



Material Safety Data Sheet

Page: 1 of 4

Infosafe No. 3NU2P Issue Date : November 2006 ISSUED by NUFARM

Product Name : **Roundup Ready® Herbicide**

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name Roundup Ready® Herbicide
Product Code 0904
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. 24hr 1800 033 498
Telephone/Fax Number Tel:
(03) 9282-1000
Fax:
(03) 9282-1001
Recommended Use For the control of many annual and perennial weeds in Roundup Ready® and Roundup Ready Flex® crops and other situations as per the Directions for Use table on the label.
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 HAZARDOUS SUBSTANCE.
NON-DANGEROUS GOODS.
Hazard classification according to the criteria of NOHSC.
Dangerous goods classification according to the Australia Dangerous Goods Code.
Risk Phrase(s) R41 Risk of serious damage to eyes.
Safety Phrase(s) S13 Keep away from food, drink and animal feeding stuffs.
S2 Keep out of reach of children.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/39 Wear suitable protective clothing and eye/face protection.
Other Information Poisons Schedule S5

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization Solid

| Ingredients | Name | CAS | Proportion |
|--------------------|--|------------|-------------------|
| | Glyphosate (present as the mono-ammonium salt) | 1071-83-6 | 690 g/kg |
| | Ethoxylated Tallow Amine | 61791-26-2 | 10-30 %w/w |
| | Stabilisers (non-hazardous) | | Balance |

4. FIRST AID MEASURES

Inhalation Over-exposure by inhalation is improbable. Check for other causes of observed symptoms and seek medical advice.
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.
Rinse mouth thoroughly with water.
Skin Wash affected areas thoroughly with soap and water.
If irritation persists, seek medical advice.



Material Safety Data Sheet

Page: 2 of 4

Infosafe No. 3NU2P Issue Date : November 2006 ISSUED by NUFARM

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Eye If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes.
Seek medical advice immediately.

First Aid Facilities If poisoning occurs, contact a doctor or the Poisons Information Centre (Australia) on 13 11 26.

Advice to Doctor Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media Water, foam, carbon dioxide or dry chemical.

Hazards from Combustion Products Keep upwind.
This product, when wet, 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 and phosphorous.

Special Protective Equipment for fire fighters Breathable air apparatus may have to be worn if material is involved in fires especially in confined spaces.

Hazchem Code None Allocated

Other Information STOP FIRE WATER FROM ENTERING DRAINS OR WATER BODIES.

6. ACCIDENTAL RELEASE MEASURES

Spills & Disposal Recover the product by sweeping up or vacuuming without raising dust.
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 standards have been established for this product by Worksafe Australia, however, the TWA exposure standard for dusts not otherwise specified is 10 mg/m³.

Engineering Controls No special ventilation required.

Personal Protective Equipment When preparing product for use wear elbow-length PVC gloves and face shield or goggles.

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 NSW regulations require that people who use pesticides in their job or business must have training in the application of the materials. By 1st September, 2005 all users must have received such training.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Solid

Appearance Caramel coloured granules

Odour Musty odour



Material Safety Data Sheet

Page: 3 of 4

Infosafe No. 3NU2P Issue Date : November 2006 ISSUED by NUFARM

Product Name : **Roundup Ready® Herbicide**

Solubility in Water Soluble in water.
Specific Gravity 0.6 g/ml (bulk density)
Vapour Pressure N/A
Vapour Density (Air=1) N/A
Volatile Component N/A
Flammability Non combustible material.

10. STABILITY AND REACTIVITY

Incompatible Materials When wet, corrosive to mild steel, galvanised steel 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 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.
Skin May irritate the skin.
Eye The concentrate will cause severe irritation and possible damage unless washed off immediately.
Chronic Effects No information available, no chronic effects expected.
Acute Toxicity - Oral LD50 (rat) 2814 mg/kg for a similar product
Acute Toxicity - Dermal LD50 (rabbit) >5000 mg/kg for a similar product
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, 'ADI List', TGA, June 2006).
This material contains less than 0.4% sodium sulphite. In sulphite-sensitive individuals, skin reactions have been reported following dermal exposures and respiratory reactions have been reported on ingestion of food, or on ingestion or inhalation of medicines which contain related sulphiting agents (bisulphites or metabisulphites) as preservatives. Individuals with asthma may be more prone to these types of reactions.

12. ECOLOGICAL INFORMATION

Persistence / Degradability Adsorption studies indicate that glyphosate has very low mobility. Average field half life of glyphosate is 47 days.
Known Harmful Effects on the Environment Harmful to fish and other aquatic organisms (mainly due to the surfactant).
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, read the label for more information.



Material Safety Data Sheet

Page: 4 of 4

Infosafe No. 3NU2P Issue Date : November 2006 ISSUED by NUFARM

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Acute Toxicity - Fish The following is data for a similar product.
LC50 (96 hr) for rainbow trout is 3 mg/l

Acute Toxicity - Other Organisms The following data is for the active ingredient, glyphosate.
Birds: Not toxic to birds. LD50 for bobwhite quail is >3850 mg/kg
Bees: Not toxic to bees. LD50 >100 µg/bee.

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. Shake the last amount of product from the bag into application equipment. Thoroughly wash out the inner and add washings to the spray tank. Dispose of washed inner and cardboard box in landfill. Empty containers and product should not be burnt.

14. TRANSPORT INFORMATION

Transport Information It is good practice to separate this product from food, food related materials, animal feedstuffs, seed or fertilisers during transport.

U.N. Number None Allocated

Proper Shipping Name None Allocated

DG Class None Allocated

Hazchem Code None Allocated

Packing Group None Allocated

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

Hazard Category Irritant

AICS (Australia) All of the components in this product are listed on the Australian Inventory of Chemical Substances.

16. OTHER INFORMATION

Contact Person/Point Normal Hours: Mr Volker Maier Phone: (03) 9282 1000
After Hours: Shift Supervisor Phone: 1800 033 498

Revisions Highlighted The MSDS was reviewed. Minor changes were made to the information.

Other Information © Registered trademark of Monsanto
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