

# SAFETY DATA SHEET

## TOUGH ROUNDUP® READY TO USE WEEDKILLER

Infosafe No.: LQ1JG  
ISSUED Date : 14/10/2015  
ISSUED by: Evergreen Garden Care  
Australia Pty. Ltd.

### 1. IDENTIFICATION

**GHS Product Identifier**

TOUGH ROUNDUP® READY TO USE WEEDKILLER

**Company Name**

Evergreen Garden Care Australia Pty. Ltd.

**Address**

Level 2,  
32 Lexington Drive, Bella Vista  
NSW 2153 Australia

**Telephone/Fax Number**

Tel: (02) 8602 9000

Fax: (02) 8602 9001

**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.

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**5. FIRE-FIGHTING MEASURES**

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**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.

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**6. ACCIDENTAL RELEASE MEASURES**

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**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.

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**7. HANDLING AND STORAGE**

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**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 incompatibilities**

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**

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#### **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.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Properties	Description	Properties	Description
Form	Liquid	Appearance	Colourless liquid
Colour	Colourless	Odour	Faint musky
Decomposition Temperature	Not available	Melting Point	Not available
Boiling Point	Not available	Solubility in Water	Soluble
Specific Gravity	1.003 (20°C)/(4°C)	pH	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/cm <sup>3</sup> (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 (P<sub>x</sub>O<sub>y</sub>), nitrogen oxides (NO<sub>x</sub>), 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

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### Ecotoxicity

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

### Persistence and degradability

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

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#### Disposal considerations

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

### 14. TRANSPORT INFORMATION

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#### 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

#### IMDG Marine pollutant

No

#### Transport in Bulk

Not available

#### Special Precautions for User

Not available

## 15. REGULATORY INFORMATION

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### 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).

### Poisons Schedule

S6

## 16. OTHER INFORMATION

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### 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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