



# BUCKSHOT Herbicide

## 1. PRODUCT & COMPANY IDENTIFICATION

Product Identification: Buckshot  
Product Use: Herbicide  
Company Identification: Rainbow & Brown Limited  
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## 2. HAZARDS IDENTIFICATION

Hazard Classifications: 6.4A, 6.5B, 9.1D, 9.2A  
Hazard Descriptions: Irritating to eyes. May cause skin sensitisation.  
Ecotoxic in the aquatic and soil environments.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

<i>Ingredient</i>	<i>CAS Number</i>	<i>Proportion</i>
• Picloram triethanolamine salt	082683-78-1	3.24%
• Ingredients not contributing to the hazards		Balance

## 4. FIRST AID MEASURES

Eyes: Flush with cold water immediately for at least 15 minutes. Seek medical advice.  
Skin: Wash skin well with soap and water. Wash contaminated clothing before re-use.  
Ingestion: Give plenty of water to drink. Do not induce vomiting. Contact a doctor, or the Poisons Information Centre ...  
(0800 POISON – 0800 764 766).  
Inhalation: If dust is inhaled, move to fresh air. If breathing difficulty is experienced seek medical attention.  
Advice to Doctor: No specific antidote. Treat symptomatically.

## 5. FIRE FIGHTING MEASURES

Flash Point:	None
Flammable Limits:	LFL Not Applicable UFL Not Applicable
Extinguishing Media:	Use fire-fighting media suitable for underlying fire.
Fire & Explosion Hazards:	Toxic fumes under fire conditions. Prevent the material and run-off from entering drains.
Fire Fighting Equipment:	Use self-contained breathing apparatus.
HAZCHEM:	2Z

## 6. ACCIDENTAL RELEASE MEASURES

Spills:	Shovel or sweep up. Do not flush with water. Place spilled material in a container for disposal.
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## 7. HANDLING AND STORAGE

Handling:	Read the storage/handling precautions on the product label. Keep out of reach of children. Harmful if swallowed. Causes eye irritation and skin sensitivity. Avoid eye, skin & clothing contact. After work, remove protective clothing and equipment, wash hands before eating, drinking, smoking or using toilet. Wash clothing after use.
Storage:	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, seed or fertilisers.

## 8. EXPOSURE CONTROLS & PERSONAL PROTECTION

Exposure Guidelines:	TWA = 10mg/m <sup>3</sup> for 100% picloram (OSH WES)
Engineering Controls:	No WES, TEL or EEL has been set by ERMA.
Respiratory Protection:	No special precautions are necessary for respiratory protection under normal handling conditions. Concentrations exceeding the exposure guideline above will require an approved dust respirator.
Skin Protection:	Clean body-covering clothing is required.
Eye Protection:	Side shield safety glasses recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Light tan granule
Melting Point:	Not available
Bulk Density:	1230g/L
Vapour Pressure:	(Picloram acid) 0.082 mPa @ 35°C

## 10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions. May generate toxic fumes in fire.
Incompatibility:	None known.
Hazardous Decomposition Products:	May produce hydrogen chloride and oxides of nitrogen.
Hazardous Polymerization:	Not known to occur.

## 11. TOXOLOGICAL INFORMATION

Potential Health Effects. This section includes the possible adverse health effects that could occur if the substance is not handled as recommended.

Eye:	May cause slight irritation. ERMA classifies this substance as 6.4A
Skin:	May cause slight irritation and sensitisation. Acute LD <sub>50</sub> is >3980mg/kg for the active ingredient at 100% concentration. ERMA classifies this substance as 6.5B
Ingestion:	The LD <sub>50</sub> (female rat) is 8200mg/kg for the active ingredient at 100% concentration. Single dose oral toxicity is low.
Inhalation:	Dust may cause slight irritation.
Systemic (Other Target Organ) Health Effects:	Repeated excessive exposure to high amounts of concentrated active ingredient may cause liver effects.
Cancer Information:	The active ingredient did not cause cancer in long-term animal studies.
Teratology:	Birth defects are unlikely following exposure to the active ingredient. Exposures to active ingredient which have an adverse effect on a mother should have no effect on the foetus.
Reproductive Effects:	In animal studies, the active ingredient has been shown to not interfere with reproduction.
Mutagenicity Effects:	The active ingredient is non-mutagenic in invitro and animal testing.

