



## MATERIAL SAFETY DATA SHEET

Page 1 of 5  
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MSDS No. 1024

### STATEMENT OF HAZARDOUS NATURE

Classified as hazardous according to criteria of Worksafe Australia.

### COMPANY DETAILS

Company Scotts Australia Pty. Ltd.  
Address Australia: 11 Columbia Way Baulkham Hills, NSW, 2153  
New Zealand: 180c Great South Rd Takanini Auckland  
Telephone Number (02) 8853 7300  
Fax (02) 8853 7310  
Emergency Telephone Number Australia: 1800 033 111 New Zealand: 0800 734 607

### IDENTIFICATION

Product Name **ROUNDUP HERBICIDE**  
Other Names Glyphosate  
Manufacturers Product Code US S00012144 01/94  
UN Number None allocated  
Dangerous Goods Class Not a Dangerous Good  
Sub-Risk Class Not applicable  
Packaging Group Not applicable  
Hazchem Code N/A  
Poisons Schedule S5  
Uses Herbicide.

### Physical Description /Properties

Appearance & Odour Clear, viscous, amber-coloured solution, slight amine odour/odourless.  
Melting point/softening point  
Boiling Point  
Vapour Pressure  
Flashpoint >90 Pensky-Martens  
Flammability Limits Not flammable.  
Solubility in Water Soluble  
pH (1% solution) : 4.7  
Incompatibility  
Specific Gravity 1.17  
Bulk density  
Volatile Proportion  
Corrosiveness

### Ingredients

Ingredient	Chemical Name	CAS Number	Proportion %
Active ingredients	Glyphosate Isopropylamine Salt	38641-94-0	36% approx.
Inerts	Surfactant	Not disclosed	10-20%
	Water	7732-18-5	Balance

All constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

**HEALTH HAZARD INFORMATION**

**Health Effects**

Acute

Swallowed Ingestion may produce gastrointestinal discomfort, nausea, vomiting and diarrhoea. Ingestion of large quantities of the undiluted product may result in hypotension and lung oedema.

Eye Causes eye irritation.

Skin Prolonged contact may cause dermal irritation.

Inhaled

Chronic

**First Aid**

Swallowed If poisoning occurs, contact a doctor or Poisons Information Centre (13 11 26). If swallowed do not induce vomiting. Give a glass of water.

Eye Hold eyes open, flood with water for at least 15 minutes and see a doctor.

Skin Remove contaminated clothing and wash skin thoroughly.

Inhaled Remove victim to fresh air. If not breathing, give artificial respiration preferably mouth to mouth. Get medical attention.

First Aid Facilities Eye wash, washing facilities, water.

**Advice to Doctor** If further treatment guidance is required, contact Emergency Response Number: 1800 033 111.

Medical conditions which may be aggravated by contact None known.

**PRECAUTIONS FOR USE**

Exposure Standards No exposure limits have been established for this material or its components.

Engineering Controls No specific precautions recommended.

Personal Protection Precautionary Measures: Avoid contact with eyes, skin and clothing.

Eye Protection: Wear a face shield or chemical safety goggles to prevent eye contact during mixing/pouring operations or other activities in which eye contact with undiluted material may occur. Have eye-flushing equipment available.

Skin Protection: When handling the undiluted material wear elbow-length PVC gloves and face shield or goggles. Wash hands and contaminated skin thoroughly after handling. Launder contaminated clothing and clean protective equipment before re-use.

Respiratory Protection: Respiratory protection should not be required for normal use/handling. Avoid breathing spray mist. During periods of abnormal exposure to heavy spray or mist, use of respiratory equipment approved for pesticide vapour/mist is recommended. The respirator use limitations specified by the manufacturer must be observed. Respirator programs must be in compliance with AS 1715 and AS 1716.

Flammability Water based solution. Not combustible or flammable.

<b>SAFE HANDLING INFORMATION</b>
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Storage and Transport	Stable for at least 5 years under normal conditions of warehouse storage. Avoid contamination of fertilizers, spray materials, seed, feed, food stuffs or water by storage or disposal. Not classified as a Dangerous Good by the Australian Transport Code.
Spills and Disposal	<p>Observe all PRECAUTIONS FOR USE. Use of rubber gloves or rubber overshoes when cleaning up spills. Contain and absorb liquid spills on floor or other impervious surfaces with absorbent clays e.g. attapulgate, bentonite or kitty litter. Collect contaminated absorbent, place in plastic-lined metal drum and dispose of in accordance with instructions provided under Waste Disposal. Thoroughly scrub floor or other impervious surfaces with a strong industrial type detergent solution and rinse with water. Dig up liquid spills that soak into the ground, place in lined metal drums and dispose of as recommended under Waste Disposal. Separate leaking containers from non-leakers and transfer either the container or its contents to a plastic-lined drum or other non-leaking container and dispose of as recommended under Waste Disposal. Any recovered spilled liquid should be similarly collected and disposed of.</p> <p>Avoid contamination of fertilizers, spray materials, seed, feed, food stuffs or water by storage or disposal.</p> <p><u>Waste Disposal:</u> If wastes cannot be used according to label instructions or chemically reprocessed, dispose of in a landfill approved for pesticide disposal or bury under at least 500 mm of soil in a non-crop, non-pasture area away from water sources or homes. Dispose of in accordance with all applicable local and state laws.</p> <p><u>Containers:</u> Emptied containers retain material residue. Observe all labelled safeguards until container is cleaned, reconditioned or destroyed. Triple rinse container, replace cap, then offer for recycling or reconditioning. Otherwise, dispose of in an approved landfill or bury under at least 500mm of soil in a non-crop, non-pasture area away from water sources or homes. Small containers may be wrapped in paper and placed in domestic garbage bins. Keep material out of sewers, watersheds and water systems.</p>

