

SAFETY DATA SHEET

SECTION 1

IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **Apparent Lawn Buff Weeder**

Other Names: Bromoxynil + MCPA, Group C & I Herbicide.
Use: A selective, post-emergence broad leaf home garden herbicide.
Company: Apparent Pty Ltd
Address: Suite G.08, 762 Toorak Road, Hawthorn East, Vic. 3123.
PO Box 3092, Cotham PO, Kew, Vic 3101
ACN/ABN: 143 724 136
Telephone Number: 03 9822 1321
Email: enquiries@apparentag.com.au
Emergency Contact: 0411 227 338

SECTION 2

HAZARDS IDENTIFICATION

**Classified as hazardous according to criteria of Safe Work Australia.
Not classified as a Dangerous Good according to the ADG Code.
Combustible Liquid (C1).**

GHS Classification:

Flammable Liquids: Category 4
Acute Toxicity – Inhalation: Category 4.
Acute Toxicity – Inhalation: Category 3.
Toxic to Reproduction: Category 2
Sensitization – Skin: Category 1, 1A, 1B
Acute Toxicity – Oral: Category 4.
Aspiration Hazard: Category 1
Acute Toxicity – Dermal: Category 4.
Hazardous to the Aquatic Environment – Long-Term Hazard: Category 1

Signal Word: DANGER.

Hazard Statements:

H227 Combustible Liquid.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H317 May cause an allergic skin reaction.
H331 Toxic if inhaled.
H332 Harmful if inhaled.
H361 Suspected of damaging fertility or the unborn child.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

Prevention:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces: — No smoking.
P261 Avoid breathing mist, vapours or spray.
P264 Wash hands, arms and face thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only in 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.

SECTION 2 HAZARDS IDENTIFICATION (Continued)

Prevention (Continued):

- P280 Wear protective gloves/protective clothing/eye protection/face protection.
P281 Use personal protective equipment as required.

Response:

- P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if feel unwell.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P321 Specific treatment - see Safety Directions on product label.
P322 Specific measures - see First Aid Instructions on product label.
P330 Rinse mouth.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.
P370 + P378 In case of fire: Use foam blanket, carbon dioxide or dry agent for extinction
P391 Collect spillage.

Storage:

- P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal:

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

Pictograms:



SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

CHEMICAL	CAS NUMBER	PROPORTION
Bromoxynil (present as octanoic acid ester ester)	1689-99-2	200 g/L
MCPA (present as butoxyethanol ester)	94-74-6	200 g/L
Liquid Hydrocarbon	-	343 g/L
Other ingredients determined not to be hazardous		Balance

SECTION 4 FIRST AID MEASURES

FIRST AID

- Ingestion:** If swallowed do NOT induce vomiting; seek medical advice immediately and show this container or label, or contact the Poisons Information Centre phone Australia 13 11 26. Make every effort to prevent vomit from entering the lungs by careful placement of the patient.
- Eye contact:** If in eyes, hold eyelids open and wash with copious amounts of water until chemical is removed. Seek medical advice if irritation develops or persists.
- Skin contact:** Wash affected skin with soap and water. Remove contaminated clothing. If skin irritation persists, re-wash area and seek medical advice. Launder contaminated clothing before re-use.
- Inhalation:** Remove to fresh air and observe until recovered. If effects persist, seek medical advice. Not expected to be a source of over-exposure.

SECTION 4 FIRST AID MEASURES (Continued)

Advice to Doctor: The above first aid instructions are mandated by the Commonwealth Department of Health and Ageing via the National; Drugs and Poisons Schedule. These instructions are suitable for ingestion of spray solution and small amounts of concentrate; however if SUBSTANTIAL AMOUNTS of the concentrate have been swallowed (more than about 15 mL) AND if medical assistance is more than 30 minutes away, the induction of vomiting should be CONSIDERED, preferably based on MEDICAL ADVICE if a physician can be contacted by phone. All care must be taken to prevent vomit from being inhaled. Do not give anything by mouth to a semi-conscious or unconscious person. Treat symptomatically. If vomiting occurs, solvent present may cause pulmonary pneumonitis.

