

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name:	Sabakem 2,4-D 625 Selective Herbicide
Other means of identification	
Recommended use of the chemical and restrictions on use:	Selective herbicide for control of certain broadleaf weeds as directed on 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 classified as hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Classification of the substance or mixture:

Acute toxicity (oral) – Category 4
Eye irritation/damage – Category 1
Skin sensitization – Category 1

The following environment hazard categories fall outside the scope of the Workplace Health and Safety Regulations:

Aquatic chronic toxicity – Category 2

SIGNAL WORD: DANGER



Hazard Statement(s):

H302: Harmful if swallowed.
H317: May cause an allergic skin reaction.
H318: Causes serious eye damage.
H411: Toxic to aquatic life with long lasting effects.

Precautionary Statement(s):

Prevention:

P261: Avoid breathing vapours or spray.
P264: Wash hands/contacted areas thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P272: Contaminated work clothing should not be allowed out of the workplace.
P280: Wear protective gloves, eye protection/face protection.
P273: Avoid release to the environment.

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.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes.
P310: Immediately call a POISON CENTER/doctor.
P333 + P313: If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364: Take off contaminated clothing and wash it before reuse.
Remove contact lenses, if present and easy to do. Continue rinsing.
P391: Collect spillage.

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)
2,4-D, Dimethylamine salt	2008-39-1	30 – 60 %
2,4-D Diethanolamine salt	5742-19-8	30 – 60 %

Although concentrations of the individual salts are not available, 2,4-D is present at 625g/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: Use fire extinguishing methods suitable to surrounding conditions.

Hazchem code: •3Z (bulk only)

Specific hazards arising from the chemical: This product is not combustible but may decompose in a fire. Hazardous combustion products include oxides of carbon and nitrogen which may be toxic if inhaled.

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/	In the event of a spill, prevent spillage from entering drains or water courses with absorbent material and call emergency services.
Environmental precautions:	
Personal precautions/	Wear protective clothing. It is good practice to wear impermeable gloves when
Protective equipment:	handling chemical products.
Methods and materials for	Contain - prevent run off into drains and waterways. For minor spills, clean up,
containment and cleaning up:	rinsing to sewer and put empty container in garbage.

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:	Store packages of this product in a cool place. Make sure that containers of this product are kept tightly closed. Keep containers dry and away from water. Make sure that the product does not come into contact with substances listed under 'Incompatibilities' in Section 10. Check packaging - there may be further storage instructions on the label.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure control measures:	No value assigned for this specific material by Safe Work Australia. No biological limit allocated for the product or any of its ingredients. No biological monitoring is required.
Engineering controls:	No special ventilation requirements are normally necessary for this product. However, make sure that the work environment remains clean and that vapours and mists are minimised.
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:	Use an approved vapour respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. Consult AS/NZS 1715 and AS/NZS 1716 for further information.
Eye and face protection:	Avoid contact with eyes. Eye protection such as protective glasses or goggles must be worn when product is being used. Failure to protect your eyes may cause them harm. Emergency eye wash facilities are also recommended in an area close to where this product is being used. See Australian/New Zealand Standard Industrial Eye Protection: AS1336 and AS/NZS 1337 for more 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. DO NOT allow contaminated work clothing out of the workplace. Always check with the glove manufacturer or your personal protective equipment supplier regarding the correct type of glove to use. Consult AS/NZS 2161 for further information.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Colour:	Clear red brown
Odour:	Ammoniacal odour
pH:	Not available
Specific gravity:	Approx. 1.255 at 20°C
Melting point/Freezing point:	Below 0°C
Boiling point/range:	Approximately 100°C at 100kPa.
Flash point:	Not available
Evaporation point:	Not available
Vapour pressure:	2.37 kPa at 20°C (water vapour pressure).
Vapour density:	Not available
Solubility:	Completely soluble in water
Partition coefficient: n- octanol/water	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not available

10. STABILITY AND REACTIVITY

Reactivity:	This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf-life properties.
Chemical stability:	Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Possibility of hazardous reactions:	This product is likely to decompose only after heating to dryness, followed by further strong heating. Hazardous polymerisation will not occur.
Conditions to avoid:	Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.
Incompatible materials:	Strong acids, strong bases and strong oxidising agents.
Hazardous decomposition products:	Carbon dioxide, and if combustion is incomplete, carbon monoxide. Nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas in reducing atmospheres. 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:	Is considered harmful via oral routes, according to available information. No data is available on the formulated product. The following is the acute toxicity data available for 2,4-D: Oral LD50 (Rat): 639 mg/kg; Oral LD50 (Mice): 138 mg/kg Dermal LD50 (Rabbit): >2000 mg/kg Inhalation LC50 (Rat): 0.78 mg/L
Skin irritation:	Not considered a skin irritant according to available information.
Eye irritation:	Causes eye damage according to available information.
Respiratory or skin sensitisation:	Is expected to be a skin sensitiser and may cause an allergic skin reaction 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:	Not considered to be toxic to reproduction according to available data.
STOT-single exposure:	Not expected to cause toxicity to a specific target organ according to available data.

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 being toxic to aquatic life with long lasting effects.
Following is the ecotoxicity data available for the active constituent: 2,4-D, Dimethylamine salt and acid.
Fish - Acute 96 hour LC₅₀: 100mg l⁻¹ (*Pimephales promelas*)(Moderately toxic)
Sediment dwelling organisms - Acute 96 hour LC₅₀ > 3.88 mg l⁻¹ (*Chironomus* spp.)
Aquatic plants - Acute 7 day EC₅₀, biomass 2.7mg l⁻¹ (*Lemna gibba*)

Persistence/Degradability: Non-moderately persistent depending on soil and sediment conditions (DT50: 4.4 – 96.3)

Bioaccumulative potential: Low bioaccumulative potential.

Mobility in soil: Mobile in soil Koc - 39.3 mL g⁻¹.

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: Australian Special Provisions; AU01: Environmentally Hazardous Substances meeting the description of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in;
(a) packaging's that do not incorporate a receptacle exceeding 500 Kg (L); or
(b) 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 HEPTAMETHYLTRISILOXANE, ALLYL ETHER, ETHOXYLATE, PROPOXYLATE)
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 6

APVMA approval no.: 67401
AICIS: All the constituents of this material are either listed on the Australian Inventory of Industrial Chemicals (AIC), 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: 001
Issue date: 10th July 2024
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)
AIC – 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
NOEL – No observable effect level
Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice (July 2023)
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