

# SAFETY DATA SHEET

## SECTION 1

## IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name:** **Apparent Beamer Herbicide**

**Other Names:** Beamer. Bromoxynil plus Diflufenican. Groups C & F Herbicide.  
**Use:** An agricultural cereal and pasture 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](mailto: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).**

### Globally Harmonised System (GHS) Classification:

Flammable Liquids – Category 4.  
Acute Toxicity – Inhalation: Category 4.  
Skin Corrosion/Irritation: Category 2.  
Sensitization – Skin: Category 1, 1A, 1B.  
Eye Damage/Irritation: Category 2B.  
Specific Target Organ Toxicity (Single Exposure): Category 3.  
Toxic to Reproduction: Category 1.  
Toxic to Reproduction: Category 2.  
Hazardous to the Aquatic Environment – Acute Hazard – Category 1.  
Hazardous to the Aquatic Environment – Long Term Hazard – Category 2.

**Signal Word:** DANGER.

### Hazard Statements:

H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H320 Causes eye irritation.  
H332 Harmful if inhaled.  
H335 May cause respiratory irritation.  
H360 May damage fertility or the unborn child.  
H361 Suspected of damaging fertility or the unborn child.

### 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 flames and hot surfaces. – No smoking.  
P261 Avoid breathing mist, vapour or spray.  
P264 Wash hands, arms and face thoroughly after handling.  
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/eye protection/face protection.  
P281 Use personal protective equipment as required.

**SECTION 2**

**HAZARDS IDENTIFICATION**

*Response:*

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.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
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 the product label.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362	Take off contaminated clothing and Wash before reuse.
P363	Wash contaminated clothing before reuse.
P370 + P378	In case of fire: Use carbon dioxide, foam or dry agent for extinction.
P391	Collect Spillage.

*Storage:*

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

*Disposal:*

P501	Dispose of contents/container in accordance with national regulations.
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**Pictograms:**



**SECTION 3**

**COMPOSITION/INFORMATION ON INGREDIENTS**

**Ingredients:**

<b>CHEMICAL</b>	<b>CAS NUMBER</b>	<b>PROPORTION</b>
Bromoxynil present as the octanoate ester	29450-45-1	250 g/L
Diffufenican	83164-33-4	25 g/L
N-Methyl-2-pyrrolidone	872-50-4	175 g/L
Liquid Hydrocarbons	-	397 g/L
Other ingredients (including water) determined not to be hazardous		Balance

**SECTION 4**

**FIRST AID MEASURES**

**FIRST AID**

- Ingestion:** If poisoning occurs, contact a Doctor or Poisons Information Centre. Phone 131 126. If swallowed do NOT induce vomiting. Wash mouth out with water and give water to drink.
- Eye contact:** Immediately hold eyes open and flood with clean water until chemical is removed. Ensure irrigation under eyelids by occasionally lifting them. Do not try to remove contact lenses unless trained. If irritation persists, seek medical attention.
- Skin contact:** Remove contaminated clothing. Wash skin with soap and water. If skin is irritated and persists, seek medical advice.
- Inhalation:** Remove to fresh air and observe until recovered. If irritation or symptoms persists more than about 30 minutes, seek medical advice.
- Advice to Doctor:** Treat symptomatically. If vomiting occurs, solvent present may cause pulmonary pneumonitis.

**SECTION 5**

**FIRE FIGHTING MEASURES**

**Specific Hazard:** Combustible liquid (C1) – Flash point > 62°C.

**Extinguishing media:** Extinguish fire using carbon dioxide, alcohol resistant foam or dry agent. If waterspray is used, contain all runoff. Contain all runoff.

**Hazards from combustion products:** There is a risk of an explosion from this product if commercial quantities are involved in a fire. On heating will emit toxic fumes. Firefighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or smoke.

**Precautions for fire-fighters and special protective equipment:** Isolate fire area. Evacuate downwind residents. Wear full protective clothing and self-contained breathing apparatus. Do not breathe smoke or vapours generated.

**SECTION 6**

**ACCIDENTAL RELEASE MEASURES**

**Emergency procedures / Material and methods for containment and cleanup procedures:**

**Accidental release:** In the event of a major spill, prevent spillage from entering drains or water courses. As a minimum, wear overalls, elbow length PVC gloves and face shield or goggles.

