

SCOTT'S AUSTRALIA PTY. LTD
Material Safety Data Sheet

Emergency Telephone Number (all hours): 1800 033 111

Poisons Information Centre Telephone Number: 13 11 26

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name Roundup ® Concentrate Weedkiller
Product Use Roundup ® Concentrate Weedkiller is a water soluble herbicide for non-selective control of many annual and perennial weeds
Company Name Scotts Australia Pty. Ltd
Address 11 Columbia Way, Baulkham Hills, NSW, 2153, Australia
Telephone number 02 8853 7300
FAX 02 8853 7310
Product Type Herbicide/Weedkiller

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Liquid
Active ingredient Isopropylamine salt of N-(phosphonomethyl)glycine; {Isopropylamine salt of glyphosate}
Composition

COMPONENT	CAS No.	Concentration, g/L (approximate)
Isopropylamine salt of Glyphosate	38641-94-0	360
Surfactant	+	~10%
Water and other minor formulating ingredients	+	Balance

+ Trade secret composition.

3. HAZARDS IDENTIFICATION

Emergency overview

Appearance and odour (colour/form/odour): Amber solution/ Liquid / Slight

WARNING!
CAUSES SUBSTANTIAL BUT TEMPORARY EYE INJURY
HARMFUL IF SWALLOWED
HARMFUL IF INHALED

Classified as hazardous according to criteria of NOHSC

Poisons Schedule: S5 (NOT TO BE TAKEN)

Potential health effects

Likely routes of exposure

Skin contact, eye contact

Eye contact, short term

May cause temporary eye irritation

Skin contact, short term

Not expected to produce significant adverse effects when recommended use instructions are followed.

Inhalation, short term

May be irritating by inhalation

Single ingestion

Harmful if swallowed.

Causes gastrointestinal tract irritation.

Refer to section 11 for toxicological and section 12 for environmental information.

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Australian Poisons Information Centre by phoning 13 11 26

Eye contact

If in eyes, hold eye open and rinse gently for 15-20 minutes.

Remove contact lenses, if present, after first 5 minutes, then continue rinsing.

Skin contact

Immediately wash affected skin with plenty of water.

Take off contaminated clothing, wristwatch, jewellery.

Wash clothes and clean shoes before re-use.

Inhalation

Remove to fresh air.

Ingestion

Immediately offer water to drink.

Get medical attention.

Never give anything by mouth to an unconscious person.

Do NOT induce vomiting unless directed by medical personnel.

Advice to doctors

This product is not an inhibitor of cholinesterase.

Antidote

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

5. FIRE-FIGHTING MEASURES

Flash point

Does not flash

Extinguishing media

If involved in a fire, Roundup Concentrate Weedkiller will not burn. Choose an extinguishing material to suit the burning material.

Recommended: Water, foam, dry chemical, carbon dioxide (CO₂)

Unusual fire and explosion hazards

None

Minimise use of water to prevent environmental contamination.

Environmental precautions: see section 6.

Hazardous products of combustion

Carbon monoxide (CO), phosphorus oxides (P_xO_y), nitrogen oxides (NO_x)

Fire fighting equipment

Self-contained breathing apparatus

Equipment should be thoroughly decontaminated after use.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protection recommended in section 8.

Environmental precautions

SMALL QUANTITIES:

Low environmental hazard.

LARGE QUANTITIES:

Minimise spread.

Contain spillage with sand bags or other means.

Keep out of drains, sewers, ditches and water ways.

Methods for cleaning up

SMALL QUANTITIES:

Flush spill area with water.

LARGE QUANTITIES:

Absorb in earth, sand or absorbent material.

Dig up heavily contaminated soil.

Collect in containers for disposal.

Refer to section 7 for types of containers.

Flush residues with small quantities of water.

Minimise use of water to prevent environmental contamination.

Refer to section 13 for disposal of spilled material.

7. HANDLING AND STORAGE

Good industrial practice in housekeeping and personal hygiene should be followed.

Handling

Avoid contact with eyes, skin and clothing.

Avoid breathing vapour or mist.

Wash hands thoroughly after handling or contact.

Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

When using, do not eat, drink or smoke.

Wash contaminated clothing before re-use.

Thoroughly clean equipment after use.

Do not contaminate drains, sewers and water ways when disposing of equipment rinse water.

