1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: Roundup Biactive Herbicide

Recommended Use of the Chemical Herbicide.

and Restrictions on Use

Supplier: Bayer Cropscience Pty Ltd (ABN 87 000 226 022)

Street Address: Level 1, 8 Redfern Rd

Hawthorn East, Victoria, 3123

Australia

Telephone Number: +61 3 9248 6888 **Facsimile:** +61 3 9248 6800

Emergency Telephone: Australia 1800 033 111 or +61 3 9663 2130 (All Hours)

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

2. HAZARDS IDENTIFICATION

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

Based on available information, not classified as hazardous according to Safe Work Australia; NON-HAZARDOUS CHEMICAL.

Classification of the chemical:

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations: Eye damage/irritation - Category 2B

Poisons Schedule (SUSMP): S5 Caution.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Product Description: Active ingredient is Isopropylamine salt of glyphosate.

| Components | CAS Number | Proportion | Hazard Codes |
|--|------------|------------|--------------|
| Isopropylamine salt of glyphosate | 38641-94-0 | 41.14% | H411 |
| Surfactant(s), water and minor formulating ingredients | - | 58.86% | - |

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

Inhalation:

Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Skin Contact:

Remove contaminated clothing and wash skin with running water. If irritation occurs seek medical advice.

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Eye Contact:

If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes.

Ingestion:

Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Never give anything by the mouth to an unconscious patient. Seek medical advice.

Indication of immediate medical attention and special treatment needed:

This product is not an inhibitor of cholinesterase. Treatment with atropine and oximes is not indicated.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Not combustible, however, if material is involved in a fire use: Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

Specific hazards arising from the chemical:

Not combustible, however following evaporation of the water component of the material, the residual material can burn if ignited. On burning will emit toxic fumes, including those of oxides of carbon, oxides of phosphorus, oxides of nitrogen.

Special protective equipment and precautions for fire-fighters:

Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion. Equipment should be thoroughly decontaminated after use.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures/Environmental precautions:

Clear area of all unprotected personnel. Do not allow container or product to get into drains, sewers, streams or ponds. If contamination of sewers or waterways has occurred advise local emergency services.

Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:

Slippery when spilt. Avoid accidents, clean up immediately. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. After cleaning, flush away any residual traces with water.

7. HANDLING AND STORAGE

This material is a Scheduled Poison S5 and must be stored, maintained and used in accordance with the relevant regulations.

Precautions for safe handling:

Avoid skin and eye contact and breathing in vapour, mists and aerosols. When using do not eat, drink or smoke. Keep out of reach of children. Wash hands thoroughly after handling. Thoroughly clean equipment after use. Launder contaminated clothing before reuse. Follow label warnings even after container is emptied since empty containers may retain product residues.

Conditions for safe storage, including any incompatibilities:

Store in a cool, dry, well ventilated place and out of direct sunlight. Do not store above 50°C. Store in the original container, tightly closed and away from foodstuffs. Store away from food, drink and animal feeding stuffs. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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Control Parameters: No value assigned for this specific material by Safe Work Australia.

Appropriate engineering controls:

Use in well ventilated areas. Keep containers closed when not in use.

Individual protection measures, such as Personal Protective Equipment (PPE):

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES.







Wear overalls, chemical goggles and impervious gloves. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. If determined by a risk assessment an inhalation risk exists, wear a suitable mist respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid

Colour: Green - Dark Green

Odour: Slight

Solubility: Miscible in water. Specific Gravity: 1.173 @ 25°C Relative Vapour Density (air=1): Not available Vapour Pressure (20 °C): Not available Flash Point (°C): Not applicable Flammability Limits (%): Not applicable **Autoignition Temperature (°C):** Not available **Boiling Point/Range (°C):** Not available 4.4 - 4.8 (80 g/L) pH: Viscosity: Not available **Evaporation Rate:** Not available

Partition Coefficient: log Pow: -3.2 @ 25°C (glyphosate)

10. STABILITY AND REACTIVITY

Reactivity: Reacts with mild steel, galvanised steel / zinc producing hydrogen gas which may

form explosive mixture with air.

Chemical stability: Stable under normal conditions of use.

Possibility of hazardous

reactions:

None known.

Conditions to avoid: Avoid exposure to direct sunlight. Avoid contact with foodstuffs.

Incompatible materials: Incompatible with strong alkalis.

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Hazardous decomposition

products:

Oxides of carbon. Oxides of phosphorus. Oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Indestion: No adverse effects expected, however, large amounts may cause nausea and

vomiting.

An eye irritant. Eye contact:

Skin contact: Contact with skin may result in irritation.

Inhalation: Breathing in mists or aerosols may produce respiratory irritation.

Acute toxicity: No LD50 data available for the product. However, based on similar product(s):

Oral LD50 (rat): >2000 mg/kg Dermal LD50 (rabbit): >2000 mg/kg

Minimal irritant (rabbit). Skin corrosion/irritation: Serious eye damage/irritation: Moderate irritant (rabbit).

Respiratory or skin

Not a skin sensitiser (quinea pig).

sensitisation:

Chronic effects: No information available for the product.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways. **Ecotoxicity**

48hr EC50 (Daphnia magna): 243 mg/L (for similar formulation) 96hr LC50 (rainbow trout): >1039 mg/L (for similar formulation)

13. DISPOSAL CONSIDERATIONS

Disposal methods:

Triple or preferably pressure 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.

For refillable container, empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage. Do not reuse empty container.

14. TRANSPORT INFORMATION

Road and Rail Transport

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

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Marine Transport

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea: NON-DANGEROUS GOODS.

Air Transport

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

15. REGULATORY INFORMATION

Classification:

Based on available information, not classified as hazardous according to Safe Work Australia; NON-HAZARDOUS CHEMICAL.

Classification of the chemical:

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations:

Eye damage/irritation - Category 2B

Poisons Schedule (SUSMP): S5 Caution.

This product is registered in Australia by the Australian Pesticides & Veterinary Medicines Authority (APVMA). APVMA product number 48518

16. OTHER INFORMATION

References:

Supplier Safety Data Sheet; 09/2013.

This safety data sheet has been prepared by Ixom Operations Pty Ltd Toxicology & SDS Services.

Reason(s) for Issue:

First Issue Primary SDS

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

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