: Shift Supervisor Phone: 1800 033 498
Revisions Highlighted	The MSDS was reviewed. Minor changes were made to the information. See sections 13, 15 and 16. ...End Of MSDS...



Material Safety Data Sheet

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