Emptied containers retain vapour and product residue.

Observe all labelled safeguards until container is cleaned, reconditioned or destroyed.

Storage

Minimum storage temperature: 0 °C

Maximum storage temperature: 50 °C

Keep product in the original packaging.

Compatible materials for storage: stainless steel, aluminium, fibreglass, plastic, glass lining

Incompatible materials for storage: galvanised steel, unlined mild steel, see section 10.

Keep out of reach of children.

Keep away from food, drink and animal feed.

Maximum shelf life: 5 years (using normal conditions of warehouse storage)

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Airborne exposure limits

Components	Exposure Guidelines
Isopropylamine salt of Glyphosate	No specific occupational exposure limit has been established.
Water and minor formulating ingredients	No specific occupational exposure limit has been established.

Engineering controls

Have eye wash facilities immediately available at locations where eye contact can occur.

Eye protection

If there is potential for contact:

- Wear chemical goggles.
- Applicators and other handlers must wear eye protection.
- Have eye flushing material available.

Skin protection

Although this product does not present a significant skin concern, minimize skin contact by following good industrial hygiene practice.

If repeated or prolonged contact:

- Wear chemical resistant gloves.

Respiratory protection

If airborne exposure is excessive:

- Wear respirator.

Full facepiece/hood/helmet respirator replaces need for chemical goggles.

Respiratory protection programs must comply with all local/regional/national regulations.

9. PHYSICAL AND CHEMICAL PROPERTIES

These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

Color/color range:	Amber colored solution
Form:	Liquid
Odor:	Slight
Flash point:	Does not flash.
Specific gravity:	1.17
Solubility:	Water: Completely miscible.
pH (8% solution in water):	4.4 – 5.0
Partition coefficient (log Pow):	-3.2 @ 25 °C (Glyphosate)
Volatile Component	~50% (water is volatile material)

10. STABILITY AND REACTIVITY

Stability

Stable under normal conditions of handling and storage

Hazardous decomposition

Thermal decomposition that could occur if involved in a fire fueled by other flammable materials: Hazardous products of combustion: see section 5.

Materials to avoid/Reactivity

REACTS WITH GALVANISED STEEL OR UNLINED MILD STEEL TO PRODUCE HYDROGEN, A HIGHLY FLAMMABLE GAS THAT COULD EXPLODE IF IGNITED

11. TOXICOLOGICAL INFORMATION

This section is intended for use by toxicologists and other health professionals.

Data obtained on similar products and on components are summarized below.

Similar formulation

Acute oral toxicity

Rat, LD50 (limit test): > 5,000 mg/kg body weight
Practically non-toxic.
FIFRA category IV.

Acute dermal toxicity

Rat, LD50 (limit test): > 5,000 mg/kg body weight
Practically non-toxic.
FIFRA category IV.
No mortality.

Skin irritation

Rabbit, 6 animals, OECD 404 test:
Days to heal: 7
Primary Irritation Index (PII): 0.8/8.0
FIFRA category IV.
Slight irritation.

Eye irritation

Rabbit, 6 animals, OECD 405 test:
Days to heal: 10
Moderate irritation.
FIFRA category II.

Acute inhalation toxicity

Rat, male, LC50, 4 hours, aerosol: 1.6 mg/L
FIFRA category III.
Slightly toxic.

Skin sensitization

Guinea pig, Buehler test:
Positive incidence: 0 %

N-(phosphonomethyl)glycine; {glyphosate}

Mutagenicity

In vitro and in vivo mutagenicity test(s):
Not mutagenic.

Repeated dose toxicity

Rabbit, dermal, 21 days:
NOAEL toxicity: > 5,000 mg/kg body weight/day
Target organs/systems: none
Other effects: none

Rat, oral, 3 months:
NOAEL toxicity: > 20,000 mg/kg diet
Target organs/systems: none
Other effects: none

Carcinogenicity

Mouse, oral, 24 months:
NOEL tumour: > 30,000 mg/kg diet
NOAEL toxicity: ~ 5,000 mg/kg diet
Tumours: none
Target organs/systems: liver
Other effects: decrease of body weight gain, histopathologic effects

Rat, oral, 24 months:
NOEL tumour: > 20,000 mg/kg diet
NOAEL toxicity: ~ 8,000 mg/kg diet
Tumours: none

