

SAFETY DATA SHEET

1. Identification

Product name:	Concentrate Roundup® Weedkiller
Use:	For use as herbicide to control a wide range of weeds and grasses in garden beds, rockeries, driveways, along fence lines and garden edges, around buildings and prior to planting new lawns and garden areas.
Company name	MONSANTO AUSTRALIA LTD
address and contact details:	12/600 St Kilda Road Melbourne, Australia 3004. Telephone: (+61) 3 9522 7122 Fax: (+61) 3 9522 6122
	New Zealand Distributor: Tui Products Ltd Truman Lane, Te Maunga Mount Maunganui 3175 Telephone: (07) 575 2160 Fax: (07) 575 8462 Website: www.tuiproducts.co.nz
Emergency phone number:	New Zealand National Poisons Centre 0800 764 766 [0800 POISON]

2. Hazard Identification

Classified as hazardous according to the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001, New Zealand.

HSNO Approval Number: HSR000767

HSNO Classification(s): 9.1B

Pictogram(s):



Signal word: Not applicable

Hazard Statement(s): H411 Toxic to the aquatic environment with long lasting effects.

Prevention Statement(s): P103 Read label before use.
P273 Avoid release to environment.

Response Statement(s): P391 Collect spillage.

Storage Statement(s): -

Disposal Statement. P501 Dispose of product and container in accordance with any local or National regulations.

3. Composition/Information on Ingredients

Ingredient	CAS No	Proportion (%w/w)
Isopropylamine salt of glyphosate *	38641-94-0	41 - 42
Surfactant, formulating agents and water	Proprietary	58 - 59

*The product is formulated to contain equivalent to 360 g/L glyphosate (CAS No 1071-83-6)

4. First Aid Measures

For advice or in an emergency, contact the National Poisons Centre, tel 0800 764 766 [0800 POISON] or a doctor. Have product label or this Safety Data Sheet at hand.

- Inhalation:** In inhaled, move person to fresh air. Keep at rest in a position comfortable for breathing until recovered. Get medical advice if symptoms persist.
If person is not breathing, seek immediate medical assistance and give artificial respiration, preferably mouth to mouth.
- Ingestion:** Do NOT induce vomiting. Rinse mouth with water. Get immediate medical advice.
- Skin:** Wash affected area with plenty of soap and water. If irritation persists or develops, get medical advice.
- Eye contact:** Hold eyelids apart and flush continuously with water several minutes. Remove contact lenses if present, after the first 5 minutes and continue rinsing. If irritation persists or symptoms develop, seek immediate medical attention.
- First Aid Facilities:** Eye wash and washroom facilities.
- Advice to Doctor:** This product is not an inhibitor of cholinesterase.
- Antidote:** Treatment with atropine and oximes is not indicated.

5. Fire-fighting measures

- Flammability:** Product is non-combustible.
- Suitable extinguishing media:** Water, foam, dry chemical or carbon dioxide (CO₂) as appropriate for surrounding materials.
- Hazards from combustion:** Toxic and/or, irritating fumes or gases that may include carbon oxides, phosphorous oxides, nitrogen oxides.
- Decomposition temperature:** Not available.
- Specific hazards:** Prevent extinguishing media from entering waterways, drains or sewers.
- HAZCHEM Code:** 3Z
- Precautions for fire-fighters:** Wear Self-Contained Breathing Apparatus (SCBA) operated in positive pressure mode and full protective clothing to prevent exposure to vapours or fumes.

6. Accidental release measures

- Emergency procedures:** Wear personal protection equipment and clothing to minimise exposure. Contain spill. If unable to recover liquid, absorb with an inert absorbent material. Collect



and place in labelled container than can be sealed before disposal. If contamination of waterways, drains or sewers occurs, immediately inform local council and emergency services.

7. Handling and storage

Precautions for Safe Handling: Read label before use. Avoid inhalation of vapours and mists and contact with skin or eyes. Wear personal protection equipment and clothing to minimise exposure. Use in a well-ventilated area to avoid build-up of vapours and mists. Follow good occupational hygiene practices. Wash hands before eating, drinking, smoking or using toilet facilities. Wash contaminated clothing before re-use. Keep containers closed when not in use.

When mixing and/or applying, use only stainless steel, aluminium, brass, copper, fibreglass, plastic or plastic lined containers. Do NOT use galvanized steel or unlined steel (except stainless steel) as a reaction may produce hydrogen gas which is highly combustible and can flash or explode when ignited.

Conditions for Safe Storage: Keep out of reach of children. Store only in original container and away from food, drink and animal feed.

8. Exposure controls/personal protection

Health Exposure Standards: Workplace Exposure Standards (WES) have not been set by Worksafe NZ for this substance.

Biological limit values: None established

Personal Protective Equipment:

Respiratory Protection: Respiratory protection may be necessary under certain use conditions. Under such conditions, an approved respirator with a replaceable mist filter according to local standards (AS/NZS 1715), must be worn.

Eye Protection: Wear safety glass with side shields or safety goggles to avoid contact of solution with eyes.

Skin/ Body Protection: The wearing of impervious chemical resistant gloves, e.g. nitrile, neoprene, natural rubber, polyvinyl chloride (PVC) is recommended.

