



1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:	ACTA 1080 Concentrate
Recommended use of the chemical and restrictions on use:	For the preparation of 1080 baits to control feral pigs, foxes, rabbits and wild dogs Distance restrictions apply as per Distance restrictions apply as per state/territory government legislation. Only to be used in accordance with the label and any state/territory instructions for 1080 products This product is only made available to approved purchasers and is not for general use by unqualified persons and must not be made available to unapproved users. This is a restricted chemical substance and must be stored securely.
Supplier:	Animal Control Technologies (Australia) Pty Ltd
ABN:	25 137 868 449
Street Address:	46-50 Freight Drive Somerton Vic 3062, Australia
Telephone No:	+61 3 9308 9688 (Monday to Friday, 8:00a.m. – 5:00p.m. EST)
Fax:	+ 61 3 9308 9622
Email:	enquiries@animalcontrol.com.au
Emergency Telephone:	Poisons Information Centre 13 11 26 (24 hours)

2. HAZARDS IDENTIFICATION

Classification of the substance mixture: This material is hazardous according to Safe Work Australia; HAZARDOUS SUBSTANCE.

Classification of the substance or mixture:

Acute Oral Toxicity - Category 2

Acute Dermal Toxicity - Category 2

Acute Inhalation Toxicity – Category 4

SIGNAL WORD: DANGER



Hazard Statement(s):

H300 Fatal if swallowed.

H310 Fatal in contact with skin.

H332 Harmful if inhaled.

Precautionary Statement(s):

Prevention:

P264 Wash hands, arms and face thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P262 Do not get in eyes, on skin, or on clothing.

P280 Wear protective gloves/face protection.

P261 Avoid breathing mist/ vapours.

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



Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

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

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

P321/P322 Specific treatment refer to section 4 first aid measures.

P330 Rinse mouth.

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 and Local Government regulations, refer to section 13 disposal considerations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion (w/w)
Sodium fluoroacetate ("1080")	62-74-8	3%
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: Inhalation risk is minimal with the product which is an aqueous concentrate. 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 and clothing and wash skin thoroughly. Take care to thoroughly cleanse area including fingernails and scalp (if applicable). Remove from contaminated area. The product contains dye as a marker to indicate contaminated areas. The dye may persist after the sodium fluoroacetate has been washed away and is not of concern.

Eye Contact: If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor. Sodium Fluoroacetate is water soluble and is readily dispersed with water.

Ingestion: A primary source of poisoning with sodium fluoroacetate is the oral route. Seek immediate medical assistance. Apply artificial respiration if not breathing.

First Aid Facilities: Eyewash and normal washroom facilities.

Medical attention and special treatment:

The 1080 bait manufacturing concentrate contains 3% w/w (30g/kg) sodium fluoroacetate ('1080') and is used as a concentrate for the manufacture of baits for control of pest animals in accordance with APVMA approved product label.

Mode of action:

Sodium fluoroacetate is readily absorbed by the oral route and 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 Co-A 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 and 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 and 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 and heart attack. Treat symptomatically and supportively. Monitor for electrolyte abnormalities and metabolic acidosis. While prompt removal of any unabsorbed poison from the gut will reduce risks and 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 and so may result in no symptoms and 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 and is very water soluble prompt washing in soapy water will minimise risk after accidental skin exposure.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:	The product is non-combustible however in case of fire, use fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).
Hazchem Code:	2X
Specific hazards arising from the substance or mixture:	The aqueous formulation is not flammable and will not auto-ignite.
Special protective equipment and precautions for fire-fighters:	Fire fighters should wear a respirator with an A/P filter (organic vapour + particulate) and suitable protective clothing to prevent risk of exposure to products of decomposition.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures/ Environmental precautions:	Clear area of all unprotected personnel. If contamination of sewers or waterways has occurred advise local emergency services.
Personal precautions/ Protective equipment:	Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact. Work up wind or increase ventilation.
Methods and materials for containment and cleaning up:	Sodium fluoroacetate is water soluble. Contain - prevent run off into drains and waterways. While wearing protective equipment, mop-up excess liquid using absorbent sponge or towel and collect in containers. Wash any contaminated areas with soapy water and collect in containers. Triple rinse and bury rinsate and empty containers 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 should not be burnt. Do NOT re-use containers for any other purpose.

7. HANDLING AND STORAGE

Precautions for safe handling:	Keep containers closed at all times - check regularly for leaks or spills. Transport and store upright. To avoid risks to people and environment the instructions for use are to be followed. Avoid all contact with the product and wear protective clothing and elbow-length PVC gloves while opening the container and handling bait. Keep out of reach of children. Do not eat, drink or smoke in contaminated areas. Always remove contaminated clothing and wash hands after use and before eating, drinking, smoking or using the toilet. Wash contaminated clothing
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Conditions for safe storage, including any incompatibilities:

and other protective equipment before storage or re-use. Do not inhale vapour. Do not open containers indoors or in confined spaces and allow good ventilation in working areas.

