

Thylation

Pty Ltd

SAFETY DATA SHEET

FELIXER 1080 CARTRIDGE

Date of issue: 29 March 2023

1. IDENTIFICATION OF MATERIAL & SUPPLIER

PRODUCT IDENTIFIER

Product name: Felixer 1080 Cartridge
APVMA Product Number: 89542
Chemical name: Sodium fluoroacetate (1080)

RECOMMENDED USE OF CHEMICAL & RESTRICTIONS ON USE

Relevant identified uses: **For use with Felixer Grooming Trap for control of feral cats**
Restrictions: Restrictions apply to the placement of Felixer Grooming Traps.
Only to be used in accordance with the label instructions & any other State/ Territory instructions for 1080 products.

This product is only made available to approved purchasers & is not for general use by unqualified persons. It must not be made available to unapproved users. This is a restricted chemical substance & must be stored securely.

DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Supplier: **Thylation Operations Pty Ltd**
ABN: 47 638 174 704
Street Address: c/- Level 1, 100 Hutt St, Adelaide SA 5000
Telephone: 1300 234 816
Website: <https://thylation.com>
Email: gm@thylation.com

EMERGENCY TELEPHONE NUMBER

Organisation: Poisons Information Centre
Emergency telephone: 13 11 26 (24 hours)

2. HAZARDS IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

This material is hazardous according to Safe Work Australia: HAZARDOUS CHEMICAL.
Not Classified as Dangerous Goods under the ADG Code, or International classification.

GHS Hazard Classification
Acute Oral Toxicity - Category 4
Acute Dermal Toxicity - Category 4

SIGNAL WORD**WARNING****HAZARD STATEMENT(S):**

H302: Harmful if swallowed
H312: Harmful in contact with skin

PRECAUTIONARY STATEMENT(S): PREVENTION

P102: Keep out of reach of children
P262: Do not get in eyes, on skin, or on clothing
P264: Wash hands, arms & face thoroughly after handling
P270: Do not eat, drink or smoke when using this product
P280: Wear protective gloves and protective clothing

PRECAUTIONARY STATEMENT(S): RESPONSE

P301 + P310: IF SWALLOWED: Immediately call a POISON CENTRE or doctor/ physician
P302 + P352: IF ON SKIN: Wash with plenty of soap & water
P312: Call a POISON CENTRE or doctor/ physician if you feel unwell
P321 / P322: Specific treatment refer to Section 4, First aid measures
P330: Rinse mouth
P337: If eye irritation persists seek medical attention
P361: Remove/ take off immediately all contaminated clothing
P363: Wash contaminated clothing before reuse

STORAGE

P405: Store locked up

DISPOSAL

P501: Dispose of contents/container in accordance with Federal, State & Local Government regulations following Directions for Use. Refer to Section 13 disposal considerations.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	PROPORTION
Sodium fluoroacetate (1080)	62-74-8	0.267 % w/w
Rhodamine B marker dye	81-88-9	trace

Other ingredients in this formulation are considered not to be hazardous & therefore are not required to be disclosed according to 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:** Inhalation risk is minimal with this product which is a gel contained in a plastic cartridge. However if required, bring affected person to fresh air.
- Skin contact:** Absorption via intact skin is minimal but if skin contact occurs, remove contaminated footwear & clothing & wash skin thoroughly. Take care to thoroughly cleanse area including fingernails & scalp (if applicable). Remove from contaminated area. The product contains Rhodamine dye as a marker to indicate contaminated areas. The dye may persist after the sodium fluoroacetate has been washed away & is not of concern.
- Eye contact:** If in eyes, hold eyes open, flood with water for at least 15 minutes & see a doctor. Sodium fluoroacetate is water soluble & readily dispersed with water.
- Ingestion:** A primary source of poisoning with sodium fluoroacetate is the oral route. Effects may be delayed by several hours. Seek immediate medical assistance. Note that the content of a single cartridge is unlikely to cause risk in adult humans & no immediate or long term symptoms would be expected. Consumption of the contents of multiple cartridges would pose a risk to life. Apply artificial respiration if not breathing.

First Aid facilities: Eyewash & normal washroom facilities. The risk of Inhalation is minimal, the product being a gel enclosed in a plastic cartridge. If required, bring patient to fresh air.