## 12. ECOLOGICAL INFORMATION

Environmental Fate, based on information for the picloram active ingredient at 100% concentration (note that this product contains 2% concentration):

Movement & Partitioning: Bioconcentration potential is moderate (BCF is between 100 and 3000 or Log Pow between 3 and 5). Potential for mobility in soil is very high (Koc is between 0 and 50). Log octanol/water partition coefficient (Log Pow) is estimated using a structural fragment method to be 2.27. Log soil organic carbon/water partition coefficient (Log Koc) is 1.23. Bioconcentration factor(BCF) in fish is between 31 and 135.

Degradation/Persistence: In the atmospheric environment, picloram has an estimated tropospheric half-life of 12 days. Photolysis half-life in water is 2.3 – 9.6 days. Under aerobic conditions soil half-life is 167-513 days. Under anaerobic conditions soil half-life is >300 days. Hydrolysis half-life is 1.8 years. Theoretical Oxygen Demand is calculated at 0.99p/p. Under OECD test guidelines, picloram cannot be considered biodegradable, however this does not necessarily mean that picloram is not biodegradable under real environmental conditions. Biodegradation reached in Manometric Respirometry Test (OECD Test No 301F) after 28 days = 0%.

Ecotoxicology: Moderately toxic to aquatic organisms on an acute basis (LC<sub>50</sub> or EC<sub>50</sub> between 1 and 10mg/L in the most sensitive species).

Acute LC<sub>50</sub> in fathead minnow is 55mg/L

Acute LC<sub>50</sub> in bluegill is 14-45mg/L

Acute LC<sub>50</sub> in rainbow trout is 3.1-60mg/L

Acute LC<sub>50</sub> in water flea is 34-76mg/L

Growth inhibition EC<sub>50</sub> in green alga is 37-79mg/L

Growth inhibition EC<sub>50</sub> in duckweed is 127mg/L

Practically non-toxic to birds:

Acute oral LD<sub>50</sub> in mallard is >2150mg/kg

Acute contact LD<sub>50</sub> in honeybee is >0.1mg/bee

Acute oral LD<sub>50</sub> in honeybee is 0.1mg/bee

LC<sub>50</sub> for earthworms is >5000mg/kg

Highly toxic to terrestrial plants.

ERMA classifies this product as 9.1D and 9.2A

## 13. DISPOSAL CONSIDERATIONS

Disposal Method: Follow the label directions.  
Triple rinse empty containers before disposal.  
Do not burn empty containers that have not been rinsed. Burn in an appropriate incinerator if circumstances such as wind direction permit.  
Otherwise crush or puncture and bury in a suitably approved landfill. Do not dispose of this product down drains or sewers. Follow all local, regional and national laws and regulations regarding hazardous waste disposal.

## 14. TRANSPORT INFORMATION

Dangerous Goods Classification:

Shipping Name: Not Applicable - not scheduled as dangerous goods for transport  
Class: NA  
UN Number: NA

Transport limitations: Up to 3kg may be carried on a public passenger vehicle. No limitation on non-passenger vehicles. Must be transported in original sealed and labelled container.

## 15. REGULATORY INFORMATION

ACVM Registration No: P7717  
ERMA Approval No: HSR000554  
Approved Handler: Approved Handler certification is NOT required to purchase, handle or apply this product.  
Tracking: Not required.

## 16. OTHER INFORMATION

### Glossary

AEL	Acceptable Exposure Limit
DT <sub>50</sub>	Time (days) for 50% loss
EC <sub>50</sub>	Median effective concentration
EEL	Environmental Exposure Limit
ERMA	Environmental Risk Management Authority
HSNO	Hazardous Substances & New Organisms Act
Koc	Organic carbon partition coefficient (ml soil water/g organic carbon)

LFL	Lower flammability Limit
LC <sub>50</sub>	Lethal Concentration in air or water for 50% of test organisms
LD <sub>50</sub>	Lethal Dose for 50% of test organisms
NOEL	No Observable Effect Level
OSHA	Occupational Safety & Health Administration (USA)
OSH	Occupational Safety & Health service (NZ)
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 ERMA/OSH

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 manufacturers 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.

Further Information:           Rainbow & Brown Limited  
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