

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name:	Sabakem Oxyfluorfen 240EC Herbicide
Other means of identification	Emulsifiable concentrate containing Oxyfluorfen
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 Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work Health and Safety regulations, Australia.

Not subject to the ADG Code when transported in Australia by Road or Rail in packages 500kg(L) or less; or IBCs (refer to SP AU01). However, if transported by Air or Sea, this provision does not apply. Then the product is classed as Dangerous (Class 9 Environmentally Hazardous) by IATA and IMDG/IMSBC respectively. See details below and in Section 14 of this SDS.

Classification of the substance or mixture:

Skin irritation – category 2

Eye irritation – category 2A

Specific target organ toxicity (single exposure) – category 3

Reproductive toxicity – category 1B

Aspiration hazard – category 1

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

Aquatic acute toxicity – Category 2

Aquatic chronic toxicity – Category 2

SIGNAL WORD: DANGER



Hazard Statement(s):

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

H360D: May damage the unborn child.

H304: May be fatal if swallowed and enters airways

H401: Toxic to aquatic life.

H411: 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 fumes, mists, vapours or spray.

P264: Wash contacted areas thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P301 + P310: IF SWALLOWED: Immediately call a POISON CENTRE/doctor.

P331: Do NOT induce vomiting.

P312: Call a POISON CENTRE/doctor if you feel unwell.

P302 + P352: IF ON SKIN: Wash with plenty of soap and water.

P304 + P340: IF INHALED: Remove person to fresh air and keep 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.

P332 + P313: If skin irritation occurs: Get medical advice/attention.

P337 + P313: If eye irritation persists: Get medical advice/attention.

P362 + P364: Take off contaminated clothing and wash it before reuse.

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)
Oxyfluorfen	42874-03-3	240 g/L
N-Methyl-2-pyrrolidone	872-50-4	108 g/L
Liquid hydrocarbon	64742-94-5	606 g/L

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, 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.

First aid facilities:	Eyewash and normal washroom facilities.
Symptoms caused by Exposure:	Exposure may cause irritation of the skin, eyes and respiratory tract. Skin contact may result in itching and redness. Eye contact may cause stinging, redness and excessive watering. Inhalation may cause headache, irritation of the nose and throat, and increased mucus production. Ingestion may cause a burning sensation and redness of the mouth and throat. Symptoms would generally be expected to lessen after exposure has ceased. Exposure during pregnancy may damage the unborn child.
Medical attention and special treatment:	Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media:	Carbon dioxide, dry chemical, foam, water fog or water mist.
Specific hazards arising from the substance or mixture:	This product is classified as a C2 combustible product. There is little risk of an explosion from this product if commercial quantities are involved in a fire. Vapours may accumulate in low-lying areas and may travel to a source of ignition. Under fire conditions, toxic and/or irritating fumes may be emitted, including carbon monoxide, carbon dioxide, oxides of nitrogen, hydrogen chloride and hydrogen fluoride. 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.
Hazchem code:	•3Z

6. ACCIDENTAL RELEASE MEASURES

Personal precautions/ Protective equipment and Environmental precautions:	Ensure adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Slippery when spilt. Wear protective clothing. It is good practice to wear impermeable gloves when handling chemical products. Keep out of waterways.
Emergency procedures:	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.
Methods and materials for containment and cleaning up:	Stop the leak if safe to do so and contain the spill. Absorb with sand, earth, vermiculite or other non-combustible absorbent material. Collect into properly labelled containers for recovery or disposal. Prevent product and washings from entering drains or waterways. If a significant quantity enters drains or waterways, advise emergency services. Dispose of waste in accordance with Section 13 and the product label.

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. Check 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 parameters: No exposure standard has been assigned for this product. The following exposure standards apply to hazardous components:

N-Methyl-2-pyrrolidone: TWA 103 mg/m³ (25 ppm); STEL 309 mg/m³ (75 ppm).

Liquid hydrocarbon: TWA 790 mg/m³; STEL not set.

The acceptable daily intake (ADI) for oxyfluorfen is 0.025 mg/kg bw/day. The corresponding no-observed-effect level (NOEL) is 2.5 mg/kg bw/day.

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

Biological monitoring: No biological limit allocated for the product or any of its ingredients. No biological monitoring is required.

Control banding: No information available

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.

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 for further information

Respiratory protection: If engineering controls are not effective in controlling airborne exposure, then an approved respirator should be used. See Australian Standards AS/NZS 1715 and AS/NZS 1716 for more information.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Colour:	Clear, dark amber
Odour:	Characteristic aromatic odour
pH:	7-8 (estimated)
Specific gravity:	Approximately 1.08g/mL
Melting point/Freezing point:	No specific data. Liquid at normal temperatures
Boiling point/range:	Not available
Flash point:	Approximately 100°C
Upper Flammability Limit:	12%
Lower Flammability Limit:	1.3%
Evaporation point:	Not determined.
Vapour pressure:	0.027 mPa at 25°C (oxyfluorfen)
Vapour density:	Not determined
Solubility:	Emulsifiable in water
Partition coefficient: n- octanol/water	log Pow = 4.47 (oxyfluorfen)
Auto-ignition temperature:	Approximately 350°C
Decomposition temperature:	Not determined
Viscosity:	Not determined

