1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name:	**Sabakem Reckon-M 275EC Selective Herbicide**
Other means of identification	Blend of Diflufenican and MCPA in a suitable solvent system.
Recommended use of the chemical and restrictions on use:	Agricultural herbicide for use as described on the product label.
Supplier:	Sabakem Pty Ltd
Street address:	Suite 809, Level 8, 2 Queen St Melbourne VIC 3000 Australia
Telephone no.:	03 9629 3979
Website:	www.sabakem.com
Emergency telephone:	Poisons Information Centre 13 11 26 (24 hours)

2. HAZARDS IDENTIFICATION

Classification of the substance mixture:

This material is hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia; HAZARDOUS SUBSTANCE.

Classification of the substance or mixture:
Acute toxicity (oral) – Category 4
Skin corrosion/irritation – Category 2
Eye damage/irritation – Category 2
Skin sensitization – Category 1B
STOT single exposure – Category 3
Reproductive toxicity – Category 1B

The following environment hazard categories fall outside the scope of the Workplace Health and Safety Regulations:
Aquatic acute toxicity – Category 1
Aquatic chronic toxicity – Category 1

SIGNAL WORD: DANGER

Hazard Statement(s):
H302: Harmful if swallowed
H315: Causes skin irritation
H319: Causes serious eye irritation
H317: May cause an allergic skin reaction
H335: May cause respiratory irritation
H360: May damage fertility or the unborn child
H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.

Precautionary Statement(s):
Prevention:
P201 Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P261: Avoid breathing vapour or spray.
P264: Wash contacted areas 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/eye protection/face protection.

Response:
P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
P330: Rinse mouth.
P302 + P352: IF ON SKIN: Wash with plenty of water.
P333 + P313: If skin irritation or rash occurs, get medical advice/attention.
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/attention.
P308 + P313: If exposed or concerned: Get medical advice/attention.
P312: Call a POISON CENTER/doctor if you feel unwell.
P362 + P364: Take off contaminated clothing and wash before reuse.
P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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 as per container label, in accordance with local/state/territory government regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion (w/v)
MCPA (as ethyl hexyl ester)	29450-45-1	250 g/L
Diflufenican	83164-33-4	25 g/L
N-Methyl-2-pyrrolidone	872-50-4	150 g/L
Aromatic hydrocarbons	64742-94-5	325 g/L
Other components are not considered hazardous in this formulation and therefore are not required to be disclosed according to the WHS Regulations.		

4. FIRST AID MEASURES

Speed in treatment is essential. If poisoning occurs, contact a Poisons Information Centre. Phone Australia 131126; New Zealand 0800 764 766 or a doctor. Have this SDS or the label with you.

Inhalation: If inhaled, bring affected person to fresh air. If symptoms develop, contact a Poisons Information Centre or a doctor at once.

Skin contact:	Remove contaminated clothing and wash with plenty of water and soap. If symptoms develop, seek medical attention.
Eye contact:	If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes. Seek medical advice.
Ingestion:	If swallowed, wash mouth with water and contact a Poisons Information Centre, or call a doctor. Do not induce vomiting unless told to do so by the Poisons Information Centre or doctor.
First aid facilities:	Eyewash and normal washroom facilities.
Medical attention and special treatment:	Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable extinguishing equipment:	Alcohol resistant foam/ foam
Hazchem code:	•3Z (bulk only)
Specific hazards arising from the chemical:	This product is classified as a C1 combustible product. There is little risk of an explosion from this product if commercial quantities are involved in a fire. Violent steam generation or eruption may occur upon application of direct water stream on hot liquids. Vapours from this product are heavier than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. They may also flash back considerable distances. Fire decomposition products from this product are likely to be toxic and corrosive if inhaled. Take appropriate protective measures.
Special protective equipment and precautions for fire-fighters:	In case of fire and/or explosion do not breathe fumes. Wear self-contained breathing apparatus and chemical-protective clothing. Keep containers cool by spraying with water if exposed to fire. Collect contaminated extinguishing water separately. Do not allow contaminated water to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures/ Environmental precautions:	In the event of a spill, prevent spillage from entering drains or water courses if safe to do so with absorbent material and call emergency services.
Personal precautions/ Protective equipment:	Wear full protective clothing including eye/face protection. All skin areas should be covered. See below under Personal Protection regarding Australian Standards relating to personal protective equipment. Suitable materials for protective clothing include no specific manufacturer recommendations. Use impermeable gloves with care. Eye/face protective equipment should comprise as a minimum, protective goggles. If there is a significant chance that vapours or mists are likely to build up in the cleanup area, we recommend that you use a respirator. It should be fitted with a type G cartridge, suitable for agricultural chemicals. Otherwise, not normally necessary. Wear protective clothing. It is good practice to wear impermeable gloves when handling chemical products.
Methods and materials for containment and cleaning up:	Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Because of the environmentally hazardous nature of this product, special care should be taken to restrict release to waterways or drains. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Refer to product label for specific instructions. After spills, wash area preventing runoff from entering drains. If a

significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this SDS and the label, instructions on the label prevail. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

