



## SAFETY DATA SHEET

# RECLAIM® BRUSHKILLER

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND COMPANY

#### 1.1 Identifiers

Product name: Reclaim® Brushkiller  
Other Name(s): Emulsifiable concentrate containing 300 g/L triclopyr (as the acid) and 100 g/L picloram (as the acid)

#### 1.2 Recommended use of the chemical and restrictions on use

Product Use: Herbicide for control of a range of brushweeds.

#### 1.3 Supplier contact details:

Company name: Grosafe Chemicals Limited  
Address: 20 Jean Batten Drive Mt Maunganui, 3116  
Telephone: 0800 220 002  
Email: [info@grosafe.co.nz](mailto:info@grosafe.co.nz)

**Emergency telephone number** 0800 CHEMCALL (0800 243 622)

### SECTION 2: HAZARD IDENTIFICATION

#### 2.1 Classification of the Hazardous Chemical

Hazardous substance according to Hazardous Substances and New Organisms (HSNO) Act 1996  
Classifications: 6.1D (oral), 6.3B, 6.4A, 6.5B, 6.9B, 9.1A, 9.2A, 9.3C

#### 2.2 Label elements:

##### Pictograms:



**Signal Word:** WARNING

##### Hazard statements:

H302 Harmful if swallowed.  
H312 Harmful in contact with skin  
H316 Causes mild skin irritation.  
H317 May cause an allergic reaction.  
H319 Causes serious eye irritation.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H332 Harmful if inhaled.  
H410 Very toxic to aquatic life with long lasting effects.

- H421 Very toxic in the soil environment.  
 H433 Harmful to terrestrial vertebrates.

**Precautionary statements:**

*Prevention*

- P102 Keep out of reach of children.  
 P103 Read label before use.  
 P260 Do not breathe dust/mist/spray.  
 P264 Wash hands and any exposed skin thoroughly after handling.  
 P270 Do not eat, drink or smoke when using this product.  
 P271 Use only outdoors or in a well-ventilated area.  
 P272 Contaminated work clothing should not be allowed out of the workplace.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves, protective clothing and eye/face protection.

*Response*

- P101 If medical advice is needed, have product container or label at hand.  
 P301 + P312 IF SWALLOWED: Call a Poison Centre or doctor if you feel unwell  
 P330 Rinse mouth.  
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
 P332 + P313 If skin irritation or rash occurs: Get medical advice.  
 P312 Call a POISON CENTRE or doctor if you feel unwell.  
 P363 Wash contaminated clothing before re-use.  
 P304 + P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.  
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P337 + P313 If eye irritation persists, get medical advice.  
 P391 Collect spillage.

*Storage*

*Disposal*

- P501 Dispose of contents/container in accordance with local regulations.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Ingredients	CAS	Proportion g/L
Triclopyr butoxyethyl ester	64700-56-7	417.0*
Picloram	1918-02-1	100.0**
Other ingredients	Trade secret	balance

\* equivalent to 300 g/L triclopyr acid

\*\* present as picloram hexyloxypropylamine

This is a commercial product whose exact ratio of components may vary slightly.

**SECTION 4: FIRST AID MEASURES**

**4.1 Description of first aid measures**

**General Information:**

For advice call the National Poison Centre, telephone 0800 POISON [0800 764 766] for advice.  
 Have label or Safety Data Sheet at hand

**Ingestion:** If swallowed, do NOT induce vomiting. Rinse mouth with water and then give glass or two of water to drink. Get medical advice if person feels unwell.

**Skin Contact:** Remove contaminated clothing and wash affected area with soap and water. If irritation occurs then get medical advice.

**Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists then get medical attention.

**Inhalation:** Remove person to fresh air and keep at rest in a position comfortable for breathing. Immediately call a Poison Centre or doctor.

#### **4.2 Symptoms caused by exposure**

None specified.

#### **4.3 Medical attention and special treatment**

Treat symptomatically.

### **SECTION 5: FIRE FIGHTING MEASURES**

#### **5.1 Suitable extinguishing media**

Use water spray or fog, alcohol resistant foam, dry powder or carbon dioxide. Contain to prevent runoff into drains, sewers, waterways.

#### **5.2 Specific hazards arising from the chemical**

Fire decomposition products (carbon oxides, hydrogen cyanide, nitrogen oxides) may be toxic if inhaled.

#### **5.3 Special protective equipment and precautions for fire fighters**

Wear full personal protective equipment including with self-contained breathing apparatus (SCBA).

### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

#### **6.1 Personal precautions, protective equipment and emergency procedures**

In the event of an accidental spill, wear full protective clothing including respiratory, eye and face protection. Wash contaminated personal protective equipment and clothing, and dry before re-use.

#### **6.2 Environmental precautions**

Prevent spillage from entering drains or waterways. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.

