

BROMACIL 800 WP

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Bromacil 800 WP

Other identifier: -

Recommended use: Herbicide

Restrictions on use: Agriculture

Supplier: Universal Crop Protection (Pty) Ltd.

Co. Reg. No.: 1983/008184/07

PO Box 801

Kempton Park, 1620, South Africa

Telephone: (011) 396 2233

Fax: (011) 396 4666

Website: www.villacrop.co.za

Emergency telephone numbers:

24 Hr Transport / Spill emergency no:

(Hazcall24) +27 86 044 4411

(Client: Villa Crop Protection)

Griffon Poison Information Centre +27 82 446 8946

(Client: Villa Crop Protection)

Poisoning Emergency telephone numbers:

Griffon Poison Information Centre +27 82 446 8946

Poisons Information Centre +27 861 555 777

2. HAZARDS IDENTIFICATION

UN GHS, Regulation EC 1272/2008 [EU-GHS/CLP] EU & SANS 10234:2008		
Hazard classes	Hazard categories	H-statements
Health		
Oral	Acute Tox. 4	H302
Dermal	Skin Irrit. 3	H316
Eye	Eye Irrit. 2	H319
Environment		
Aquatic acute	Aquatic acute 1	H400
Aquatic chronic	Aquatic chronic 1	H410

The most important adverse effects:

Physiochemical effects: None known

Human health effects:

Harmful if swallowed (Acute Tox. 4).

Causes mild skin irritation (Skin Irrit. 3).

Causes serious eye irritation (Eye Irrit. 2).

Label elements:



Signal word: Warning

Hazard statements:

H302: Harmful if swallowed.

H316: Causes mild skin irritation.

H319: Causes serious eye irritation.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P264+P265: Wash hands and face thoroughly after handling. Do not touch eyes.

P270: Do not eat, drink or smoke when using this product.

P273: Avoid release into the environment.

P280: Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.

P301+P317: IF SWALLOWED: Get medical help.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P330: Rinse mouth.

P332+P317: If skin irritation occurs: get medical help.

P337+P317: If eye irritation persists: Get medical help.

P391: Collect spillage.

P405: Store locked up.

P501: Dispose of content/container to suitable landfill in accordance with local regulations.

Other hazards:

None known.

Toxicity:

Classification according to GHS: Category 4

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance / Mixture: Mixture

Composition:

Chemical name	CAS	Conc. (m/m%)	Classification EC 1272/2008
Bromacil	314-40-9	81.5 %	Acute Tox. 4 H302 Aquatic Acute 1 H400 Aquatic Chronic 1 H410
Polyoxyethylene lauryl ether	9002-92-0	< 10%	Acute Tox. 4 H302 Eye Irrit. 2 H319 Aquatic Chronic 3 H412
Sodium dodecyl benzene sulfonate	25155-30-0	< 10%	Acute Tox. 4 H302 Skin Irrit. 2 H315 Eye Dam. 1 H318

4. FIRST AID MEASURES

Remove the victim from the area of exposure. Wash off remaining material with plenty of water. In the event of any complaints or symptoms, avoid further exposure.

Inhalation: Remove person from contaminated area to fresh air. If breathing has stopped, perform artificial

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respiration and administer oxygen. Avoid mouth-to-mouth resuscitation. Keep person warm and at rest. **Seek medical advice immediately.**

Skin: Remove contaminated clothing and shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. **Obtain medical attention if irritation persists.**

Eyes: Flush eyes with clean water for at least 15 – 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. **Seek medical attention.**

Ingestion: Seek medical attention or call a poison control centre for treatment advice. Do not induce vomiting unless instructed to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person. If the person is alert, rinse mouth thoroughly with water. Establish and maintain airway. Treat respiratory difficulty with artificial respiration and oxygen. Qualified medical personnel should perform administration of gastric lavage or oxygen. **Seek medical advice immediately.**

Anticipated acute effects: Harmful if swallowed. Ingestions of these herbicides are likely to be followed by vomiting and diarrhoea due to the irritant properties of most of the toxicants.

Causes mild skin irritation. Causes serious eye irritation.

Anticipated delayed effects: None known.