7. HANDLING AND STORAGE

Precautions for safe handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Keep containers closed at all times - check regularly for leaks or spills. Transport and store upright. Refer to Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under 'Storage' should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Conditions for safe storage, including any incompatibilities: C1 Combustible Liquid so must be stored and handled as specified in AS 1940 "The storage and handling of flammable and combustible liquids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure control measures: No value assigned for this specific product by Safe Work Australia (SWA)

SWA exposure limits for N-Methyl-2-pyrrolidone
TWA (mg/m^3) = 103
STEL (mg/m^3) = 309

Engineering controls: Use in well-ventilated areas. Keep containers closed when not in use.

Individual protection measures, such as Personal Protective Equipment (PPE):

See container label safety directions. The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

Observe good standards of hygiene and cleanliness. Always wash hands, arms and face thoroughly with soap and water before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment with detergent and warm water before storage or re-use.

Respiratory protection: If engineering controls are not effective in controlling airborne exposure, then an approved respirator with a replaceable vapour/mist filter should be used. Consult AS/NZS 1715 and AS/NZS 1716 for further information.

Eye and face protection: Avoid contact with eyes. Safety glasses/goggles with side shield protection should be worn as a general precaution. Consult AS/NZS 1336 and AS/NZS 1337 for further information.

Skin protection: Full protective clothing, and elbow-length rubber or chemical resistant gloves must be worn when opening the container and using the product. Always check with the glove manufacturer or your personal protective equipment supplier regarding the correct type of glove to use. Consult AS/NZS 2161, AS/NZS 45-1 and AS/NZS2210 for further information.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Colour:	Clear dark brown
Odour:	Characteristic ester odour
pH:	No available data

Specific gravity:	1.063
Melting point/Freezing point:	No specific data. Liquid at normal temperatures.
Boiling point/range:	176 – 200°C at 100kPa
Flash point:	No available data
Evaporation point:	No available data
Vapour pressure:	4.25 x 10^{-3} mPa at 25°C (Diflufenican)
Vapour density:	No available data
Solubility:	Emulsifiable
Partition coefficient: n- octanol/water	4.9 (Diflufenican) 5.37 (MCPA, 2EHE) (log Pow octanol/water)
Auto-ignition temperature:	No available data
Decomposition temperature:	No available data
Viscosity:	No available data

10. STABILITY AND REACTIVITY

Reactivity:	No known reactivity hazards associated with this product, under normal conditions of use.
Chemical stability:	Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Possibility of hazardous reactions:	No information available.
Conditions to avoid:	Heat, sparks, open flames and other sources of ignition. Do not store in direct sunlight.
Incompatible materials:	Acids, bases, oxidising agents.
Hazardous decomposition products:	Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas in reducing atmospheres. Hydrogen chloride gas, other compounds of chlorine. Hydrogen fluoride gas and other compounds of fluorine. Water. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: Harmful if swallowed.
Not considered harmful and does not cause toxicity via dermal and inhalation route, according to available information.

Toxicity data is available on the active constituent, MCPA (as ethyl hexyl ester):
LD50 (Rat), Oral = >300 - <2000 mg/kg bw
Toxicity data is available on the active constituent, Diflufenican:
LD50 (Rat), Oral = >5000 mg/kg bw
LD50 (Rat), Dermal = 2000 mg/kg bw
LD50 (Rat), Inhalation = >5.12 mg l^{-1}

Skin irritation:	Is considered a skin irritant according to available information.
Eye irritation:	Causes serious eye irritation according to available information.
Respiratory or skin sensitisation:	Is considered a skin sensitiser and expected to be a respiratory sensitiser according to available information.
Germ cell mutagenicity:	Not suspected to cause genetic defects according to available data.
Carcinogenicity:	Not considered to be carcinogenic according to available data.
Reproductive toxicity:	Is considered to be toxic to reproduction according to available data. A two-generation rat study at doses of up to 15 mg/kg/day diflufenican affected reproductive function. It is unlikely that humans will experience these effects under normal exposure conditions.

STOT-single exposure:	May cause respiratory irritation. Inhalation of product mist or vapour can cause irritation of the nose, throat and respiratory system.
STOT-repeated exposure:	Not expected to cause toxicity to a specific target organ according to available data.
Aspiration hazard:	Not expected to be an aspiration hazard according to available data.
Chronic health effects:	Not expected to cause chronic health effects according to available data.

12. ECOLOGICAL INFORMATION

Ecotoxicity: Available information on this product indicates that this product is classified as an acute and chronic aquatic toxicant.