Indication of immediate medical attention & The Felixer 1080 Cartridge is designed for use with the Felixer Grooming Trap to control feral cats. The gel contents of the cartridge are sprayed onto a passing feral cat when it activates the grooming trap, The cat ingests the toxic gel when it grooms. Each cartridge contains 8mg of sodium fluoroacetate, which is a certain lethal dose for a feral cat & which also poses a high risk to foxes & wild & domestic dogs. Humans are less susceptible to this poison so the dose from a single cartridge is individually less likely to pose a serious risk.

Special treatment needed: No minimum acceptable dose is set for sodium fluoroacetate in humans. It is important to ascertain the route of exposure & the quantity exposed to any human patient.

Mode of action: Sodium fluoroacetate is readily absorbed orally. It substitutes for normal acetate once it enters mitochondria, where it is initially converted to fluoroacetyl Coenzyme A. This process may take several hours during which clinical signs are absent. Fluoroacetyl CoA substitutes for normal Acetyl CoA and is readily combined with oxaloacetate to form fluorocitrate, for downstream processing by the enzymes of the Tri Carboxylic Acid cycle (TCA cycle). However, Fluorocitrate, unlike normal citrate, blocks the aconitase enzyme & this prevents further processing of the fluoridated citrate. This blockade of aconitase also prevents processing of normal citrate in

mitochondria, so the production of energy (ATP, NADH) is prevented at all subsequent stages of the TCA cycle.

Normal citrate accumulates upstream of the metabolic blockade while the pyruvate pathway continues to function temporarily. Organs with high energy requirements such as the heart, diaphragm & brain are most affected by acute reductions in metabolic energy. Accumulation of citrate can cause chelation of extra cellular calcium ions. Disturbances in calcium ion levels can lead to clinical symptoms as nervous function is impeded.

Early symptoms may include nausea, vomiting, stomach pains, tingling of the nose, numbness of the face & nervousness. More severe symptoms include tetanic convulsions, laboured breathing, excitability, hallucinations & heart attack.

Treat symptomatically & supportively. Monitor for electrolyte abnormalities & metabolic acidosis. While prompt removal of any unabsorbed poison from the gut will reduce risks & minimise further absorption, it is important to seek medical advice as to the risks of causing vomiting. Consult poisons control for most up to date information.

There is no proven antidote for fluoroacetate. Sub-lethal exposures will not block all aconitase enzymes & so may result in no symptoms & in this circumstance the fluoroacetate will be defluorinated to harmless excretion products in a short time, so long as biochemical energy supplies are available. Thus, minor exposures in less susceptible species may require no intervention. Sodium fluoroacetate is not readily absorbed through skin & is very water soluble. Prompt washing in soapy water will minimise risk after accidental skin exposure.

5. FIRE FIGHTING MEASURES

Fire & explosion hazard:	The plastic cartridge and gel are combustible. There is no risk of explosion from this product under normal circumstances if it is involved in a fire.
Suitable extinguishing media:	In fire use fine water spray, normal foam or dry agent (carbon dioxide, dry chemical powder).
Hazchem code:	Not applicable
Special protective equipment:	Fire fighters should wear a respirator & suitable protective clothing to prevent risk of exposure to products of decomposition, including carbon and nitrogen oxides. Fluoride is present only in negligible quantities.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures / Environmental precautions:	Prevent spillage from entering drains or water courses with bunding or drain covers. If a significant quantity of material enters drains, advise emergency services. Evacuate the spill area & deny entry to unnecessary & unprotected personnel.
Personal precautions / Protective equipment:	Avoid accidents; clean up immediately. Wear protective equipment to prevent skin (e.g., chemical impervious gloves) & eye contact. Work up-wind or increase ventilation.
Methods & materials for	Clean up spilt gel & place in a sealable, labelled container.

containment & cleaning up: Triple rinse & bury rinsate, empty containers & gel for disposal in a local authority landfill. If no landfill is available, bury containers below 50cm in a disposal pit specifically marked & set up for this purpose, clear of waterways, desirable vegetation & tree roots. Burning of empty containers can only be done in accordance with State legislation. DO NOT re-use containers for any other purpose. Sodium fluoroacetate is readily degraded by common soil bacteria & fungi. Wash contaminated areas with soapy water & bury rinsate from washed areas. After clean-up, decontaminate & launder all protective clothing & equipment before storing & re-using.

