



Triclo Herbicide

1. PRODUCT & COMPANY IDENTIFICATION

Product Identification/Name:	Triclo
Product Use:	Herbicide
Company Identification:	Rainbow & Brown Limited 68A Tallyho Street, Rotorua, New Zealand PO Box 10049, Mail Centre, Rotorua, 3046
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Toll-Free Phone:	0508 299 299
After Hours Emergency	+64 27 498 2574
National Poisons Centre	0800 764 766
Website:	www.rainbowbrown.co.nz
Date of Issue:	18 January 2019
Latest Revision Date:	18 January 2019

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture (HSNO):	6.1D oral – Acutely toxic substance if swallowed 6.3B – Mild skin irritant 6.4A – Eye irritant 6.5B – Contact sensitiser 6.9B oral – Harmful to human target organs or systems (kidneys) 9.1A – Very ecotoxic to aquatic life with long lasting effects 9.2A – Very ecotoxic in the soil environment 9.3C – Harmful to terrestrial vertebrates
Classification of the substance or mixture (GHS):	Acute toxicity: Oral Category 4 Skin corrosion/irritation Category 3 Serious eye damage/eye irritation Category 2 Systemic target organ systemic toxicity (single exposure) Category 2 Aquatic toxicity (chronic) Category 1

Storage:	<p>P333 + P313 – If skin irritation or rash occurs: Get medical advice/attention.</p> <p>P363 – Wash contaminated clothing before reuse.</p> <p>P309 + P311 – IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.</p> <p>P391 – Collect spillage.</p>
Disposal:	<p>P405 – Store locked up.</p> <p>P501 – In accordance with the EPA Hazardous Substances (Disposal) Notice 2017. Refer to Section 13 of this SDS.</p>

3. COMPOSITION/INFORMATION ON INGREDIENTS

Main Component	CAS Number	Concentration
Triclopyr Butoxyethyl Ester	64700-56-7	60%
Diethylene glycol monoethyl ether	111-90-0	10-30%
Ingredients not contributing to hazard		Balance

4. FIRST AID MEASURES

Eye Contact:	Hold eyes open, flush with water for at least 15 minutes. Seek medical attention if irritation develops and persists.
Skin:	Wash skin with plenty of soap and water, while removing contaminated clothing and shoes. Wash contaminated clothing before re-use. Seek medical attention if skin irritation develops and persists.
Ingestion:	Contact a doctor or Poisons Information Centre (0800 POISON – 0800 764 766). Do not induce vomiting unless directed to do so by doctor/physician. Rinse mouth. Do not give anything by mouth to an unconscious person.
Inhalation:	Remove to fresh air. If effects persist seek medical attention.
Advice to Doctor:	No specific antidote. Ingestion may cause kidney damage. Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flash Point:	95°C
Flammable Limits:	Not flammable or combustible
Extinguishing Media:	Water spray, dry chemical, alcohol resistant foam, CO ₂
Fire & Explosion Hazards:	Not a fire or explosion hazard. Toxic fumes and irritating vapours may be produced in a fire. Containers may burst when exposed to high temperatures due to pressure build-up.
Fire Fighting Equipment:	Use self-contained breathing apparatus.
Fire Fighting Instructions:	Do not allow runoff to drains.
Hazchem Code:	2X

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Clear area of all unprotected personnel. Keep unnecessary and unprotected personnel from entering area. Use appropriate protective clothing and equipment.
Spills:	<p>Ensure there is appropriate and adequate personal protective equipment, trained personnel and clean up materials for management of accidental release. Avoid release to the environment.</p> <p>Contain spill. Absorb with inert material such as clay or sand. Shovel or sweep up and place into a container for disposal. Do not use water for clean-up unless it can be entirely contained and absorbed for disposal.</p> <p>Label disposal containers. Dispose of waste in accordance with Section 13.</p>

7. HANDLING AND STORAGE

Label:	N/A
Handling:	Avoid formation of mists/sprays. Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product. Remove contaminated clothing and

	wash hands and face before entering eating areas. Wash clothing after use.
Storage:	Keep out of reach of children. Store locked up. Store in tightly closed original container in a cool, dry, well-ventilated and secure area when not in use. Do not store with food, feedstuffs, seeds or fertilisers.