#### **6.3 Methods and materials for containment and cleaning up**

Contain spilled material, recover into labelled drums that can be sealed for safe disposal. If spray mixture is spilled, absorb and collect in drums. Deal with all spillages immediately.

### **SECTION 7: HANDLING AND STORAGE**

#### **7.1 Precautions for safe handling**

Read the label before use. Use only outdoors or in well-ventilated environment. Trained handler required. Avoid contact with skin and eyes. Avoid inhalation of spray mist/aerosols. Wear coat/trouser (overalls), boots, waterproof hat, respirator, gloves and eye protection when handling product. Wash hands and exposed skin after handling. Do not eat, drink or smoke when using. Do not use spray equipment contaminated with this product for any other purpose unless first thoroughly cleaned with a suitable alkaline cleaning detergent.

#### **7.2 Conditions for safe storage**

Store locked up in the closed original packaging out of reach of children and in a dry, cool, well-ventilated area. Keep away from food, drink and animals feeding stuffs.

## SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

### 8.1 Control parameters – exposure standards, biological monitoring

Ingredient	TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )
Picloram	10	-

Exposure limits have not been established for any of the significant ingredients in this product. No biological limits applicable.

### 8.2 Engineering controls

Use outdoors to ensure adequate ventilation.

### 8.3 Personal protective equipment (PPE)

The following Standards provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: **AS/NZS 4501**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

**Eye/Face Protection:** Wear protective glasses or goggles when mixing or applying product.

**Skin Protection:** Wear impervious gloves, coat, trousers, waterproof hat. Ensure all skin areas are covered.

**Respirator:** Where product is being sprayed and a mist could be produced a respirator should be worn. It should be fitted with a type G cartridge, suitable for agricultural chemicals.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear yellowish- brown liquid
Odour	Slight
Odour threshold	Not known
pH	4.5 – 6.5
Melting/Freezing Point	No data available
Boiling Point /Range	Not applicable
Flash point	> 93 deg. C
Flammability (solid, gas)	Not applicable
Vapour Pressure	No data available
Vapour density	No data available
Specific gravity	1.1 – 1.2 g/ml
Solubility	Emulsifies in water
Partition Co-efficient n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	Not applicable

## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity

This product is unlikely to react or decompose under normal storage conditions.

### 10.2 Chemical stability

Stable under normal temperatures and pressure for storage and use.

### 10.3 Conditions to Avoid

Store in the closed original container in a dry, cool, well-ventilated area and out of direct sunlight.

### 10.4 Incompatible materials and possible hazardous reactions

Oxidising agents (i.e. nitrates, oxidising agents, chlorine leaches, pool chlorine ,etc as ignition may result.

**10.5 Hazardous decomposition products**

**Fire Decomposition:** Carbon monoxide, carbon dioxide, hydrogen chloride, phosgene, nitrogen oxides and other unspecified compounds.

**Polymerisation:** This product will not undergo polymerisation reactions.

**SECTION 11: TOXICOLOGICAL INFORMATION**

**11.1 Health hazard information**

The product is classified for health hazards according to an assessment of information on product.

**11.2 Toxicological information**

Acute toxicity:	Product is classified as harmful for oral acute toxicity.
Aspiration hazard:	Product contains no solvents identified with aspirant hazard.
Respiratory irritation:	No effects identified.
Skin corrosion/irritation	Product is classified as mild skin irritant.
Serious eye damage/irritation	Product is classified as eye irritant.
Respiratory or skin sensitisation	Product is classified as contact skin sensitizer.
Germ cell mutagenicity:	No ingredients in product classified as presumed or suspected mutagens.
Carcinogenicity	No ingredients in product classified as presumed or suspected carcinogens.
Reproductive toxicity	No ingredients in product classified as presumed or suspected of impairing fertility or the unborn child
Specific target organ toxicity – single/repeated exposure	Classified for target organ toxicity. Both triclopyr and picloram may cause damage to renal function (kidneys).
Narcotic effects	Product contains no ingredient identified as causing narcotic effects.

**11.3 Toxicological data:**

Triclopyr butoxyethyl ester	Oral, LD <sub>50</sub> 803 mg/kg b.w. (species not identified)
Picloram	Oral, mouse LD <sub>50</sub> 1061 mg/kg b.w.

**SECTION 12: ECOLOGICAL INFORMATION**

**12.1 Ecotoxicity**

This product is classified as being very toxic to aquatic life, very toxic in the soil environment and as harmful to terrestrial vertebrates. .