SECTION 5 FIRE FIGHTING MEASURES

Specific Hazard: Flash point 75°C. Combustible liquid (C1).

Extinguishing media: Extinguish fire using foam blanket, carbon dioxide or dry agent. If not available, use waterfog or fine water spray but ensure all runoff is contained. Contain all runoff.

Hazards from combustion products: If involved in a fire, it will emit harmful fumes of hydrogen bromide, hydrogen chloride, hydrogen cyanide and possibly other compounds of bromine, chlorine and nitrogen. Firefighters to wear self-contained breathing apparatus and suitable protective clothing if risk to of exposure to vapour or smoke. Keep upwind.

Precautions for fire-fighters and special protective equipment: Isolate fire area. Evacuate downwind residents. Firefighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or smoke. Do not breathe smoke or vapours generated.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Emergency procedures: In the event of a major spill, prevent spillage from entering drains or water courses. For major spills, wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length PVC gloves, face-shield or goggles. In the case of spillage, stop leak if safe to do so, and contain spill. Prevent spillage entering drains or watercourses. Contain and absorb spilled material with absorbent material such as sand, clay, cat litter or material such as vermiculite. Collect recoverable product for use as labelled on the product. Vacuum, shovel or pump contaminated spilled material into an approved container and dispose of waste as per the requirements of Local or State Waste Management Authorities. Keep out animals and unprotected persons.

This product is a herbicide and spills can damage crops, pastures and desirable vegetation. Prevent from entering drains, waterways or sewers. Use earthen bunds or absorbent bunding to prevent spreading of spillage. If a significant quantity of material enters drains, advise emergency services. Thoroughly launder protective clothing before storage or re-use.

Material and methods for containment and cleanup procedures: To clean spill area, tools and equipment, wash with a solution of soap, water and acetic acid/vinegar. Follow this with a neutralisation step of washing the area with a bleach or caustic soda ash solution. Finally, wash with a strong soap and water solution. Absorb, as above, any excess liquid and add both solutions to the drums of waste already collected.

SECTION 7 HANDLING AND STORAGE

Precautions for Safe Handling: No smoking, eating or drinking should be allowed where material is used or stored. Product is poisonous if inhaled or swallowed. Attacks the eyes and skin. Avoid contact with the eyes and skin. Do not inhale spray mist. When opening the container, preparing and using the prepared spray wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length PVC gloves, face-shield or goggles. If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

SECTION 7 HANDLING AND STORAGE (Continued)

Conditions for Safe Storage: DO NOT store near (or allow to contact) fertilizers, fungicides or pesticides. Store in the closed original container, in a cool well ventilated area, out of direct sunlight. Store in a room or place away from children, animals, food, feed stuffs, seed and fertilizers. This product is classified as a C1 (Combustible Liquid) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to state regulations for storage and transport requirements. This product is a Schedule 6 Poison (S6) and must be stored, transported and sold in accordance with the relevant Health Department regulations.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:

Exposure guidelines have not been established for this product by Safe Work Australia however the manufacturer recommends the following guideline.

Atmospheric Contaminant	Exposure Standard (TWA)
Total hydrocarbon	100 mg/m ³ (17 ppm)

TWA = Time-Weight Average

Biological Limit Values:

No biological limit allocated.

Engineering controls:

Keep containers closed when not in use. No special engineering controls are required, however make sure that the work environment remains clean and that vapours are minimised.

Personal Protective Equipment (PPE):

When opening the container, preparing and using the prepared spray wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length PVC gloves, face-shield or goggles. If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water.

