

1. PRODUCT & COMPANY IDENTIFICATION

Product Name	DoubleShot
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	9 September 2025
Expiry Date	9 September 2030

2. HAZARD IDENTIFICATION

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

EPA Approval No	HSR000206
Hazard Pictograms	
Signal Word	WARNING

GHS Classification & Category	HSNO Classification	Hazard Code	Hazard Statement
Eye irritation, Category 2	6.4A	H319	Causes serious eye irritation
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 soil environment	9.2A	H421	Very toxic to the soil environment

Prevention Code	Prevention Statement
P102	Keep out of reach of children
P103	Read label before use
P264	Wash face and hands thoroughly after handling.
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 the spray mist. When mixing or 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
P101	If medical advice is needed, have product container or label at hand
P305+P351+P338	IF IN EYES: Rinse cautiously for several minutes. Remove contact lenses if easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.
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
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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	38%
Glyphosate isopropylamine	38641-94-0	11%
Surfactant	Proprietary	<10%
Preservative	Proprietary	<1%
Non-hazardous ingredients	Proprietary	Balance 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	Remove contaminated clothing and flush with water. If skin irritation occurs, get medical advice/attention. Wash contaminated clothing before reuse.
Ingestion	DO NOT induce vomiting. Rinse mouth. Call the Poisons Centre or doctor if you feel unwell.
Inhalation	Remove to fresh air and keep at rest in a position comfortable for breathing. Call a doctor if you feel unwell. Apply artificial respiration if not breathing.
Workplace Facilities	Hand wash facility. Eye wash facility.
Advice to Doctor	No specific antidote. 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	Irritation and eye damage
Skin	Mild irritation
Ingestion	Nausea, vomiting, gastrointestinal discomfort
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.
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Fire & Explosion Hazards	Non-flammable. Thermal decomposition may produce toxic fumes and compounds.
Fire Fighting Instructions	Wear self-contained breathing apparatus and protective clothing. 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. Exclude non-essential people from the area.
Environmental Precautions	Prevent further spillage or leakage. Prevent material from entering drains, waterways, etc.
Clean Up	Exclude non-essential people from the area. Wear protective clothing and prevent chemical from entering waterways. Absorb spill with inert material such as attapulgate, 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.

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 DoubleShot require secondary containment, signage, and an emergency response plan.
Handling and Use	Keep out of reach of children. Refer to prevention statements in section 2 above. Keep people and animals away from the area while treating and for the duration of the REI. This product must be under the control of a suitably qualified handler during mixing, loading and use.
REI	None specified (Also refer to Section 15).

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

Tolerable Exposure Limit	None established
Workplace Exposure Standards	None
Engineering Controls	Select spray application equipment to minimise exposure to operator and bystanders
Personal Protection	
Respiratory	Not required where spray mist is not inhaled. Otherwise, respirator (organic vapour and particulate matter) is required.

Skin	Chemical resistant overalls snugly fitting at the neck, wrist and ankle, boots and gloves
Eye	Wear eye/face protection

Clean protective equipment after use

9. PHYSICAL & CHEMICAL PROPERTIES

Appearance	White to beige viscous liquid
Odour	Information not available
Odour Threshold	Information not available
pH	4.5 – 7.0
Melting Point/Freezing Point	Information not available
Boiling Point	Information not available
Flash Point	Information not available
Flammability	Not flammable
Upper/Lower Flammability	Information not available
Vapour Pressure	Information not available
Vapour Density	Information not available
Relative/Specific Gravity	1.10 – 1.14 g/ml @25°C
Water Solubility	Soluble in water
Partition Coefficient: n-octanol/water	Information not available
Auto-ignition Temperature	Does not apply
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 two years
Hazardous Reactions	None expected
Incompatibility	Strong acids/bases. Oxidising and reducing agents.
Hazardous Decomposition Products	Hazardous polymerisation will not occur. Thermal decomposition may produce 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	Terbutylazine LD50 (rat) 1503 mg/kg Glyphosate isopropylamine LD50 (rat) > 2000mg/kg
Acute Dermal Toxicity	Terbutylazine LD50 (rat) > 2000mg/kg Glyphosate isopropylamine LD50 (rat) > 2000mg/kg
Acute Inhalation Toxicity	Terbutylazine LD50 (4hr, rat) > 5.3 mg/kg
Skin corrosion/irritation	Information not available
Serious eye damage/eye irritation	Causes serious eye irritation
Respiratory or skin sensitisation	Information not available
Germ Cell Mutagenicity	Information not available
Carcinogenicity	Information not available
Reproductive Toxicity	Information not available
Specific Organ Toxicity – Single exposure	Information not available
Specific Organ Toxicity – Repeated exposure	Information 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 ingredients:	
TOXICITY	Very toxic to aquatic life with long lasting effects. Very toxic to the soil environment.
Precautions	Qualified Handler: This product must be under the control of a suitably qualified handler during handling, mixing, loading or application. This product must not be applied directly into or onto water. Avoid contamination of any waterways with product or empty container. Selective Herbicide - very toxic to some plant species. Spray Drift Hazard – May cause serious damage to other desirable plants. Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the area of application. NOT TO BE USED ON PASTURE OR CROPLAND.
Ecotoxicity	Terbutylazine LC50 (96hr, Rainbow Trout) 3.4mg/L LC50 (96hr, Mysidopsis bahia) 0.109 mg/L EC50 (5day, Selenastrum capricornum) 0.0032 mg/L

	Glyphosate Isopropylamine LC50 (96hr, bluegill sunfish) 45 mg/L EC50 (48hr, water flea) 134 mg/L EC50 (96hr, diatom) 1.2mg/L
Persistence & Degradability	No
Bioaccumulation	No
Mobility in Soil	Ye
Environmental Exposure Limit	None set

13. DISPOSAL CONSIDERATIONS

Avoid contamination of any water supply with chemical or empty container. Follow all local, regional and national laws and regulations regarding hazardous waste disposal.

Product	Dispose of this product only by using according to the label directions or if this is not possible alternatively contact Rainbow & Brown for advice. Do not dispose of this product down drains or sewers.
Container	Triple rinse empty containers and add residue to spray tank. Do not burn containers. Crush or puncture and bury in a suitably approved landfill or through Agrecovery recycling service.

14. TRANSPORT INFORMATION

Dangerous Goods	
UN Number	3082
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (contains terbuthylazine 38%, glyphosate 11%).
Class	9
Subsidiary Class	-
Packing Group	III
Additional Information	Marine Pollutant
MTQ (Non-Commercial)	1000L

15. REGULATORY INFORMATION

ACVM Registration No.	Exempt from registration under the ACVM Act 1997
EPA Approval No	HSR000206
Qualified Person	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	Refer to NZS 8409:2004 'Management of Agrichemicals', and relevant local and regional council plans

16. OTHER INFORMATION

SDS review Date	9 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
K_{oc}	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.