Triclopyr butoxyethyl ester	Bluegill sunfish LC <sub>50</sub> (96 h) 0.36 mg/L <i>Daphnia magna</i> LC <sub>50</sub> (48 hr) 1.7 mg/L Eastern oyster, <i>Crassostrea virginica</i> EC <sub>50</sub> (96 hr) 0.46 mg/ Freshwater diatom, <i>Navicula palliculosa</i> EC <sub>50</sub> (24 hr) 0.10 mg/L Alfalfa, EC <sub>25</sub> 0.0129 mg/kg Bird (Bobwhite quail) LD <sub>50</sub> (21 days) 735 mg/kg
Picloram	Lake trout, <i>Salvelinus namaycush</i> , LC <sub>50</sub> (96 hr) 1.55 mg/L <i>Scenedesmus subcapitata</i> , EC <sub>50</sub> (72h) 36.79 mg/L Honey bee, <i>Apis mellifera</i> LC <sub>50</sub> (48 hr) 14.5 µg/bee <i>Daphnia magna</i> LC <sub>50</sub> (21 days) 14.6 mg/L

## 12.2 Environmental Fate

**Breakdown in soil and groundwater:** No specific information available on product. The DT50 for triclopyr is >30 days.

Triclopyr butoxyethyl ester KOC = 557.3

Picloram KOC = 18.1

**Bioaccumulation:** No specific information available on product.

Triclopyr butoxyethyl ester LogPOW = 4.4529

Picloram LogPOW = 1.3599

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Product Disposal

Use the product for its intended purpose according to label. Otherwise dispose of unused product to waste management facility for pesticides or to landfill.

### 13.2 Container Disposal

Do not use packaging for storage of other products. Triple rinse container and add residue to mixture. If circumstances, especially wind direction, permit the empty containers may be burned, otherwise bury in a suitable land fill.

## SECTION 14: TRANSPORT INFORMATION

### Road and Rail Transport:

Classified as Dangerous Good Class 9 according to NZS5433 Transport of Dangerous Goods on Land

### Marine Transport (IMO/IMDG):

Classified as Dangerous Good Class 9 by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

### Air Transport (ICAO/IATA):

Classified as Dangerous Good Class 69 by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulation for transport by air.

**UN Number:** 3082

**UN Proper Shipping Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (TRICLOPYR, PICLORAM)

**Transport hazard class(es)** 9

**Packing Group:** III

**Special Precautions for User:**

**IMDG Marine pollutant:** Yes

**Transport in Bulk:** Not available

## SECTION 15: REGULATORY INFORMATION

### 15.1 HSNO Act 1996

Hazardous substance according to Hazardous Regulations

**Approved substance number:** HSR002485

**Hazardous classifications:** 6.1D (All), 6.3B, 6.4A, 6.5B, 6.9B, 9.1A, 9.2A, 9.3C

**Controls:** refer to HS Notices ([www.epa.govt.nz](http://www.epa.govt.nz)) and HSW HS Regulations ([www.worksafe.govt.nz](http://www.worksafe.govt.nz))

### 15.2 ACVM Act 1997

**Registration number:** P008982

Refer to [www.foodsafety.govt.nz](http://www.foodsafety.govt.nz) for registration conditions.

## SECTION 16: OTHER INFORMATION

### 16.1 Date of preparation or last revision of SDS

<b>SDS issued</b>	24 <sup>th</sup> September 2018
<b>SDS supersedes</b>	Feb 2017
<b>Reason issued</b>	Update SDS template and review product information.

### 16.2 ABBREVIATIONS

<b>ADI</b>	Acceptable Daily Intakes
<b>CAS number</b>	Chemical Abstracts Service Registry Number
<b>CCID</b>	Chemical Classification Identification Database
<b>EPA</b>	Environmental Protection Authority
<b>ErC<sub>50</sub></b>	Half maximal Effective Concentration
<b>GHS</b>	Globally Harmonized System of Classification and Labelling of Chemicals
<b>Hazchem Code</b>	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
<b>HSNO</b>	Hazardous Substances and New Organisms
<b>HS</b>	Health and Safety
<b>HSR</b>	Hazardous Substances Register
<b>IARC</b>	International Agency for Research on Cancer
<b>LC<sub>50</sub></b>	Median Lethal Concentration
<b>LD<sub>50</sub></b>	Median Lethal Dose
<b>SDS</b>	Safety Data Sheets
<b>NOAEL</b>	No Observable Adverse Effect Level
<b>NOEL</b>	No Observable Effect Level
<b>NOS</b>	Not otherwise specified
<b>STEL</b>	Short Term Exposure Limit
<b>SWA</b>	Safety Work Australia
<b>TWA</b>	Time-Weighted Average
<b>UN Number</b>	United Nations Number

### 16.3 REFERENCES

Manufacturer information  
EPA CCID and Approved Substance databases  
University of Hertfordshire Pesticides Properties Database

### 16.4 OTHER

Reclaim<sup>®</sup> is a registered trademark of Grosafe Chemicals Ltd

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End of Safety Data Sheet