Personal Hygiene: Product is poisonous if inhaled or swallowed. Attacks the eyes and skin. Avoid contact with eyes and skin. DO NOT inhale spray mist. Clean water should be available for washing in case of eye or skin contamination. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, face shield or goggles and contaminated clothing. Shower at the end of the workday.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Dark brown liquid.
Odour:	Typical solvent (hydrocarbon) odour.
Boiling point:	No data available.
Freezing point:	No data available.
Specific Gravity:	Approximately 1.1.
Solubility in Water:	Soluble.
pH:	3.5 – 4.0 (1% solution).
Flammability:	Combustible liquid C1.
Flashpoint (°C):	75°C.
Poisons Schedule:	This product is a schedule 6 (S6) poison.
Formulation type:	Emulsifiable concentrate (EC).

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: Product is considered stable in ambient conditions for a period of at least 2 years after manufacture.

Conditions to avoid: Do not store for prolonged periods in direct sunlight. Avoid sources of ignition.

Incompatible materials: Avoid strong acids, bases and strong oxidizing agents.

Hazardous decomposition products: If involved in a fire, it will emit harmful fumes of hydrogen bromide, hydrogen chloride, hydrogen cyanide and possibly other compounds of bromine, chlorine and nitrogen.

SECTION 10 STABILITY AND REACTIVITY (Continued)

Hazardous reactions: Violent reactions between this product and oxidising agents are possible. Avoid chlorates, nitrates, nitric acid, organic peroxides and potassium chlorate.

SECTION 11 TOXICOLOGICAL INFORMATION

No specific data is available for this product as no toxicity tests have been conducted on this product. Information presented is our best judgement based on similar products and/or individual components. As with all products for which limited data is available, caution must be exercised through the use of protective equipment and handling procedures to minimise exposure.

Potential Health Effects:**ACUTE EFFECTS**

Swallowed: Possible symptoms of exposure include: headache, nausea, dizziness and weakness. If aspirated into the lung, e.g. from vomiting, the presence of solvent may result in chemical pneumonitis or other lung damage. LD₅₀ (rat) = 238 mg/kg for Bromoxynil octanoate. LD₅₀ (rat) = 1300 mg/kg for MCPA butoxyethanol ester.

Eye: The product is an eye irritant.

Skin: Mild to Moderate skin irritant. Prolonged contact with the concentrate can cause defatting of the skin and may result in dermatitis. Bromoxynil octanoate is a skin sensitiser. LD₅₀ (rat) > 2000 mg/kg for Bromoxynil octanoate. LD₅₀ (rat) > 2000 mg/kg for MCPA butoxyethanol ester.

Inhaled: High vapour concentrations of the solvent while handling the concentrate are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, and may have other central nervous system effects. LC₅₀ (rat) = 0.72 mg/L/4hrs for Bromoxynil octanoate. LC₅₀ (rat) > 3.1 mg/L/4 hrs for MCPA butoxyethanol ester.

Chronic Effects: Chronic Overexposure: Weight loss and damage to liver and kidneys may be expected if exposure is excessive.

Reproductive Toxicity: Safe Work Australia has classified Bromoxynil octanoate in the occupational environment as a Carcinogen Category 3 substance. This means that the substance is not classifiable as to carcinogenicity to humans. This classification has been assigned on the basis of studies, in rats, rabbits and mice which show reduced ossification and increased incidence of supernumerary ribs at doses (range 5 – 15 mg/kg/day) which are not toxic maternally.

Supernumerary ribs are seen in control animals and are often seen in reproductive toxicity studies. The ribs disappear during subsequent development with rats, but not with mice. The significance of supernumerary species remain as an indicator of developmental toxicity and extrapolations to other species remain problematical.

SECTION 12 ECOLOGICAL INFORMATION**Environmental Toxicology:**

No data is available for the product, the following information is for the active ingredients. Product is very toxic to fish and toxic to some birds. Bromoxynil and MCPA are not toxic to bees.

Test	Bromoxynil octanoate	MCPA butoxyethanol ester
LC ₅₀ for Rainbow trout:	(96hr) 0.041 mg/L	(48hr) 1.15 mg/L for LC ₅₀
LC ₅₀ for Daphnia magna:	(48 hr) 0.046 mg/L	-
LC ₅₀ for Pheasants:	50 mg/kg	-
LC ₅₀ for Bobwhite quail:	100 mg/kg	377 mg/kg

Environmental Properties:

Bromoxynil has low persistence in soil. In sandy soil DT₅₀ is about 10 days and in clay about 2 weeks. MCPA is also rapidly degraded with DT₅₀ ranging from 14 to 30 days.