Most important symptoms / effects: None known.

Advice to physician: There are no specific antidotes for poisoning by these herbicides. In the case of suicidal ingestions, particularly, the possibility must always be kept in mind that multiple toxic substances may have been swallowed.

1. If large amounts of herbicide have been ingested, and if the patient is fully alert, induce emesis with Syrup of Ipecac, followed by several glasses of water. Dosage for adults and children over 12 years: 30 mL; dosage for children under 12 years: 15 mL; When vomiting has stopped, give activated charcoal. Add sorbitol to the charcoal slurry unless diarrhoea has already commenced. If, for some reason, the patient is not fully alert, put in place a cuffed endotracheal tube to protect the airway, then aspirate and lavage the stomach with a slurry of activated charcoal. Leave a quantity of charcoal, with sorbitol, in the stomach before withdrawing the stomach tube. Repeated administration of charcoal at half or more the initial dosage every 2 to 4 hours may be beneficial.

2. If the amount of ingested herbicides was small, if effective emesis has already occurred, or if treatment is delayed, administer the activated charcoal and sorbitol by mouth.

3. If serious dehydration and electrolyte depletion have occurred as a result of vomiting and diarrhoea, monitor blood electrolytes and fluid balance and administer intravenous infusions of glucose, normal saline, Ringer's solution, or Ringer's-lactate to restore extracellular fluid volume and electrolytes. Follow this with

oral nutrients as soon as fluids can be retained. Fluids serve to support excretion of the toxicants.

4. Supportive measures are ordinarily sufficient for successful management of excessive exposures to these herbicides. If the patient's condition deteriorates in spite of good supportive care, the operation of an alternative or additional toxicant should be suspected.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Use carbon dioxide or dry chemical for small fires and water fog or foam for large fires.

Unsuitable Extinguishing Media: High volume water jet. Use a water jet only to cool heated containers.

Specific hazards: Product is not explosive, but dust/air mixture may be explosive in the presence of an ignition source. Fire may produce irritating and/or toxic vapours, mists or other products of combustion.

Special fire-fighting procedures: Remove spectators from surrounding area. Isolate the fire area and evacuate all personnel downwind of the fire. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Remain upwind of fire. Avoid inhaling hazardous vapours and fumes from burning materials. Remove container from fire area if possible and without risk. Do not use high volume water jet, due to contamination risk. Do not scatter the burning material. Water can be used to cool unaffected containers but must be contained for later disposal. Contain fire control agents for later disposal. Avoid pollution of waterways by run-off from the site).

Personal protective equipment: Wear NIOSH / MSHA approved self-contained breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid contact with eyes and skin. Do not breathe in spray mist or dust / fumes / vapours. Ventilate area of spill or leak, especially in contained areas.

Protective equipment: Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product.

Emergency procedures: Alert firefighting personnel, evacuate unprotected personnel and animals.

Environmental Precautions: Prevent spilled product from entering sewers, waterways or ground water. Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high-water mark. This product is classified as very toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment. Any spillages or uncontrolled discharges into watercourses should be reported immediately to the police and the Department of Water / Environmental Affairs.

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Methods and Materials for Containment: Contain spilled product by diking area with sand or earth.

Methods and Materials for Clean-up: Contain spilled product by picking up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal. Do not create a powder cloud by using a brush or compressed air. Label containers with the contents and dispose of according to local regulations. Do not place spilled material back in original container. Do not re-use spilled material. To decontaminate the spill area, tools and equipment, wash with water and suitable detergent. Collect washings and add to the drums already collected. Do not flush spilled material or washings into drains or waterways. See section 13 for disposal considerations.

7. HANDLING AND STORAGE

Handling:

Precautions for safe handling: Harmful if swallowed. Avoid contact with skin and eyes. Ensure adequate ventilation during handling and use. Do not handle broken packages without protective equipment. Immediately clean up spills that occur during handling. Keep containers closed when not in use. In the case of contact with the product refer to First Aid Measures – Section 4.

General occupational hygiene: Practice good hygiene when using this material. Wash hands before eating, drinking, chewing gum, smoking, using the toilet or applying cosmetics. Worker should shower at the end of each workday. Launder all clothing before it is re-used.