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:	Hazardous polymerisation is not expected to occur.
Conditions to avoid:	Protect from light, heat, sparks, open flames and other sources of ignition. Do not store in direct sunlight.
Incompatible materials:	Strong acids, strong bases and strong oxidising agents.
Hazardous decomposition products:	Thermal decomposition or combustion may produce carbon monoxide, carbon dioxide, oxides of nitrogen, hydrogen chloride, hydrogen fluoride and other toxic or irritating fumes.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	Not considered harmful by the oral, dermal or inhalation routes according to available information.
	Toxicity data are available on the active constituent, Oxyfluorfen LD50 oral, rat and dog = 5,000 mg/kg bw LD50 oral, mouse = 2,700–5,000 mg/kg bw LD50 dermal, rat and rabbit = >5,000 mg/kg bw
Skin irritation:	Causes skin irritation. Symptoms may include itchiness and reddening of contacted skin. Other symptoms may also become evident, but all should disappear once exposure has ceased.
Eye irritation:	Causes serious eye irritation.
Respiratory or skin sensitisation:	Not considered to be a skin sensitiser and not expected to be a respiratory sensitiser according to available information.
Germ cell mutagenicity:	The mixture is not classified for germ cell mutagenicity based on available information.
Carcinogenicity:	Not considered to be carcinogenic according to available data.
Reproductive toxicity:	May damage the unborn child. This classification is driven by N-methyl-2-pyrrolidone in the formulation. In a developmental study with oxyfluorfen in rabbits, increased fused sternal bones in foetuses were observed at the highest dose tested (30 mg/kg bw/day), together with maternal toxicity.
STOT-single exposure:	May cause respiratory irritation. Inhalation of vapours or mists may irritate the nose, throat and respiratory system.
STOT-repeated exposure:	Effects on the liver have been observed in long-term studies with oxyfluorfen. The mixture is not classified for specific target organ toxicity following repeated exposure based on available information.
Aspiration hazard:	May be fatal if swallowed and enters airways.
Chronic health effects:	Repeated or prolonged exposure may aggravate the effects described above.
Information on possible routes of exposure:	Oral, Dermal, Inhalation routes of entry are anticipated.
Interactive effects:	No information available.
Other Information:	No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity:	Toxic to aquatic life with long lasting effects. Oxyfluorfen is highly toxic to aquatic invertebrates, aquatic plants and fish. It is practically non-toxic to birds and honeybees according to available information.
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Toxicity data is available on the active constituent, Oxyfluorfen

Fish, bluegill sunfish: 96hr LC50 = 0.2 mg/L

Aquatic invertebrates, Daphnia: 48hr LC50 = 1.5 mg a.i./L

Freshwater algae, *Scenedesmus acutus*: 96hr EC50 = 5.04 mg/L

LD50 oral, bobwhite quail = >2,200 mg/kg

LD50 oral, mallard duck = >4,000 mg/kg

LC50 oral, honeybees = >10,000 ppm

Persistence/ Degradability:	Oxyfluorfen is moderately persistent in soil, with a representative field half-life of approximately 30-40 days. Photodegradation is an important degradation pathway in soil and water.
Bioaccumulative potential:	Oxyfluorfen is highly hydrophobic and may bioconcentrate. Available studies indicate a low to moderate potential for bioaccumulation in aquatic species.
Mobility in soil:	Oxyfluorfen is nearly insoluble in water and strongly adsorbs to soil and sediment. It is therefore expected to have low mobility in soil.
Other Information:	Avoid release to the environment.

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 containers and dispose of the rinsate and empty containers in accordance with the product label and applicable local requirements. If no landfill is available, bury the containers below 0.5 m 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.
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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); or (b) intermediate bulk containers (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 OXYFLUORFEN) 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.
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 by 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.:	69160

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 date:** September 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 current GHS requirements**Key abbreviations or acronyms used:** ADG Code - Australian Code for the Transport of Dangerous Goods by Road and Rail (Edition 7.9)

AICIS – Australian Industrial Chemicals Introduction Scheme (formerly NICNAS)

AIIC - Australian Inventory of Industrial Chemicals

APVMA – Agricultural Pesticides and Veterinary Medicines Australia

ATE - Acute Toxicity Estimate

BCF - Bioconcentration factor

BLV - Biological limit value

BOD - Biochemical oxygen demand (BOD)

CAS No. - Chemical Abstract Service number

COD - Chemical oxygen demand (COD)

EC50 - Median effective concentration

GHS - Globally Harmonised System of Classification and Labelling of Chemicals (7th revised edition) 2017

IARC - International Agency for Research on Cancer

IATA - International Air Transport Association

IMDG - International Maritime Dangerous Goods

LC50 - Median lethal concentration

LD50 - Median lethal dose

LOAEL - Lowest Observed Adverse Effect Level

NOAEC - No-Observed Adverse Effect Concentration

NOAEL - No-Observed Adverse Effect Level

NOEC - No-Observed Effect Concentration

N.O.S. - Not Otherwise Specified

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice (June 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

ThOD - Theoretical oxygen demand (ThOD)

TLM - Median Tolerance Limit

TGA – Therapeutic Goods Administration

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.

VOC - Volatile Organic Compounds

WHS – Work 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 Pty 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