9. Physical and chemical properties

Form:	Liquid
Appearance:	Clear, pale amber
Odour:	Faint amine like
Melting point (°C):	No data
Boiling point (°C):	> 100
Decomposition temperature (°C):	No data
Flash point (°C):	Non flammable
Specific gravity (g/cc):	1.16 @ 25°C
pH:	4.4 – 5.0 (as 8% w/v aqueous solution)
Vapour pressure:	No data
Vapour density (Air=1):	No data
Evaporation rate:	No data
Solubility in water:	Soluble
Partition coefficient (log Pow):	-3.2 @ 25 °C (glyphosate)



10. Stability and reactivity

- Chemical Stability:** Stable under normal conditions of storage and handling.
- Conditions to avoid:** Extremes of temperature and direct sunlight.
- Incompatible materials:** Contact with galvanized steel or unlined mild steel which may produce hydrogen, a highly flammable gas.
- Hazardous decomposition products:** Thermal decomposition may produce toxic or irritating fumes and gases; may include carbon oxides, phosphorous oxides and nitrogen oxides.
- Hazardous polymerization:** Does not occur.

11. Toxicological information

- Ingestion:** May irritate gastric tract and cause nausea and vomiting. Potentially harmful if swallowed in large quantities resulting in hypotension and pulmonary oedema.
- Inhalation:** Product vapours may be irritating to nose, throat and respiratory system.
- Eye Contact:** May be slightly irritating causing discomfort; redness, itching and/or tearing.
- Skin Contact:** May be slightly irritating causing discomfort; redness, itching and/or swelling.
- Other Health Effects:** Product is not identified as sensitizer, mutagen and carcinogen or with adverse effects on fertility or unborn child, or to organs or systems.

Toxicological Information:

For concentrate of similar product:
Oral LD₅₀ (rat) > 5000 mg/kg b.w.
Dermal LD₅₀ (rabbit) > 5000 mg/kg b.w.
Inhalation LC₅₀ 4 hr aerosol (rat) 2.3 mg/L

12. Ecological information

- Ecotoxicity:** This product is toxic to aquatic life with long-lasting effects.
- Persistence and degradability:** Absorption studies indicate that glyphosate has very low mobility. Average field half-life of glyphosate is 47 days.
- Mobility:** Glyphosate is strongly absorbed by soil and therefore becomes practically immobile. Microbial degradation is the major cause of loss from soil with liberation of carbon dioxide.
- Bioaccumulation:** Glyphosate is not bio-accumulative.
BCF = <1 for bluegill sunfish.
Log Pow -3.2 @ 25 °C (for glyphosate)
- Ecotoxicity Information:** For glyphosate in form of isopropylamine salt;
Bluegill sunfish (*Lepomis macrochirus*) LC₅₀ (96 h) 45 mg/L
Daphnia magna LC₅₀ (48 h) 930 mg/L
Skeletonema costatum (diatom) EC₅₀ (96 hr) 1.2 mg/L



For glyphosate acid;
 Rainbow trout (*Oncorhynchus mykiss*) LC₅₀ (96 hr) 86 mg/L
 Bluegill sunfish (*Lepomis macrochirus*) LC₅₀ (96 h) 120 mg/L
Daphnia magna EC₅₀ (48 h) 780 mg/L
 Bobwhite quail (*Colinus virginianus*) LD₅₀ > 3850 mg/kg
 Honey bee (*Apis mellifera*) oral, LD₅₀ 100 µg/bee

Other Information: Environmental Exposure Limit (EEL) for glyphosate is 0.37 mg/L

13. Disposal considerations

Disposal Methods: Empty containers retain product residues and vapour. Triple rinse empty containers with water and use in spray mix. Do not allow product to enter drains or watercourses or dispose of where ground or surface waters may be affected. Dispose of empty containers in accordance with local or National regulations. Incinerate if appropriate facility/equipment is available. Do not use container for storing any other product.

14. Transport information

New Zealand This product is classified as a Dangerous Good, Class 9. Please consult the Land Transport Rule: Dangerous Goods 2005, and NZS 5433:2012 Transport of Dangerous Goods on Land for information.

UN Number: 3082

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S
(CONTAINS GLYPHOSATE)

DG Class: 9

Subsidiary Risk: -

Packing Group: III

HAZCHEM: 3Z



15. Regulatory information

New Zealand

Classified as hazardous according to the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001, New Zealand.

HSNO Approval number: HSR000767 Soluble concentrate containing 300 – 450 g/Litre glyphosate as the isopropylamine salt.

HSNO Controls: Refer to www.epa.govt.nz for all Controls relating to this product and use.

Note the additional Control 77A -Use restriction. Where the substance is applied onto or into water and the water has the potential to leave the place containing the application area, any application of the substance must be under the personal control of an approved handler.

16. Other information

Date of Issue: 9 February 2015.
Reasons for issue: SDS for New Zealand use.
Replaces: Not applicable.

Abbreviations:

EC50 50% effect concentration
EEL Environmental Exposure Limit
EPA Environmental Protection Authority
HSNO Hazardous Substance and New Organisms
LD50 50% lethal dose
STEL Short Term Exposure Limit (15 minute exposure period)
TWA Time-Weighted Average (8 hours exposure period)
WES Workplace Exposure Standard

References:

EPA www.epa.govt.nz
Supplier Safety Data Sheets

Other:

The information contained herein is given in good faith but no warranty, expressed or implied is made. Consult supplier if additional information or explanation is required.

End of safety data sheet