Storage:

Conditions for safe storage: Keep under lock and key and out of reach of unauthorised persons, children and animals. Store in its original, labelled container, tightly closed in an isolated, dry, cool and well-ventilated area. Do not store near heat, open flame, sources of ignition or hot surfaces. Not to be stored next to foodstuffs, feed and water supplies. Avoid cross contamination with other pesticides and fertilisers.

Incompatible substances and mixtures: Refer to product label.

Packaging material: paper lined bags and/or containers.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible concentration:

No occupational exposure limits have been determined for the significant ingredients in this product.

Engineering Controls:

It is essential to provide adequate ventilation. The measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure. Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne concentrations

below OELs or other specified exposure limits. Local exhaust ventilation is preferred. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire and other applicable regulations.

Personal Protective Equipment:

Respiratory Protection: For most well-ventilated conditions, no respiratory protection should be needed. If used in a poorly ventilated area (airborne concentrations exceed exposure limits), use a NIOSH approved, air-purifying respirator with cartridges / canisters approved for organic vapours.

Hand Protection: The use of chemically protective impervious gloves is recommended to prevent against skin contact.

Eye Protection: The use of chemical safety goggles is recommended to prevent against eye contact. Contact lenses are not protective eye devices.

Skin and Body Protection: Employees must wear appropriate protective impervious clothing, rubber boots, hat and equipment to prevent repeated or prolonged skin contact with this substance.

Emergency eyewash: Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: beige powder.

Odour: Odourless.

Odour threshold: Not available.

pH (1% aqueous dilution): Not available

Melting point: Not available.

Freezing Point: Not available.

Boiling Point: Not available.

Flash Point: Not applicable.

Flammability: Not applicable.

Upper / lower explosion limits: Not available.

Vapour Pressure (mm Hg): Not available.

Relative Vapour Density: Not available.

Density / Relative density: Not available.

Solubility: Suspendable – 815 ppm.

Solubility in other solvents:

Xylene: 3.2 g/100 mℓ

Acetone: 16.7 g/100 mℓ

Acetonitrile: 7.1 g/100 mℓ

n-octanol / water partition coefficient: Not available.

Auto-ignition temperature: Not applicable.

Decomposition temperature: Not available.

Viscosity: Not applicable.

10. STABILITY AND REACTIVITY

Chemical stability: The product is stable for two years at ambient temperature and pressure, under normal storage and handling conditions. Avoid storage under extreme

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temperatures and conditions. Store below 50 °C, preferably below 30 °C, and not for prolonged periods in direct sunlight.

Reactivity: None known.

Possibility of hazardous reactions: Unlikely to occur.

Conditions to avoid: Extreme heat or exposure to flames.

Incompatible materials: The product is incompatible with strong oxidising agents.

Hazardous decomposition products: Thermal decomposition may emit toxic fumes of CO₂, NO and smoke. Occasionally hydrogen cyanide gas in reduced atmospheres. Nitrogen and its compounds sometimes oxides of nitrogen. Hydrogen chloride gas and other compound of chlorine. Hydrogen fluoride gas, other compound of fluorine and water.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Calculated according to GHS

Oral LD₅₀ >1400 mg/kg

Dermal LD₅₀ > 5000 mg/kg

Inhalation LC₅₀ (4h) >5 mg/ℓ

Skin Irritation / Corrosion: Causes mild skin irritation.

Eye Damage / Irritation: Causes serious eye irritation.

Skin Sensitization: Not classified.

Respiratory Sensitization: Not classified.

Reproductive cell mutagenicity: Not classified.

Carcinogenicity: Not classified.

Reproductive toxicity: Not classified.

Specific target organ toxicity – single exposure: Not classified.

Specific target organ toxicity – repeated exposure: Not classified.

Aspiration hazard: Not classified.

Chronic Effects: Not classified.

POTENTIAL ADVERSE EFFECTS:

Inhalation: None known.

Ingestion: Harmful if swallowed.

Skin contact: Causes mild skin irritation.

Eye contact: Causes serious eye irritation.

12. ECOLOGICAL INFORMATION

This product is very toxic to aquatic organisms.

