

1. PRODUCT & COMPANY IDENTIFICATION

Product Name	TerbGuard 500
Recommended Use	Herbicide
Suppliers Details	Rainbow & Brown Limited 68A Tallyho Street, Rotorua, New Zealand PO Box 10049, Mail Centre, Rotorua, 3046
Web Address	www.rainbowbrown.co.nz
Email address	mail@rainbowbrown.co.nz
Telephone	(07) 350 2009 (office hours), 0508 299 299 (free phone, office hours)
Emergency Telephone	0800 CHEMCALL (0800 243 622) (24 hours)
National Poison Centre	0800 POISON (0800 764 766) (24 hours)
Date of Issue	19 September 2025
Expiry Date	19 September 2030

2. HAZARD IDENTIFICATION

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020.

EPA Approval No	HSR100978
Hazard Pictograms	
Signal Word	WARNING

GHS Classification & Category	HSNO Classification	Hazard Code	Hazard Statement
Hazardous to the aquatic environment (acute) Category 1	9.1A	H400	Very toxic to aquatic life
Hazardous to the aquatic environment (chronic) Category 1	9.1A	H410	Very toxic to aquatic life with long lasting effects
Hazardous to the terrestrial vertebrates	9.3C	H433	Harmful to terrestrial vertebrates
Hazardous to soil organisms	9.2A	H421	Very toxic to the soil environment

TerbGuard 500

Prevention Code	Prevention Statement
P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children
P103	Read label before use
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Avoid contact with eyes and skin. Do not breathe in spray mist. When applying, wear personal protection as described in section 8. Take all reasonable steps to ensure that this product does not cause any significant adverse effects to the environment beyond the application area. Do not apply directly into or onto water.

Response Code	Response Statement
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.

First aid measures described in section 4. Contain and collect spillage for disposal. In an emergency call 111, Police or Fire Brigade. For specialist advice in an emergency only, call 0800 CHEMCALL (0800 243 6225) (24 hrs).

Storage Code	Storage Statement
	See section 7.

Disposal Code	Disposal Statement
P501	In accordance with the EPA Hazardous Substances (Disposal) Notice 2017. Refer to Section 13 of this SDS.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Concentration (%w/w)
Terbutylazine	5915-41-3	50%
Surfactant/Dispersing Agent	68425-94-5	< 10%
Biocide	5596-84-9	0.1%
Non specified non-hazardous ingredients	Proprietary	To 100%

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non-hazardous ingredients are also possible.

4. FIRST-AID MEASURES

If medical advice is needed, have product container or label at hand. For advice call the National Poisons Centre or a Doctor.

Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if easy to do so. Continue rinsing. Seek medical advice if irritation persists.
Skin	Wash with plenty of soap and water. Seek medical advice if irritation or rash occurs.
Ingestion	Never give anything by mouth to an unconscious person. If swallowed do NOT induce vomiting. Rinse mouth. For advice, contact the National Poisons Centre (0800 764 766).
Inhalation	Remove patient to fresh air. Lay down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance immediately.
Workplace Facilities	Hand wash facility. Eye wash facility.
Advice to Doctor	Treat symptomatically.
National Poison Centre	0800 POISON (0800 764 766) (24 hours)

Symptoms of Exposure which could occur if this material is not handled in accordance with instructions:

Eye Contact	No data available
Skin	No data available
Ingestion	No data available
Inhalation	No data available

5. FIRE-FIGHTING MEASURES

Extinguishing Media	Alcohol resistant foam is preferred firefighting medium but if it is not available, standard foam can be used. Prevent extinguishing media from entering drains.
Fire & Explosion Hazards	Non-flammable. Thermal decomposition may produce toxic fumes and compounds.
Fire Fighting Instructions	Wear full protective clothing and self-contained breathing apparatus. Keep upwind. Contain runoff. Cool fire exposed containers with water spray.
Hazchem Code	3Z

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear protective clothing as described in section 8. Do not inhale fumes. Exclude non-essential people from the area.
Environmental Precautions	Prevent further spillage or leakage. Prevent material from entering drains, waterways, etc.