In the case of spillage, stop leak if safe to do so, and contain spill and absorb spilled material with absorbent material such as sand, clay or cat litter and dispose of waste as indicated in section 13 or according to the Australian Standard 2507 - Storage and Handling of Pesticides. Keep out animals and unprotected persons. This product is a herbicide and spills can damage crops, pastures and desirable vegetation. Prevent spilled material entering drains, waterways or sewers.

After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Thoroughly launder protective clothing before storage or re-use.

**SECTION 7**

**HANDLING AND STORAGE**

**Precautions for Safe Handling:** Product is harmful if inhaled or swallowed. Will irritate eyes, nose, throat and skin. Avoid inhaling spray mist. When preparing spray wear elbow length PVC gloves and face-shield. 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 and contaminated clothing.

**Conditions for Safe Storage:** 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. Not classified as a Dangerous Good by the ADG. Store in the closed, original container in a well ventilated area away from children, animals, food, feedstuffs, seed and fertilisers. Do not store for prolonged periods in direct sunlight. Do not store near naked flames or ignition sources.

**SECTION 8**

**EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Exposure Guidelines:**

Exposure guidelines have been established for N-methyl pyrrolidone by Safe Work Australia and the manufacturer recommends an Exposure level (PEL) for Diflufenican 2.3 mg/m<sup>3</sup>.

Atmospheric Contaminant	Exposure Standard (TWA)	STEL (mg/m <sup>3</sup> )
N-methyl pyrrolidone	103 mg/m <sup>3</sup> (25 ppm)	309 mg/m <sup>3</sup> (75 ppm)

TWA = Time-weight Average. STEL = Short Term Exposure Limit

**Biological Limit Values:**

No biological limit allocated.

**Engineering controls:**

Use in ventilated areas. Keep containers closed when not in use. No special engineering controls are normally required.

**SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION (Continued)****Personal Protective Equipment (PPE):**

When preparing spray wear elbow length PVC gloves and face-shield. 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 and contaminated clothing.

Personal Hygiene: Product is harmful if inhaled or swallowed. Will irritate eyes, nose, throat and skin. Avoid inhaling spray mist. Clean water should be available for washing in case of eye or skin contamination. Wash skin before eating, drinking or smoking. Shower at the end of the workday.

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Clear, light yellow to dark brown liquid.
<b>Odour:</b>	Aromatic odour.
<b>Boiling point:</b>	No data available.
<b>Freezing point:</b>	No data available.
<b>Solubility in Water:</b>	Emulsifies in water.
<b>pH:</b>	No data available.
<b>Flammability:</b>	Combustible Liquid (C1).
<b>Flash point:</b>	> 62°C.
<b>Poisons Schedule:</b>	This product is a Schedule 5 (S5) Poison.
<b>Specific Gravity:</b>	Approximately 1.09.

**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:** Avoid sources of ignition and extremes of temperature.

**Incompatible materials:** Keep away from strong oxidizing agents, strong acids and strong bases.

**Hazardous decomposition products:** When burnt will emit toxic and noxious fumes. Will not polymerise.

**Hazardous reactions:** No hazardous reactions known.

**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:** Harmful if swallowed. Possible symptoms of exposure include: headache, nausea, dizziness and weakness. Acute Oral LD<sub>50</sub> 365 mg/kg (rat) (bromoxynil octanoate); Acute Oral LD<sub>50</sub> > 5000 mg/kg (rat) (diflufenican). If aspirated into the lung, e.g. from vomiting, the presence of solvent may result in chemical pneumonitis or other lung damage.

**Eye:** This product is slight eye irritant.

**Skin:** This product is a mild to moderate skin irritant. Acute dermal LD<sub>50</sub> > 2,000 mg/kg (rat) (for both bromoxynil octanoate and diflufenican). Prolonged contact with the concentrate can cause defatting of the skin and may result in dermatitis.

**Inhaled:** Harmful if inhaled. Symptoms of exposure by inhalation are similar to those described for ingestion. LC<sub>50</sub> (rat): 0.72 – 0.81 mg/L/4 hr (bromoxynil octanoate) LC<sub>50</sub> (rat): > 5.12 mg/L/4hr (diflufenican).

