

SAFETY DATA SHEET

TOUGH ROUNDUP® READY TO USE WEEDKILLER

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1. IDENTIFICATION

GHS Product Identifier TOUGH ROUNDUP® READY TO USE WEEDKILLER

Company Name SCOTTS AUSTRALIA PTY LTD

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Emergency phone number 1800 033 111

Recommended use of the chemical and restrictions on use Herbicide

2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture

Not classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Name	CAS	Proportion
Isopropylamine salt of glyphosate	38641-94-0	1-<2.5 %
Triethylamine salt of triclopyr	57213-69-1	0-<0.5 %
Ingredients determined not to be hazardous, including water.		Balance

4. FIRST-AID MEASURES

Inhalation

If inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms persist seek medical attention.

Ingestion

Do not induce vomiting. Wash out mouth thoroughly with water. Seek medical attention.

Skin

Wash affected area thoroughly with soap and water. If symptoms develop seek medical attention.

Eye contact

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. Seek medical attention.

First Aid Facilities

Eyewash and normal washroom facilities.

Advice to Doctor

Treat symptomatically. This product is not an inhibitor of cholinesterase. Antidote: Treatment with atropine and oximes is not indicated.

Other Information

For advice in an emergency, contact a Poisons Information Centre (Phone Australia 13 1126) or a doctor at once.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use carbon dioxide, dry chemical, foam, water mist or water spray

Unsuitable Extinguishing Media

Not available

Hazards from Combustion Products

Under fire conditions this product may emit toxic and/or irritating fumes and gases including carbon monoxide (CO), phosphorus oxides (PxOy), nitrogen oxides (NOx), hydrogen chloride (HCl).

Specific Hazards Arising From The Chemical

This product is non combustible. However, following evaporation of aqueous component under fire conditions, the non-aqueous component may decompose and/or burn. Minimise use of water to prevent environmental contamination.

Decomposition Temperature

Not available

Precautions in connection with Fire

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe location.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Wear appropriate personal protective equipment and clothing to prevent exposure. Increase ventilation. If possible contain the spill. Place inert absorbent material onto spillage. Collect the material and place into a suitable labelled container. Do not dilute material but contain. As a water based product, if spilt on electrical equipment the product will cause short-circuits. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid inhalation of vapours and mists, and skin or eye contact. Use only in a well ventilated area. Keep containers sealed when not in use. Prevent the build up of mists or vapours in the work atmosphere. Maintain high standards of personal hygiene i.e. Washing hands prior to eating, drinking, smoking or using toilet facilities.

Conditions for safe storage, including any incompatabilities

Store in a cool, dry, well-ventilated area, out of direct sunlight. Store in suitable, labelled containers. Keep containers tightly closed. Store away from incompatible materials. Ensure that storage conditions comply with applicable local and national regulations. Protect from freezing.

Partial crystallization may occur on prolonged storage below the minimum storage temperature. If frozen, place in warm room and shake frequently to put back into solution.

Storage Temperatures

Minimum storage temperature 5°C Maximum storage temperature 50°C

Recommended Materials

Stainless steel, aluminium, fibreglass, plastic, glass lining. Keep only in the original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values

No exposure standards have been established for this material by Safe Work, Australia. However, over-exposure to some chemicals may result in enhancement of pre-existing adverse medical conditions and/or allergic reactions and should be kept to the least possible levels.

Biological Limit Values

No biological limits allocated.

Appropriate Engineering Controls

Use with good general ventilation. If mists or vapours are produced, local exhaust ventilation should be used.

Respiratory Protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/ mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye Protection

Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/ face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

Hand Protection

Wear gloves of impervious material. Final choice of appropriate gloves will vary according to individual circumstances. i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Body Protection

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

Properties	Description	Properties	Description
Form	Liquid	Appearance	Colourless liquid
Colour	Colourless	Odour	Faint musky
Decomposition Temperature	Not available	Melting Point	Not available

9. PHYSICAL AND CHEMICAL PROPERTIES

Properties	Description	Properties	Description
Boiling Point	Not available	Solubility in Water	Soluble
Specific Gravity	1.003 (20°C)/(4°C)	рН	5.2
Vapour Pressure	Not significant volatility; aqueous solution	Vapour Density (Air=1)	Not applicable
Evaporation Rate	Not available	Odour Threshold	Not available
Density	1.003 g/cm³ (20°C)	Flash Point	Does not flash
Flammability	Non flammable	Auto-Ignition Temperature	Not available
Flammable Limits - Lower	Not available	Flammable Limits - Upper	Not available
Explosion Properties	No explosive properties	Oxidising Properties	Not available
Kinematic Viscosity	Not available	Dynamic Viscosity	Not applicable

Other Information

Log Pow: -3.2 (25°C) (glyphosate)

10. STABILITY AND REACTIVITY

Reactivity

Reacts with galvanised steel or unlined mild steel to produce hydrogen, a highly flammable gas that could explode.

Chemical Stability

Stable under normal conditions of storage and handling.

Reactivity and Stability

Reacts with galvanised steel or unlined mild steel to produce hydrogen, a highly flammable gas that could explode.

Conditions to Avoid

Extremes of temperature and direct sunlight. Protect from freezing.

Incompatible materials

Galvanised steel, unlined mild steel.

Hazardous Decomposition Products

Under fire conditions this product may emit toxic and/or irritating fumes and gases including carbon monoxide (CO), phosphorus oxides (PxOy), nitrogen oxides (NOx), hydrogen chloride (HCl).

Possibility of hazardous reactions

Reacts with galvanised steel or unlined mild steel to produce hydrogen, a highly flammable gas that could explode.

