SAFETY DATA SHEET

SECTION 1

IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: Apparent Diflufenican 500 SC Herbicide

Other Names: Use: Company: Address:	Diflufenican. Group F Herbicide. Agricultural herbicide for selective control of weeds. Apparent Pty Ltd. 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:	<u>enquiries@apparentag.com.au</u>
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.

* Under Safe Work Australia this product is not classified as a hazardous substance. Under the Globally Harmonised System (GHS) this product is a hazardous substance with the following classification:

Globally Harmonised System (GHS) classification of the substance/mixture:

Hazardous to the Aquatic Environment – Long-Term Hazard – Category 1.

Signal Word: No signal word.

Hazard statements:

H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements:

Prevention:

P273 Avoid release to the environment

Disposal:

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

Pictogram: No symbol.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL	CAS NUMBER	PROPORTION
Diflufenican	83164-33-4	500 g/L
Other ingredients (including water) determined not to be hazardous		Balance

SECTION 4

FIRST AID MEASURES

FIRST AID

Ingredients:

Ingestion: DO NOT induce vomiting. Rinse any residual product from mouth and lips. Give water to drink and seek medical help. Phone Australia 13 11 26.

Eye contact: Flush with running water until product is removed. Seek medical advice if irritation persists.

SECTION 4 FIRST AID MEASURES (Continued)

Skin contact: Remove contaminated clothing. Wash thoroughly under running water using a mild soap. Seek medical advice if irritation, reddening and/or other damage occurs.

Inhalation: Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Advice to Doctor: Treat symptomatically.

SECTION 5

FIRE FIGHTING MEASURES

Specific Hazard: Product is non-combustible. Generally considered a low risk.

Extinguishing media: Extinguish fire using carbon dioxide, foam (alcohol-resistant) or dry agent. If waterspray is used, contain all runoff. If the water in the formulation is evaporated by prolonged heating, the residue will burn.

Hazards from combustion products: Non-combustible, however product is likely to decompose after heating to dryness and continued strong heating and will emit toxic fumes. Will not polymerise.

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: Wear protective equipment to prevent skin and eyes being affected. Evacuate unprotected and unnecessary personnel from area of spill. If material is leaking from a container, stop the leak only if this can be done safely. This product is a herbicide and spills can damage crops, pastures and desirable vegetation. Prevent spillage entering drains or watercourse.

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 in compliance with relevant Local, State or Territory government regulations. Soil is a suitable absorbent, especially soils high in clay. Soil can be used to form bunds to contain spillage. Contaminated soil should be collected for disposal at a suitable landfill. Personal protective equipment and clothing should be washed with soapy water. Keep out animals and unprotected persons.

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: Keep exposure to a minimum. Minimise quantities kept in work areas. Avoid contact with eyes and skin. Wash hands after use.

Conditions for Safe Storage: Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight.

SECTION 8

EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:

No exposure limits have been assigned by Safe Work Australia to the ingredients in this product.

Biological Limit Values:

No biological limit allocated.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION (Continued)

Engineering controls:

Use in ventilated areas. Supplement natural ventilation if necessary. Keep containers closed when not in use. No special engineering controls are required.

Personal Protective Equipment (PPE):

No specific personal protective equipment is required when handling this product. As with all pesticides good industrial hygiene should be practised and exposure to the product minimised.

Avoid contact with eyes and skin. Wash hands after use.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Viscous light brown liquid suspension.
Odour:	Faint.
Boiling point:	Approximately 100°C.
Freezing point:	Just below 0°C.
Solubility in Water:	Diflufenican will be suspended, not dissolved.
pH:	Approximately 8.
Specific Gravity:	Approximately 1.1
Flammability:	Non-Combustible liquid, unless dried.
Poisons Schedule:	This product is not a scheduled poison.
Formulation type:	Suspension Concentrate (SC).

SECTION 10

STABILITY AND REACTIVITY

Chemical Stability: Product should be stable in storage for at least 2 years after manufacture. Some settling might occur, and containers should be agitated at least once every 12 months to resuspend any sediment.

Conditions to avoid: Keep in a cool, dry place and below 30°C where possible.

Incompatible materials: Strong acids, bases or oxidizing agents.

Hazardous decomposition products: Carbon dioxide and monoxide, nitrogen oxides and other toxic gases may be produced under certain conditions of combustion.

Hazardous reactions: Not likely to polymerise.

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: Acute Oral LD₅₀ (rat) > 2000 mg/kg - Diflufenican. Accidental swallowing of small amounts of this product is not expected to cause injury – low acute oral toxicity.

Eye: Mild irritant. May cause discomfort if contact is prolonged.

Skin: Acute dermal LD_{50} (rat) > 1,000 mg/kg (Diflufenican). Non-irritating, not a sensitiser.

Inhaled: Should not cause severe effects if treated promptly. May cause irritation to the respiratory tract. Acute inhalation $LC_{50} > 5.12 \text{ mg/L/4 hrs} - \text{Diflufenican}$.

Chronic toxicity:

Evidence from animal studies indicates no relevant reproductive effects were found for Diflufenican. At high doses adverse effects where females failed to deliver were observed. There is no evidence of teratogenic, mutagenic or carcinogenic effects observed.

SECTION 12

ECOLOGICAL INFORMATION

Environmental Toxicology: Moderatelly toxic to fish and very toxic to aquatic organisms, may cause long-term adverse effects to the aquatic environment. This product is not readily biodegradable. Fish: Rainbow trout 96 hr LC₅₀ = 83 mg/L; Invertebrates *Daphnia magna* 48 hr EC₅₀ = 90 mg/L; Green algae 72 hr EC₅₀ = 0.25 mg/L, Duckweed LD₅₀ 0.039 mg/L. It is not considered as harmful to birds and soil micro- and macroorganisms. LD₅₀ female mallard: > 4000 mg/kg; Bees: contact LD₅₀ > 100 µg/bee. Low toxicity to earthworms 14 day LD₅₀ > 1000 mg/kg soil.

Environmental Fate: Diflufenican has moderate mobility in soil. Absorption depends on soil pH and organic matter content. Diflufenican is not readily degradable. Degradation half-lives vary with circumstances, but vary from 15 to 30 weeks in soil. Bioconcentration factor is approximately 1500 but does not readily bioaccumulate.

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.

Disposal of empty 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.

SECTION 14

TRANSPORT INFORMATION

Road & Rail Transport: 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: Apparent Diflufenican 500 SC Herbicide 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 50% Diflufenican). Hazchem code •3Z. Hazard Identification Number (HIN) 90. Australian Standards Initial Emergency Response 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. 67933.

This product is classified as a Hazardous Substance under the criteria of Safe Work Australia. No risk phrases have been allocated.

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 (7th Ed). *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.

Apparent Diflufenican 500 SC Herbicide

SECTION 16

OTHER INFORMATION

Issue Date: 14 June 2016. Valid for 5 years till 14 June 2021. (revised to GHS).

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.
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.
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 Au	stralia: 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.
- 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