SECTION 13**DISPOSAL CONSIDERATIONS**

Spills and Disposal: Persons involved in cleanup require adequate skin protection - see Section 8. Keep material out of streams and sewers. Vacuum, shovel or pump waste into an approved drum. Dispose of drummed wastes, including decontamination solution, in accordance with the requirements of Local or State Waste Management Authorities.

Disposal of empty containers: Dispose of empty container by wrapping in paper, placing in plastic bag and putting in the garbage.

EXPLOSION WARNING: "EMPTY" containers may contain liquid and/or vapour residue which can be explosive if exposed to an ignition source at temperatures above 90°C. Such conditions may occur during cutting or welding. DO NOT cut or weld these containers.

SECTION 14**TRANSPORT INFORMATION**

Transport information: This product is exempt from classification as a Dangerous Good in packs less than 3,000 kg or litres under the Australian Code for the Transport of Dangerous Goods by Road and Rail. For bulk shipments this product is a class 9, UN 3082. (See special provision AU01).

Marine and Air Transport: This product is classified as a Marine Pollutant according to International Maritime Dangerous Goods (IMDG) Code and the International Air transport Association (IATA). If transporting by sea or air the following Dangerous Goods Classification applies:-
UN 3082, Class 9 (Miscellaneous Dangerous Goods), Packing Group III, Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains Bromoxynil octanoate).
Hazchem code •3Z. Hazard Identification Number (HIN) 90.

SECTION 15**REGULATORY INFORMATION**

Under the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP), this product is a Schedule 6 poison.

This product is registered under the Agricultural and Veterinary Chemicals Code Act 1994. Product Registration No. 82872.

This product is classified as a Hazardous Substance under the criteria of Safe Work Australia T: Toxic, Xi: irritant.

This product is not classified as a Dangerous Good according to the ADG Code (7th Ed) in packs less than 3,000 litres.

This product is classified as a Dangerous Good according to International Maritime Dangerous Goods (IMDG) Code and the International Air Transport Association (IATA).

SECTION 16**OTHER INFORMATION**

Issue Date: 22 November 2015. Valid for 5 years till 22 November. (First issue).

Key to abbreviations and acronyms used in this MSDS:

- ADG Code: Australian Dangerous Goods Code (for the transport of dangerous goods by Road and Rail).
- Carcinogen: An agent which is responsible for the formation of a cancer.
- Genotoxic: Capable of causing damage to genetic material, such as DNA.
- HSIS: Hazardous Substances Information System.
- Lacrimation: The production, secretion, and shedding of tears.
- Lavage: A general term referring to cleaning or rinsing.
- Mutagen: An agent capable of producing a mutation.
- NOHSC: National Occupational Health and Safety Commission.
- Ossification: The process of creating bone, that is of transforming cartilage or fibrous tissue, into bone.
- Pneumonitis: A general term that refers to inflammation of lung tissue.
- PPE: Personal protective equipment.
- Teratogen: An agent capable of causing abnormalities in a developing foetus.
- TWA: The Time Weighted Average airborne concentration over an eight-hour working day, for a five day working week over an entire working life.

SECTION 16 OTHER INFORMATION (Continued)

Safe Work Australia:	Formally known as Australian Safety & Compensation Council (ASCC) which was formally known as the National Occupational Health & Safety Commission (NOHSC).
Supernumery	In excess of the regular or normal number.

References

1. "Search Hazardous Substances". HSIS. Safe Work Australia website. (2016).
2. "Approved Criteria for Classifying Hazardous Substances" 3rd Ed. NOHSC Australia. [NOHSC:1008 (2004)]. October 2004.
3. Globally Harmonized System of Classification and Labelling of Chemicals (GHS). United Nations, 2009.

This SDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

End SDS