Fire/Explosion Hazard    Extinguishing Media: Water spray, foam, dry chemical, carbon dioxide and/or any Class B extinguishing agent.

Special Fire Fighting Procedures: Fire fighters or other exposed to vapours, mists or products of combustion should wear full protective clothing including self-contained breathing apparatus. Thoroughly decontaminate equipment after use.

Unusual Fire and Explosion Hazards: None.

Reactivity Data: Stable for at least 5 years under normal conditions of warehouse storage. Hazardous polymerization does not occur. The product can react with caustic (basic) materials to liberate heat. This is not a polymerization but rather a chemical neutralization in an acid/base reaction. Non-corrosive to stainless steel, polyethylene and plastics. Corrosive to mild steel, galvanized steel, aluminium and zinc.

**DO NOT MIX, STORE OR APPLY THE PRODUCT OR SPRAY SOLUTIONS OF THE PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS.**

The product or spray solutions of the product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source. Spray solutions of the product should be mixed, stored and applied only in stainless steel, fibreglass, plastic and plastic-lined steel containers.

Hazardous Decomposition Products: None.

**OTHER INFORMATION**

**Environmental Information** Do not contaminate dams, rivers or streams with the product or used container. When controlling weeds in aquatic situations, minimise the entry of spray into the water. Surfactant in product can be toxic to some aquatic organisms. Preferably use ROUNDUP BIACTIVE in aquatic situations.

<b>Animal Toxicity Data</b>	Oral LD50 Dog	>5ml/kg, practically non-toxic
	Oral LD50 Goat	4,860mg/kg, slightly toxic
	48hr Oral LD50 Honeybee:	>100 micrograms/bee, practically non-toxic
	48hr Dermal LD50 Honeybee:	>100 micrograms/bee, practically non-toxic
	48hr EC50 Daphnia magna (with aeration):	37mg/L, slightly toxic
	48hr EC50 Daphnia magna (no aeration):	24mg/L, slightly toxic
	48hr EC50 Gammarus pseudolimnaeus:	42mg/L, slightly toxic
	96hr TL50 Carp:	19.7ppm, slightly toxic
	96hr LC50 Bluegill Sunfish (static):	14mg/L, slightly toxic
	96hr LC50 Bluegill Sunfish (flow-through):	5.8mg/L, moderately toxic
	96hr LC50 Rainbow Trout (static):	15-26mg/L, slightly moderate
	96hr LC50 Rainbow Trout (flow-through):	8.2mg/L, moderately toxic
	96hr LC50 Channel Catfish:	16mg/L, slightly toxic
	96hr LC50 Fathead Minnow:	9.4mg/L, moderately toxic
	96hr LC50 Coho Salmon:	22mg/L, slightly toxic
	96hr LC50 Chinook Salmon:	20mg/L, slightly toxic
	96hr LC50 Crayfish:	>1,000ppm, practically non-toxic

Carp contained in a static pond were unaffected during a 90 day observation period following exposure by aerial application of ROUNDUP herbicide at the normal use concentration. Tissue residue analyses indicated that glyphosate, the active ingredient in ROUNDUP, will not bioaccumulate. Exposure to ROUNDUP in freshwater concentrations of 0, 10, 103 and 990 microgram/L for 10 days did not impair the ability of salmon smolts to adapt to sea water.

Immersion of chicken eggs at 4 different embryo ages (0,6,12 and 18 days) for about 5 seconds in 1% or 5% v/v Roundup in water solutions was reported to have no adverse effect on the hatchability or time to hatch of eggs.

Brahman-cross heifers were given Roundup by gavage, at daily doses of 0, 400, 500, 630, 790 and 1000mg/kg for 7 consecutive days. Clinical signs of toxicity, including loss of appetite, diarrhoea and death (790 and 1000mg/kg) were observed at 500mg/kg and above. The no-effect level was considered to be 400mg/kg/day.

APVMA registration no. 56863

**CONTACT POINT**

Emergency Response for Transport and Exposure  
 Australia: 1800 033 111  
 New Zealand: 0800 734 607

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