**SECTION 11 TOXICOLOGICAL INFORMATION (Continued)**

**Chronic toxicity:** Bromoxynil is classified by the European Community as a category 3 teratogen-substances which cause concern for man owing to possible teratogenic effects but in respect of which the information is not adequate for making a satisfactory assessment. The US EPA has classified bromoxynil octanoate as a Group C possible human carcinogen based on an increased incidence of liver tumours in mice. It is not mutagenic. Diflufenican was not mutagenic, carcinogenic or teratogenic and did not show reproductive effects in animal studies. In animal studies, N-methyl-2-pyrrolidone showed a development toxic effect in high doses which were maternally toxic.

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.

Safe Work Australia has classified N-Methyl-Pyrrolidone in the occupational environment as a reproduction category 2 substance – which indicates that there is sufficient evidence to provide a strong presumption that human exposure to the substance may result in impaired fertility. N-methyl-2-pyrrolidone caused testicular damage and male infertility in laboratory tests.

**SECTION 12 ECOLOGICAL INFORMATION**

**Environmental Toxicology:** No data is available on this product. Dangerous to fish and algae. Low hazard to bees. Do not contaminate streams, rivers or waterways with the chemical or used containers.

Test Species	Bromoxynil	Diflufenican
Blue Gill sunfish①/Rainbow trout②	LC <sub>50</sub> = 0.06 mg/L ①	LC <sub>50</sub> = 109 µg/L ②
Bobwhite quail	LC <sub>50</sub> = 170 mg/kg	LC <sub>50</sub> > 2150 mg/kg
Mallard duck	LC <sub>50</sub> = 2350 mg/kg	LC <sub>50</sub> > 4000 mg/kg
Daphnia magna	LC <sub>50</sub> (48 hr) > 190 mg/L	LC <sub>50</sub> > 240 µg/L
Algae toxicity	EC <sub>50</sub> = 1 mg/L	LC <sub>50</sub> > 0.046 mg/L

**Environmental Fate:** *Bromoxynil* has a low persistence in soil. In sandy soil, the half-life is about 10 days but is pH dependent. The evidence suggests that, while Bromoxynil is broken down by some soil bacteria, it may inhibit the action of other bacteria that promote the formation of nitrite by a process called nitrification

*Diflufenican* is not readily biodegradable. Bioconcentration factor = 1.596. DT<sub>50</sub> = 85 – 282 days depending on soil type and water content. N-methyl-pyrrolidone is readily biodegradable.

**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. To decontaminate spill area, tools and equipment, wash with detergent and water and add the solution to the drums of wastes already collected and label contents. Dispose of drummed wastes, including decontamination solution in accordance with the requirements of Local or State Waste Management Authorities. In rural areas contact ChemClear <http://www.chemclear.com.au> for help with collection of unwanted rural chemicals.

**Disposal of empty non re-fillable containers:** Triple rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. DO NOT burn empty containers or product.

drumMUSTER is the national program for the collection and recycling of empty, cleaned, non returnable crop production and on-farm animal health chemical containers. If the label on your container carries the drumMuster symbol, triple rinse the container, ring your local Council, and offer the container for collection in the program.

**SECTION 14 TRANSPORT INFORMATION**

**Road & Rail Transport:** This product is not classified as a Dangerous Goods under the Australian Code for the Transport of Dangerous Goods by Road and Rail in containers less than 3000 litres. Bulk shipments should use UN 3082, as per below.

**Marine and Air Transport:** Apparent Beamer Herbicide is 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 25% Bromoxynil octanoate). Hazchem ●3Z. Hazard Identification Number (HIN) 90. Standards Australia Emergency Guide No. 47.

**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. 81467.

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

This product is not classified as a Dangerous Good according to the ADG Code for packs less than 3000 litres (SP AU01) (7<sup>th</sup> Ed).

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

**Requirements concerning special training:**

Check State or Territory regulations that require people who use pesticides in their job or business to have training in the application of the materials.

**SECTION 16 OTHER INFORMATION**

Issue Date: 15 January 2016. Valid for 5 years till 15 January 2021 (First issue).

Key to abbreviations and acronyms used in this SDS:

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.

Mutagen: An agent capable of producing a mutation.

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.

Safe Work Australia: Formally known as Australian Safety & Compensation Council (ASCC) which was formally known as the National Occupational Health & Safety Commission (NOHSC).

**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.

*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