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

Exposure Guidelines:	No established workplace exposure standard in NZ for product.
Engineering Controls:	Normal room ventilation is sufficient.
Respiratory Protection:	No special precautions are necessary for respiratory protection under normal handling conditions. If exposed to unusually high mist/spray concentrations, then use an approved respirator with organic cartridge.
Skin Protection:	Wear protective clothing and chemical resistant gloves while handling.
Eye Protection:	Wear safety glasses with side shields while handling.
Dust:	N/A

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Light amber liquid
Odour:	Mild ester odour
Odour Threshold:	Not determined
Boiling Point:	Not available
Melting point:	Not available
Freezing point:	Not available
pH:	6-7 (10% solution)
Solubility:	Emulsifiable
Evaporation rate:	Not determined
Flash Point:	95°C
Flammability:	Not flammable or combustible
LEL/UEL:	Not applicable
Vapour Pressure:	Triclopyr: 3.6×10^{-6} Pa @ 25°C
Decomposition Temperature:	Not available
Autoignition Temperature:	Not determined

Specific Gravity:	1.200 g/mL @ 20°C
Partition Coefficient:	Not determined
Viscosity:	Not determined

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Reactivity:	Not reactive under normal conditions of use.
Conditions to Avoid:	No special requirements.
Incompatibility:	Avoid strong oxidisers, strong acids and strong bases. Keep away from food, feedstuffs, seeds and fertilisers.
Hazardous Decomposition Products:	Oxides of carbon and nitrogen, hydrogen chloride gas, may be formed.
Hazardous Polymerisation:	Will not occur.

11. TOXOLOGICAL INFORMATION

ACUTE EFFECTS:	
Acute Effects: Ingestion:	LD ₅₀ approx. 1200 mg/kg, by calculation. Harmful if swallowed.
Acute Effects: Inhalation:	Not expected to be harmful by inhalation under normal conditions of use.
Acute Effects: Skin:	Not expected to be harmful by skin contact. Mild skin irritant.
Acute Effects: Eye:	Irritating to eyes.
Sensitisation:	Skin sensitiser. May cause an allergic skin reaction on prolonged or repeated exposure.
CHRONIC EFFECTS:	
Carcinogenicity, Reproductive Toxicity, or Mutagenicity:	No known carcinogenic, reproductive/developmental or mutagenic effects.
Specific Target Organ Toxicity:	May cause damage to kidneys via ingestion.

12. ECOLOGICAL INFORMATION

Ecotoxicity:	LC/EC ₅₀ < 1 mg/L
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	Very ecotoxic to aquatic life with long lasting effects. Avoid losses to the environment wherever possible.
Persistence/degradability:	Not readily biodegradable.
Bioaccumulation:	Not bioaccumulative
Soil toxicity:	Very ecotoxic in the soil environment. Soil DT ₅₀ > 30 days.
Terrestrial vertebrates:	Harmful to terrestrial vertebrates.
Terrestrial invertebrates:	No known toxicity.
Mobility:	Not available

13. DISPOSAL CONSIDERATIONS

Disposal Method:	Do not dispose of product down drains or sewers. Dispose via an approved waste disposal contractor.
Container Disposal:	Triple rinse empty containers before disposal. Recycle through an approved recycling facility or dispose of via an approved waste disposal contractor.

14. TRANSPORT INFORMATION

Dangerous Goods Classification:	Classified as a Dangerous Good for transport in accordance with NZS5433:2012, IMDG or IATA.
Shipping Name:	Environmentally hazardous substance, liquid, N.O.S. (Triclopyr)
Class:	9
UN Number:	3082
Packaging group:	III
Marine Pollutant:	Yes
EmS Code:	F-A S-F

15. REGULATORY INFORMATION

ACVM Registration No:	P007189
EPA Approval No:	HSR000829
Assignment Description:	Emulsifiable concentrate containing 600g/L Triclopyr as the butoxyethyl ester.
Certified Handler:	Not required

Tracking:	Not required
Compliance Certificate:	Not required
Quantity that must be secured:	Not required
Emergency Response Plan:	100L
Secondary Containment:	100L
Signage:	100L
Fire Extinguishers:	No fire extinguisher requirement specified.
Training requirements:	All workplace personnel handling this substance are required to be trained on the safe handling and PPE requirements for the hazards associated with this substance in accordance with Clause 4.5 of the Health and Safety at Work (Hazardous Substances) Regulations 2017. In addition, any person preparing the product for application or applying the product must be a qualified loader, contractor or person as applicable. Refer to EPA Hazardous Substances (Hazardous Property Controls) Notice 2017 Part 4, Subpart C.
Other regulatory requirements:	The substance must not be applied onto or into water.

16. OTHER INFORMATION

Glossary	
AEL	Acceptable Exposure Limit
DT₅₀	Time (days) for 50% loss
EC₅₀	Median effective concentration
EEL	Environmental Exposure Limit
EPA	Environment Protection Authority
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

The data in this Safety Data Sheet relates only to this product alone, and not to its use in combination with other substances or products. In such circumstances, assuming the combination is permitted (refer to product labels, and contact manufacturer if in doubt), be guided by the most hazardous of the substances involved and observe the more stringent of all hazard controls applicable to the products used.

Date of Safety Data Sheet: 18 January 2019

Reason for Revision: Review and update to new legislative requirements.

Further Information: Rainbow & Brown Limited
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