11. TOXICOLOGICAL INFORMATION

Toxicology Information

Toxicity data for material given below. With the exception of the eye irritation study, the rest of the data is for a similar formulation. Data for ingredients are listed in the other information of this section.

Acute Toxicity - Oral

Similar formulation LD50 (Rat, limit test): > 5,000 mg/kg body weight No mortality

Acute Toxicity - Inhalation

This product is not aerosolized during handling or use and is therefore not classified as hazardous under the Dangerous Preparation Directive 1999/45/EC

Acute Toxicity - Dermal

Similar formulation LD50 (Rat, limit test): > 5,000 mg/kg body weight No mortality

Ingestion

Not classified according to GHS criteria.

Inhalation

Not classified according to GHS criteria.

Skin

Not classified according to GHS criteria.

Similar formulation Skin irritation Rabbit, 3 animals, OECD 404 test: Redness, individual EU scores: 0.67; 0.33; 0.33 Swelling, individual EU scores: 0.00; 0.00; 0.00 Days to heal: 3 Slightly irritating to skin but not sufficient for classification.

Eye

Not classified according to GHS criteria.

Eye irritation

Rabbit, 3 animals, OECD 405 test: Conjunctival redness, mean EU score: 0.00 Conjunctival swelling, mean EU score: 0.00 Corneal opacity, mean EU score: 0.00 Iris lesions, mean EU score: 0.00 Days to heal: 1

Respiratory sensitisation Not expected to be a respiratory sensitiser.

Skin Sensitisation

Not expected to be a skin sensitiser.

Guinea pig, 3-induction Buehler test: Positive incidence: 0 %

Germ cell mutagenicity Not considered to be a mutagenic hazard.

Carcinogenicity Not considered to be a carcinogenic hazard.

Reproductive Toxicity Not considered to be toxic to reproduction.

STOT-single exposure Not expected to cause toxicity to a specific target organ.

STOT-repeated exposure Not expected to cause toxicity to a specific target organ.

Aspiration Hazard Not expected to be an aspiration hazard.

Other Information N-(phosphonomethyl)glycine; (glyphosate acid)

Genotoxicity Not genotoxic

Carcinogenicity Not carcinogenic in rats or mice.

Reproductive/Developmental Toxicity Developmental effects in rats and rabbits only in the presence of significant maternal toxicity. Reproductive effects in rats only in the presence of significant maternal toxicity. Triethylamine salt of triclopyr Following information has been found in the literature.

Genotoxicity Not genotoxic

Carcinogenicity

Reported to be not carcinogenic to laboratory animals by some suppliers and not classifiable as to human carcinogenicity by the USEPA and other suppliers.

Reproductive/Developmental Toxicity Developmental effects in rats and rabbits only in the presence of significant maternal toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Data obtained on a similar glyphosate formulation and/or glyphosate are summarized below.

Persistence and degradability Not available

NOT available

Mobility Not available

Other Adverse Effects Not available

Environmental Protection Prevent this material entering waterways, drains and sewers.

Acute Toxicity - Fish

Similar formulation Rainbow trout (Oncorhynchus mykiss): Acute toxicity (limit test), 96 hours, static, LC50: > 150 mg/L

Acute Toxicity - Daphnia

Similar glyphosate formulation Water flea (Daphnia magna): Acute toxicity, 48 hours, static, EC50: 1634 mg/L

Acute Toxicity - Algae

Similar formulation Green algae (Selenastrum capricornutum): Acute toxicity, 72 hours, static, ErC50 (growth rate): > 150 mg/L

Acute Toxicity - Other Organisms

Similar formulation Soil organism toxicity, invertebrates Earthworm (Eisenia foetida): Acute toxicity, 14 days, LC50: > 1.250 mg/kg soil

Other Information

N-(phosphonomethyl)glycine; { glyphosate acid} Avian toxicity Bobwhite quail (Colinus virginianus): Dietary toxicity, 5 days, LC50: > 4640 mg/kg diet Mallard duck (Anas platyrhynchos): Dietary toxicity, 5 days, LC50: > 4640 mg/kg diet Bobwhite quail (Colinus virginianus): Acute oral toxicity, single dose, LD50: > 3851 mg/kg body weight Arthropod toxicity Honey bee (Apis mellifera): Oral, 48 hours, LD50: 100 μg/bee Honey bee (Apis mellifera): Contact, 48 hours, LD50: > 100 µg/bee

Bioaccumulation Bluegill sunfish (Lepomis macrochirus): Whole fish: BCF: < 1 No significant bioaccumulation is expected.

Dissipation Soil, field: Half life: 2 - 174 days Koc: 884 - 60000 L/kg Adsorbs strongly to soil.

Water, aerobic: Half life: < 7 days

13. DISPOSAL CONSIDERATIONS

Disposal considerations

The disposal of the spilled or waste material must be done in accordance with applicable local and national regulations.

14. TRANSPORT INFORMATION

Transport Information

Road and Rail Transport (ADG Code):

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) (7th edition).

Marine Transport (IMO/IMDG):

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Air Transport (ICAO/IATA): Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

U.N. Number None Allocated

UN proper shipping name None Allocated

Transport hazard class(es) None Allocated

Special Precautions for User Not available

IMDG Marine pollutant No

Transport in Bulk Not available

15. REGULATORY INFORMATION

Regulatory information

Not classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

16. OTHER INFORMATION

Date of preparation or last revision of SDS

SDS Reviewed: October 2015, Supersedes: August 2012

References

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.

Standard for the Uniform Scheduling of Medicines and Poisons.

Australian Code for the Transport of Dangerous Goods by Road & Rail.

Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

Workplace exposure standards for airborne contaminants, Safe work Australia.

American Conference of Industrial Hygienists (ACGIH).

Globally Harmonised System of classification and labelling of chemicals.

END OF SDS

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