7. HANDLING & STORAGE

Precautions for safe handling: This product is a S7 Poison.
Follow Directions for Use on the label.
Use in a well ventilated area. Avoid contact with the product & wear suitable protective clothing & chemical impervious gloves when risk of exposure occurs. When handling DO NOT eat, drink or smoke. Keep container firmly closed when not in use. Keep locked up & out of reach of children. Always remove contaminated clothing & wash hands after use & before eating, drinking or smoking. Wash contaminated clothing. In case of accident or if you feel unwell, contact a doctor or Poisons Information Centre immediately (show the label where possible).

Conditions for safe storage: Safe storage is the responsibility of all persons who are supplied with this poison. The product must be stored in the closed, original-labelled container in a dry, cool, well-ventilated area out of direct sunlight. Store in a locked room/secure facility away from children, animals, food, feedstuffs, seed & fertilisers at all times, except when required for use. Keep working dogs & pets away from the cartridges as they are highly susceptible to the poison.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters: The following exposure standard have been set for Sodium Fluoroacetate:
TWA = 0.05 mg/m³
STEL = 0.15 mg/m³
As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.
No biological limit allocated.

Appropriate engineering controls: The formulation dilutes the active product within each cartridge to a relatively low concentration compared to sodium fluoroacetate powder. This reduces the risk to users, but the product remains poisonous. The Felixer Grooming Trap propels the gel contents of the cartridge at high velocity when triggered. Operators should avoid placing their face in direct line with the propellant path when setting or checking the Felixer.

Respiratory protection: Respiratory protective equipment is not needed under normal conditions of product use. However, if protection is required, consult AS/NZS 1715 & AS/NZS 1716 for further information.

Eye & face protection: Wear safety glasses when using the Felixer Grooming Trap with this product. Consult AS/NZS 1336 & AS/NZS 1337 for further information.

Skin protection:

Wear nitrile gloves when opening the container & using the product.
Check with your personal protective equipment supplier regarding the correct type of glove to use. Consult AS/NZS 2161 for further information.
Trousers, long sleeved shirt or cotton overalls buttoned to the neck & wrists & closed in shoes or safety footwear should also be worn when opening the container & using the product.

9. PHYSICAL & CHEMICAL PROPERTIES

Physical state:	Labelled plastic cartridge with stopper
Colour:	Red (Green used in non-toxic training cartridge)
Odour:	No obvious odour
pH:	No data available for formulation
Vapour pressure:	Not applicable
Boiling point:	No data available for formulation
Melting point / freezing point:	No data available for formulation
Flash point:	No data available for formulation
Evaporation point:	No data available for formulation
Solubility in water:	The active ingredient is soluble in water
Specific gravity:	No data available for formulation
Decomposition temperature:	No data available for formulation
Viscosity:	No data available for formulation
Flammability limits:	No data available for formulation

10. STABILITY & REACTIVITY

Reactivity:	Non-reactive under normal conditions of use
Chemical stability:	Stable for extended periods while sealed
Conditions to avoid:	Avoid exposure to heat, sunlight & moisture during storage
Incompatible materials:	Strong oxidisers.
Hazardous decomposition products:	This product is mostly inert carrier gel. The small quantity of active ingredient is unlikely to produce decomposition products in significant quantities
Hazardous reactions:	No specific data

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	Based on the lowest known lethal dose for humans (0.71 mg/kg body weight), an 80 kg adult would have to consume approximately 56mg of fluoroacetic acid (more than 6 whole cartridges), at one time to receive a lethal dose. Lower doses are still likely to be lethal to many people. There will be a period of latency between ingestion & onset of symptoms of between 30 minutes & 3 hours. Neurological effects include convulsion, respiratory depression, tremulousness, hallucinations & coma. Cardiac effects include hypertension then hypotension, arrhythmias, ventricular fibrillation & cardiac failure.
Ingestion:	Very poisonous if swallowed. Lethal doses can cause cardiac arrest.
Inhalation:	Not applicable to this formulation. There is no inhalation risk with this gel product under normal circumstances.