Toxicity data is available on the active constituent, MCPA (as ethyl hexyl ester):

LC50 (freshwater fish) 96h = 0.88 mg/L (*Lepomis macrochirus*)

EC50 (freshwater aquatic invertebrate) 48h = 0.28 mg/L (*Daphnia magna*)NOEC, 30 days (fish) ≥ 10 mg/L

Toxicity data is available on the active constituent, Diflufenican:

LC50 (freshwater fish) 96h = >0.099 mg/L (*Cyprinus carpio*)

EC50 (freshwater aquatic invertebrate) 48h = > 0.24 mg/L (*Daphnia magna*)

NOEC, 21 days (fish) 0.015 mg/L (*Oncorhynchus mykiss*)

NOEC, 21 days (fish) 0.015 mg/L (*Daphnia magna*)

Persistence/ Degradability: No information available on the product.

MCPA: rapidly degraded by soil microorganisms and low persistence.

Half-life time = 14 days – 1 month depending on soil moisture and soil organic matter.

Diflufenican: Half-life time = 105 – 210 days

Bioaccumulative potential: No information available.

Mobility in soil: No information available on the product.

Diflufenican: Low mobility

13. DISPOSAL CONSIDERATIONS

Disposal methods: Refer to Waste Management Authority. Dispose of contents/container in accordance with local/regional/national/international regulations. Break, crush or puncture and dispose of empty containers in a local authority landfill. Triple rinse and bury rinsate and empty capsules in a local authority landfill. If no landfill is available, bury the containers below 0.5m in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product must not be burnt. Do NOT re-use containers for any other purpose.

14. TRANSPORT INFORMATION

Road and rail transport: Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to the provisions of the Australian Code for the Transport of Dangerous Goods by Road and Rail when transported by road or rail in;
(a) packagings that do not incorporate a receptacle exceeding 500 kg(L);
(b) or IBCs.

Marine transport: Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; MARINE POLLUTANT

UN Number:	3082
Proper Shipping Name or Technical Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS MCPA ETHYL HEXYL ESTER and DIFLUFENICAN)
Transport Hazard Class:	9
Packaging Group:	III
IMDG EMS Fire:	F – A

IMDG EMS Spill:	S - F
Environmental hazards:	Yes
Additional Information:	The marine pollutant mark is not required when transported in sizes of ≤ 5 L or ≤ 5 kg.

Air transport: IATA provision SP A197: Environmentally Hazardous Substances meeting the description of UN 3077 or UN 3082 are not subject to this Code when transported air in; packages that have inner packages (plastic bottles, glass bottles, plastic bags) of 5 L for UN3082 and 5 kg for UN3077 or less.

15. REGULATORY INFORMATION

Poison schedule (SUSMP): Schedule 5

APVMA approval no.: 69242

AICIS: All the constituents of this material are either listed on the Australian Inventory of Industrial Chemicals (AIIC), not required due the nature of the chemical as they are excluded as an industrial chemical or have been assessed under the Industrial Chemicals Act 1989 as amended.

16. OTHER INFORMATION

General information: None

Issue number: 003

Issue date: 13 January 2026

In any event, the review and, if necessary, the re-issue of an SDS shall be no longer than 5 years after the last date of issue.

Reason(s) for issue: Five-year update and updated to latest GHS requirements

Key abbreviations or acronyms used:

ADG Code - Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition)
ADI – Acceptable Daily Intake
AICIS – Australian Industrial Chemicals Introduction Scheme (formerly NICNAS)
AIIC - Australian Inventory of Industrial Chemicals
APVMA – Agricultural Pesticides and Veterinary Medicines Australia
GHS - Globally Harmonised System of Classification and Labelling of Chemicals (7th revised edition) 2017
IARC - International Agency for Research on Cancer
Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice (July 2023)
NOEL - No-observable-effect-level
STEL - Short term exposure limit means the average airborne concentration of a substance calculated over a 15 minute period. The STEL should not be exceeded at any time during a normal eight hour working day.
SUSMP - Standard for the Uniform Scheduling of Medicines & Poisons
SWA - Safe Work Australia, formerly ASCC and NOHSC
TGA – Therapeutic Goods Australia
TWA - Time-weighted average means the average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.
WHS – Workplace Health and Safety

The physical values and properties described in this SDS are typical values based on scientific literature and material produced to date, and are believed to be reliable. The manufacturer, Sabakem Pte Ltd provides no warranties, either expressed or implied and assumes no responsibility for the accuracy or completeness of the data contained herein. The information is supplied upon the condition that the persons receiving information will make their own determination as to the suitability for their purposes prior to use of this product. Due care should be taken to ensure that the use of this product and its disposal is in compliance with all relevant Federal, State and Local Government regulations.

End of SDS