TerbGuard 500

Clean Up	Absorb spill with inert material such as attapulgite, soil, etc., and place in a waste container. Wash area with water and absorb with further inert material. Dispose of safely to an approved landfill.
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7. HANDLING AND STORAGE

Storage	Store in original container, tightly closed, in a secure, dry, cool and well-ventilated area avoiding direct sunlight and away from foodstuffs, fertilisers or seeds. Storage must be in accordance with the current version of NZS 8409 Management of Agrichemicals. Stores containing 100 litres or more of TerbGuard 500 require secondary containment, signage, and an emergency response plan.
Handling and Use	Do not handle until all safety precautions have been read and understood. Use personal protective equipment. The person mixing, loading or applying TerbGuard 500 should be under the control of a suitably qualified handler. It is the duty of the PCBU that a person who uses, handles, manufactures or stores a hazardous substance (including hazardous waste) is provided information, instruction and training in accordance with Regulation 4.5 of the Health and Safety at work (Hazardous Substances) Regulations 2017. This product must not be applied into or onto water. Avoid skin and eye contact and inhalation of spray mist.
REI	None specified (Also refer to Section 15).

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

Tolerable Exposure Limit	None established
Workplace Exposure Standards	None established
Engineering Controls	Handle in well ventilated areas, generally natural ventilation is adequate.
Personal Protection	
Respiratory	NIOSH approved half face mask with organic vapour cartridge and dust/mist prefilter
Skin	Cotton overalls snugly fitting at the neck, wrist and ankle, boots and gloves
Eye	Safety glasses/goggles when applying

Clean protective equipment after use

9. PHYSICAL & CHEMICAL PROPERTIES

Appearance	White to beige liquid
Odour	Negligible
Odour Threshold	Information not available
pH	6.0 – 8.0

TerbGuard 500

Melting Point/Freezing Point	175.5°C
Boiling Point	Information not available
Flash Point	>95°C
Flammability	Non combustible material
Upper/Lower Flammability	Information not available
Vapour Pressure	0.09 mPa (25°C)
Vapour Density	Information not available
Relative/Specific Gravity	1.12 g/ml @ 25°C (typical)
Water Solubility	Soluble Suspension Concentrate (Terbuthylazine, 8.5 mg/L @ 20°C)
Partition Coefficient: n-octanol/water	Kow logP=3.4 (25°C)
Auto-ignition Temperature	Information not available
Decomposition Temperature	Information not available
Kinematic Viscosity	Information not available
Particle Characteristics	Information not available

10. STABILITY & REACTIVITY

Stability	Stable under normal conditions in original container for 2 years.
Hazardous Reactions	None.
Incompatibility	Strong acids/bases. Oxidising and reducing agents.
Hazardous Decomposition Products	Thermal decomposition may product toxic fumes and compounds.

11. TOXOLOGICAL INFORMATION

This section describes effects which could occur if this material is not handled in accordance with this data sheet and label instructions.

Acute Oral Toxicity	LD50 (rats) > 1503 mg/kg for terbuthylazine
Acute Dermal Toxicity	LD50 (rats) > 2000 mg/kg for terbuthylazine
Acute Inhalation Toxicity	LC50 (rats) > 5.3 mg/kg (4 hours) for terbuthylazine
Skin corrosion/irritation	Information is not available
Serious eye damage/eye irritation	Information is not available
Respiratory or skin sensitisation	Information is not available
Germ Cell Mutagenicity	Information is not available

Carcinogenicity	Information is not available
Reproductive Toxicity	Information is not available
Specific Organ Toxicity – Single exposure	Information is not available
Specific Organ Toxicity – Repeated exposure	Information is not available
Aspiration Hazard	Information not available

12. ECOLOGICAL INFORMATION

This section describes effects which could occur if this material is not handled in accordance with this data sheet and label instructions

The following information is presented in respect of the active ingredient:

TOXICITY	Very toxic to aquatic life with long lasting effects. Very toxic to the soil environment. Harmful to terrestrial vertebrates.
Ecotoxicity	LC50 (96hr, Rainbow Trout) 3.4mg/L LC50 (96hr, Mysideopsis bahia) 0.109 mg/L EC50 (5day, Selenastrum capricornum) 0.0032mg/L
Persistence & Degradability	No
Bioaccumulation	No
Mobility in Soil	High mobility
Environmental Exposure Limit	Information is not available

13. DISPOSAL CONSIDERATIONS

Product	Dispose of product by using it in accordance with the label. Waste product should be disposed of to a suitable landfill. For disposal of large quantities contact Rainbow & Brown Ltd.
Container	Triple rinse empty container and add rinsate to spray tank. Dispose of to a suitable landfill. Do not burn. Do not use packaging for any other purpose.