Skin:	Avoid contact with skin. Studies with rabbits have shown that 1080 is poorly absorbed through the skin.
Eye:	Avoid contact with eyes. Effects not known.
Respiratory or skin sensitisation:	Not a skin sensitiser & not expected to be a respiratory sensitiser.
Germ cell mutagenicity:	Not suspected to cause genetic defects, but not known.
Carcinogenicity:	Not considered to be carcinogenic.
Reproductive toxicity:	Not considered to be toxic to reproduction.
STOT-single exposure:	Not expected to cause toxicity to a specific target organ.
STOT-repeated exposure:	Not expected to cause toxicity to a specific target organ.
Aspiration hazard:	Not expected to be an aspiration hazard.
Chronic toxicity: testicular	Long term exposure at high doses may lead to cardiac & or damage. Studies into the effects of chronic (90 day) exposure in rats have found damage to the heart & in males the testis, at a dose of 0.25mg/kg/day. Though some of this damage may be reversible over time when exposure is removed.

12. ECOLOGICAL INFORMATION

Ecotoxicity:	Sodium fluoroacetate is toxic to a range of aquatic organisms & very toxic to most terrestrial fauna. However, it is rapidly diluted in water & readily degraded by common soil microorganisms such as bacteria & fungi once in moist ground. Do not contaminate streams, rivers or waterways with this product or used containers. Information on non-target animal distribution, conservation status, habitat preference, diet, tolerance to 1080, body weight & size of home range can be used to reduce poisoning risks. Time control programs when non-target species are least active or least susceptible. Follow approved label directions to minimise risks to non-target animals.
Persistence/degradability:	The product is biologically degradable. The contents remain stable while contained within the plastic cartridge.
Bioaccumulative potential:	The product is biologically degradable & will not accumulate in soil or water.

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 & dispose of empty containers in a local authority landfill. Triple rinse & bury rinsate & empty cartridges in a local authority landfill. If no landfill is available, bury the containers below 50cm in a disposal pit specifically marked & set up for this purpose clear of waterways, desirable vegetation & tree roots. Empty containers & product must not be burnt. Do NOT re-use containers for any other purpose.
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14. TRANSPORT INFORMATION

Road & rail transport:	This product is not classified as Dangerous Goods according to the Australian Dangerous Goods Code (ADG) Code
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The material is not classified as a marine pollutant

15. REGULATORY INFORMATION

Poison schedule: S7 – DANGEROUS POISON
AVPMA product number: 89542
AIIIC: All the constituents of this material are either listed on the Australian Inventory of Industrial Chemicals (Inventory), not required due to the nature of the chemical, or have been assessed under the Industrial Chemicals Act 2019 as amended.

16. OTHER INFORMATION

Issue date: 29 March 2023
Issue number: 001
Reasons for issue: New product
Literary reference: The information provided in this SDS has been prepared in accordance with Safe Work Australia's Model Code of Practice: Preparation of Safety Data Sheets for Hazardous Chemicals (July 2020)

Key abbreviations or acronyms used:

ADG Code: Australian Code for the Transport of Dangerous Goods by Road & Rail (7th edition)
AIIIC: Australian Inventory of Industrial Chemicals
AgVet Code Act 1994: Agricultural & Veterinary Chemicals Code Act 1994
APVMA: Agricultural Pesticides & Veterinary Medicines Authority
GHS: Globally Harmonised System of Classification & Labelling of Chemicals (3rd revised edition) 2009
IARC: International Agency for Research on Cancer
LD50 or LC50: Estimated lethal dose / concentration to kill 50% of the population/sample
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.
STOT: Specific Target Organ Toxicity
SUSMP: Standard for the Uniform Scheduling of Medicines & Poisons SWA - Safe Work Australia, formerly ASCC & NOHSC
TGA: Therapeutic Goods Australia WHS – Workplace Health & Safety
WHS: Work2 Health & Safety

This SDS summarises our best knowledge of the health & safety hazard information of the product & how to safely handle & use the product in the workplace. No warranty either expressed or implied is provided & nor is responsibility for the accuracy or completeness of the data contained herein. Each user should read this SDS & consider the information in the context of how the product will be handled & used in the workplace.

For clarification or further information please contact: Thylation Operations P/L

Email: gm@thylation.com or
Phone: 1300 234 816.

End of SDS