1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name:	**Sabakem Flumetsulam 800 WG Herbicide**
Other means of identification	
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 not classified as hazardous according to the criteria of Safe Work Australia (SWA).

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

Classification of the substance or mixture:

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

SIGNAL WORD: WARNING

Hazard Statement(s):
H400: Very toxic to aquatic life
H410: Very toxic to aquatic life with long lasting effects.

Precautionary Statement(s):
Prevention:
P273: Avoid release to the environment.

Response:
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/w)
Flumetsulam	98967-40-9	800g/kg
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: IF ON SKIN, Remove contaminated clothing and wash with plenty of water and soap. If symptoms develop, seek medical attention.

Eye contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 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, rinse mouth and contact a Poisons Information Centre, or call a doctor if you feel unwell. 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: Choose extinguishing media to suit the burning material.

Hazchem code: 2Z (bulk only)

Specific hazards arising from the chemical: Hazardous combustion products include oxides of carbon, nitrogen, nitrogen oxides, other nitrogen compounds, hydrogen cyanide, sulphur oxides, other sulphur compounds, hydrogen fluoride and other fluoride compounds.

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 and call emergency services.

Personal precautions/ Protective equipment: Wear protective clothing. It is good practice to wear impermeable gloves when handling chemical products.

Methods and materials for containment and cleaning up:	Contain - prevent run off into drains and waterways. For minor spills, clean up, rinsing to sewer and put empty container in garbage.

7. HANDLING AND STORAGE

Precautions for safe handling:	Keep out of reach of children. Dust may cause eye irritation. Users should wash hands before eating, drinking or smoking. 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 in the closed, original container in a dry, well-ventilated area out of direct sunlight. Keep container tightly sealed and do not store with seed, fertilisers or foodstuffs. 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 product or ingredients by Safe Work Australia (SWA)
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 dust/particulate filter should be used. 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. Consult AS/NZS 1336 and AS/NZS 1337 for further information.
Skin protection:	Full protective clothing, and elbow-length rubber or chemical resistant gloves should 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:	Granules
Colour:	Off-white
Odour:	Characteristic odour
pH:	5.0-8.0
Specific gravity:	No available data
Melting point/Freezing point:	252°C

Boiling point/range:	No available data
Flash point:	No available data
Evaporation point:	No available data
Vapour pressure:	3.70×10^{-7} mPa at 25°C
Vapour density:	No available data
Solubility:	Disperses in water
Partition coefficient: n- octanol/water	No available data
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:	Relatively stable in neutral, weakly acidic and weakly alkaline media. Hydrolyzed by stronger acids and basis. Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Possibility of hazardous reactions:	Hazardous polymerisation will not occur.
Conditions to avoid:	Do not store in direct sunlight.
Incompatible materials:	Very strong acid/alkaline formulations
Hazardous decomposition products:	Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Oxides of nitrogen, nitrogen oxides, other nitrogen compounds, hydrogen cyanide, sulphur oxides, other sulphur compounds, hydrogen fluoride and other fluoride compounds. 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:	Not considered to be acutely toxic via oral, dermal and inhalation routes of exposure, according to available data. Following is the acute toxicity data available for flumetsulam: Oral LD50 (Rat): >5000 mg/Kg Dermal LD50 (Rabbit): >2000 mg/kg Inhalation LC50 (Rat): >1.2 mg/L, 4 hr
Skin irritation:	Not considered a skin irritant according to available information.
Eye irritation:	May cause slight eye irritation. However, based on classification principles, the classification criteria are not met.
Respiratory or skin sensitisation:	Not a skin sensitiser and not 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:	Not considered to be toxic to reproduction according to available data.
STOT-single exposure:	Not expected to cause toxicity to a specific target organ through single exposure according to available information.
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 very toxic to aquatic life with long lasting effects.
Toxicity data is available on the active constituent, Flumetsulam:
Fish LC50 (96h) (Silverside minnow) > 379 mg/L (low toxicity)
Aquatic plants - Acute 7 day EC_{50}, biomass 0.0021 mg l^{-1}(high toxicity)

Persistence/ Degradability: No information available on the product. Flumetsulam is moderately persistent. In soil and stable in water.

Bioaccumulative potential: It is considered that Flumetsulam has low potential to bioaccumulate.

Mobility in soil: No information available on the product. Flumetsulam is considered mobile. Koc 28 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: 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:	3077
Proper Shipping Name or Technical Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS FLUMETSULAM)
Transport Hazard Class:	9
Packaging Group:	III
IMDG EMS Fire:	F – A
IMDG EMS Spill:	S - F
Environmental hazards:	Yes. Marine Pollutant substance: Flumetsulam
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): Not required to be scheduled (Appendix B)

APVMA no.: 94669

AICIS: All the constituents of this material are either listed on the Australian Inventory of Industrial Chemicals (AIIC), or not required as they are excluded as an industrial chemical being regulated as Agricultural Chemical products as per the Agricultural and Veterinary Chemicals Code Act (1994).

16. OTHER INFORMATION

General information: None

Issue number: 001

Issue date: 08 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: First issue

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
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

End of SDS