ECOTOXICITY DATA:

Active ingredient: Bromacil

Fish:

LC ₅₀ (96 h)	Rainbow trout	36 mg/ℓ
	Bluegill sunfish	127 mg/ℓ

Daphnia:

EC ₅₀ (48 h)		121 mg/ℓ
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Algae:

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EC ₅₀	<i>Selenastrum capricornutum</i>	0.0068 mg/ℓ
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Birds:

Acute oral LD ₅₀	Bobwhite quail	2250 mg/kg
Dietary LC ₅₀ (8d)	Mallard ducks	>10000 mg/kg diet
	Bobwhite quail	>10000 mg/kg diet

Bees:

LD ₅₀ contact		>50 µg/bee
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ENVIRONMENTAL EFFECTS:

Based on information for the formulation / active ingredient: Bromacil

Animals: The principal metabolite is 5-bromo-3-sec-butyl-6-hydroxymethyluracil.

Plants: Not determined.

Persistence and degradability: Duration of residual activity in soil is c. 5 mo.

Bio-accumulative potential: Not determined.

Mobility in soil: Not determined.

Other adverse effects: Not determined.

13. DISPOSAL CONSIDERATIONS

Waste: Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product cannot be reused or re-processed. Never pour untreated waste or surplus product into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers. Comply with local legislation applying to waste disposal. The product may be taken to a registered waste disposal site or incineration plant.

Container: Emptied containers retain product residues. Do not re-use the empty container for any other purpose. Empty containers by inverting the empty container over the spray or mixing tank. Thereafter, rinse the container three times with a volume of water equal to a quarter of that of the container.

Puncture the triple rinsed container and dispose of via an approved collector or recycler (www.croplife.co.za). Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages. Observe all labelled safeguards until container is destroyed.

14. TRANSPORT INFORMATION

UN Number: 3077

Road Transport ADR / ORD:

Class:	9
Packaging group:	III
UN Proper Shipping Name:	Environmentally hazardous substance, solid, N.O.S. (bromacil 800 g/kg)

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Maritime Transport IMDG / IMO:

Class: 9
Packaging group: III
UN Proper Shipping Name: Environmentally hazardous substance, solid, N.O.S. (bromacil 800 g/kg)

Marine pollutant (Y/N): Yes

Air Transport IATA / ICAO:

Class: 9
Packaging group: III
UN Proper Shipping Name: Environmentally hazardous substance, solid, N.O.S. (bromacil 800 g/kg)

Special / Environmental Precautions: Wedge drums tightly to avoid movement.

Transport in bulk: Refer to MARPOL 73/78, Annex II and the IBC code.

applicable to unusual or non-standard uses of the product nor where instructions or recommendations are not followed. All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.

END OF DOCUMENT

Compiled: August 1998

Reviewed: August 2022

Revision no.: (5)

Next revision date: August 2027

For detailed information on revisions, contact the Registration holder.

15. REGULATORY INFORMATION

Safety, health and environmental regulations / legislation for the mixture:

OHSA 1993 Regulations for Hazardous Chemical Substances.

Relevant information regarding restrictions: None.

EU regulation: Regulation EC1272/2008 (EU-GHS/CLP)

Other national regulations: None.

Chemical Safety Assessment carried out? No

16. OTHER INFORMATION

Packaging: Packed in 2, 5, 10, 20, 25, 50 kg paper lined bags and/or containers labelled according to South African regulations and guidelines.

Other hazard statements, abbreviations and explanations:

H302: Harmful if swallowed.

H412: Harmful to aquatic life with long lasting effects.

IATA: International Air Transport Association.

IBC: International Bulk Chemical.

ICAO: International Civil Aviation Organization.

IMDG: International Maritime Dangerous Goods

IMO: International Maritime Organization.

LD₅₀ value: The median lethal dose or the amount of a toxic agent that is sufficient to kill 50 percent of a population within a certain period of time.

OEL/RL: Occupational exposure limit-recommended limit.

TWA: Time-weighted average – The average exposure over a specified period, usually a nominal eight hours.

ST/STEL: Short-term exposure limits.

Disclaimer: The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not