Target organs/systems: eyes

Other effects: decrease of body weight gain, histopathologic effects

Toxicity to reproduction/fertility

Rat, oral, 3 generations:

NOAEL toxicity: > 30 mg/kg body weight

NOAEL reproduction: > 30 mg/kg body weight

Target organs/systems in parents: none

Other effects in parents: none

Target organs/systems in pups: none

Other effects in pups: none

Developmental toxicity/teratogenicity

Rat, oral, 6 - 19 days of gestation:

NOAEL toxicity: 1,000 mg/kg body weight

NOAEL development: 1,000 mg/kg body weight

Other effects in mother animal: decrease of body weight gain, decrease of survival

Developmental effects: weight loss, post-implantation loss, delayed ossification

Effects on offspring only observed with maternal toxicity.

Rabbit, oral, 6 - 27 days of gestation:

NOAEL toxicity: 175 mg/kg body weight

NOAEL development: 175 mg/kg body weight

Target organs/systems in mother animal: none

Other effects in mother animal: decrease of survival

Developmental effects: none

12. ECOLOGICAL INFORMATION

General Precautions:

Do not spray in high winds.

Glyphosate is a non-selective contact herbicide. Spray drift can cause damage to other plants

This section is intended for use by ecotoxicologists and other environmental specialists.

Data obtained on product, similar products and on components are summarized below.

Aquatic toxicity, fish

Bluegill sunfish (*Lepomis macrochirus*):

Acute toxicity, 96 hours, static, LC50: 24 mg/L

Slightly toxic.

Rainbow trout (*Oncorhynchus mykiss*):

Acute toxicity, 96 hours, static, LC50: 42 mg/L

Slightly toxic.

Aquatic toxicity, invertebrates

Water flea (*Daphnia magna*):

Acute toxicity, 48 hours, static, EC50: 160 mg/L

Practically non-toxic.

Similar formulation

Aquatic toxicity, algae/aquatic plants

Green algae (*Selenastrum capricornutum*):

Acute toxicity, 72 hours, static, ErC50 (growth rate): 8.0 mg/L

Moderately toxic.

Green algae (*Selenastrum capricornutum*):

Acute toxicity, 96 hours, static, EC50: 2.6 mg/L

Moderately toxic.

Avian toxicity

Bobwhite quail (*Colinus virginianus*):

Dietary toxicity, 5 days, LC50: > 5,620 mg/kg diet
Practically non-toxic.

Mallard duck (*Anas platyrhynchos*):

Dietary toxicity, 5 days, LC50: > 5,620 mg/kg diet
Practically non-toxic.

Arthropod toxicity

Honey bee (*Apis mellifera*):

Oral/contact, 48 hours, LD50: > 100 µg/bee
Practically non-toxic.

Soil organism toxicity, invertebrates

Earthworm (*Eisenia foetida*):

Acute toxicity, 14 days, LC50: > 5,000 mg/kg dry soil
Practically non-toxic.

N-(phosphonomethyl)glycine: {glyphosate}

Bioaccumulation

Bluegill sunfish (*Lepomis macrochirus*):

Whole fish: BCF: < 1
No significant bioaccumulation is expected.

Dissipation

Soil, field:

Half life: 2 - 174 days
Koc: 884 - 60,000 L/kg
Adsorbs strongly to soil.

Water, aerobic:

Half life: < 7 days

13. DISPOSAL CONSIDERATIONS

Product

Keep out of drains, sewers, ditches and water ways.
Recycle if appropriate facilities/equipment available.
Burn in proper incinerator.
Follow all local/regional/national/international regulations.

Container

See the individual container label for disposal information.
Emptied containers retain vapour and product residue.
Observe all labelled safeguards until container is cleaned, reconditioned or destroyed.
Empty packaging completely.
Triple or pressure rinse empty containers.
Do NOT contaminate water when disposing of rinse waters.
Ensure packaging cannot be reused.
Do NOT re-use containers.
Store for collection by approved waste disposal service.
Recycle if appropriate facilities/equipment available.
Follow all local/regional/national/international regulations.

14. TRANSPORT INFORMATION

The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation.

U.N. Number	None allocated
Proper Shipping Label	None allocated