14. TRANSPORT INFORMATION

Dangerous Goods	
UN Number	3082
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (terbuthylazine 50%)
Class	9
Subsidiary Class	N/A
Packing Group	III

Additional Information	Marine Pollutant
MTQ (Non-Commercial)	1000L

15. REGULATORY INFORMATION

ACVM Registration No.	Exempt from ACVM registration
EPA Approval No	HSR100978
Qualified Person	Not required
Certified Handler	Not required
Workplace Only	No
Location Certificate	Not required
Tracking	Not required
Record Keeping	Not required (unless more than 3L is applied within 24 hours, and which is likely to enter air or water and leave the application area)
Signage	100L
Emergency Response Plan	100L
Secondary Containment	100L
Additional Requirements	The maximum application rate of this substance is set at 9.9 kg of terbuthylazine/hectare Refer to NZS 8409:2004 'Management of Agrichemicals', and relevant local and regional council plans

16. OTHER INFORMATION

SDS review Date	19 September 2025
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Glossary

ACVM	Agricultural Compounds and Veterinary Medicines group of the Ministry of Primary Industries
DT₅₀	Time (days) for 50% reduction in concentration
EC₅₀	Concentration required to produce an effect in 50% of organisms
Environmental Exposure Limit	Maximum concentration limit of a substance in an environmental medium e.g. water, soil.
EPA Notice	Hazardous Property Controls Notice 2017
ERP Guide	Dangerous Goods – Initial Emergency Response Guide SNZ HB
GHS	Globally Harmonised System

HSNO	Hazardous Substances & New Organisms Act
Koc	Organic carbon partition coefficient
LFL	Lower Flammability Limit
LC₅₀	Lethal Concentration in air or water for 50% of test organisms
LD₅₀	Lethal Dose for 50% of test organisms
NOEL	No Observable Effect Level
OSHA	Occupational Safety & Health Administration (USA)
OSH or WorkSafe	WorkSafe New Zealand
PEL	Permissible Exposure Level
Pow	Octanol water partition coefficient (ratio of concentration of a chemical in octanol and water at equilibrium and at a specified temp.)
pH	Measure of acidity/alkalinity of a substance on a 1-14 scale (1=strong acid, 14 = strongly alkali)
STEL	Short Term Exposure Limit
TEL	Tolerable Exposure Limit
TLV	Threshold Limit Value – an exposure limit set by a competent authority
TWA	Time Weighted Average – average concentration of a chemical in air over a total exposure time (usually 8 hours)
UFL	Upper Flammability Limit
WES	Workplace Exposure Standard – set by WorkSafe NZ

Rainbow & Brown Ltd Safety Data Sheet Disclaimer

This Safety Data Sheet has been prepared by Rainbow & Brown Ltd and summarises information on this product and safe handling procedures. The information is based on data provided to Rainbow & Brown Ltd or obtained from third-party sources and represents the current understanding of appropriate safety and handling precautions at the time of issue.

Users must ensure they are working with the most current version of this SDS and should familiarise themselves with both the product label and this document. Each user should consider this information in the context of their specific handling and use of the product, including when used in conjunction with other products.

While Rainbow & Brown Ltd has exercised due care to include accurate and up-to-date information, no warranty is provided as to the accuracy, completeness, or suitability of this information. Users are responsible for determining whether this information is suitable and accurate for their particular purposes and specific applications.

For additional clarification regarding any aspect of the product or to ensure an appropriate risk assessment can be conducted, users should contact Rainbow & Brown Ltd directly or obtain further information from the manufacturer. To the fullest extent permitted by law, Rainbow & Brown Ltd accepts no liability for any loss, injury, or damage (including consequential loss) that may result from reliance on the information contained in this SDS. This information is provided in good faith, but no express or implied warranty is made.