Store in the closed, original container in a dry, cool, well ventilated area out of direct sunlight. Store in a locked room or place away from children, animals, food, feedstuffs, seed and fertilisers at all times, except when required for use. Keep working dogs and pets away from the capsules as they are highly susceptible to the poison.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters:

No value assigned for this specific material by Safe Work Australia. However, the exposure standard for the active constituent, Sodium Fluoroacetate (powder):

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 product formulation dilutes the concentration of sodium fluoroacetate and reduces the risk of handling sodium fluoroacetate powder. However this product remains extremely poisonous.

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

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:

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

Eye and Face protection:

Eye and face protection is not needed under normal and intended conditions of product use. However if protection is required, consult AS/NZS 1336 and AS/NZS 1337 for further information.

Skin Protection:

When opening the container and using the product wear cotton overalls buttoned to the neck and wrists, a washable hat and elbow-length rubber gloves. 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.

Closed in shoes or safety footwear should also be worn when opening the container and using the product. Consult AS/NZS 2210 and AS/NZS 2919 for further information.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Dark blue/red/green liquid
Colour:	Blue/red/green
Odour:	No information available
pH:	No information available
Specific Gravity:	1.05g/mL
Melting Point/Freezing Point:	No information available
Boiling Point/range:	100°C
Flash Point:	No information available
Evaporation Point:	No information available
Vapour Pressure:	No information available



Vapour Density:	No information available
Solubility:	100% soluble in water
Partition coefficient: n- octanol/water	No information available
Auto-ignition Temperature:	Not relevant
Decomposition Temperature:	No information available
Viscosity:	Not relevant

10. STABILITY AND REACTIVITY

Reactivity:	Non-reactive under normal conditions of use.
Chemical stability:	Stable for extended periods (indefinite) under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Possibility of hazardous reactions:	No information available
Conditions to avoid:	No information available
Incompatible materials:	None known.
Hazardous decomposition products:	No information available

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	Based on the lowest known lethal dose for humans (0.71 mg/kg bw), an 80 kg person would have to consume approximately 56mg of fluoroacetic acid, to receive a potential lethal dose. Lower doses may still cause toxic effects and there is a wide range of susceptibility in species compared to the highly vulnerable canid species which succumb at around 0.1mg/kg dose. There is usually period of latency between poisoning and onset of symptoms of between 30 minutes and 3 hours. Neurological effects include convulsion, respiratory depression, tremulousness, hallucinations and coma. Cardiac effects include hypertension then hypotension, arrhythmias, ventricular fibrillation and cardiac failure.
Ingestion:	Very poisonous if swallowed. Lethal doses can cause cardiac arrest.
Inhalation:	Not applicable to this formulation. There is no inhalation or vapour risk with the liquid 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 and not expected to be a respiratory sensitiser.
Germ cell mutagenicity:	Not suspected to cause genetic defects.
Carcinogenicity:	Not considered to be a 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 health effects:	Long term exposure at high doses may lead to cardiac and or testicular damage. Studies into the effects of chronic (90 day) exposure in rats have found damage to the heart and 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 fish but is rapidly diluted in water. Sodium fluoroacetate is readily degraded by common soil bacteria and moulds once baits become wet in soil. Do not contaminate streams, rivers or waterways with the chemical or used containers.
Persistence/degradability:	The product is biologically degradable. The contents remain stable while contained within the plastic capsule.
Bioaccumulative potential:	Will not accumulate in soil or water.
Mobility in Soil:	Not relevant.

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.
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14. TRANSPORT INFORMATION

Road and Rail Transport:	Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; DANGEROUS GOODS
	UN Number: 2902
	Proper Shipping Name or Technical Name: PESTICIDE, LIQUID, TOXIC, N.O.S. (CONTAINS SODIUM FLUOROACETATE)
	Transport Hazard Class: 6.1
	Packaging Group: II
	Hazchem Code: 2X
Marine Transport:	Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.
	UN Number: 2902
	Proper Shipping Name or Technical Name: PESTICIDE, LIQUID, TOXIC, N.O.S. (CONTAINS SODIUM FLUOROACETATE)
	Transport Hazard Class: 6.1
	Packaging Group: II
	IMDG EMS Fire: F-A
	IMDG EMS Spill: S-A
Air Transport:	Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.
	UN Number: 2902
	Proper Shipping Name or Technical Name: PESTICIDE, LIQUID, TOXIC, N.O.S. (CONTAINS SODIUM FLUOROACETATE)
	Transport Hazard Class: 6.1
	Packaging Group: II



15. REGULATORY INFORMATION

Poison Schedule (SUSMP):	7
APVMA Approval No.:	57956
AICS:	All the constituents of this material are either listed on the Australian Inventory of Chemical Substances (AICS), not required due to the nature of the chemical, or have been assessed under the National Industrial Chemicals (Notification and Assessment) Act 1989 as amended.

16. OTHER INFORMATION

GENERAL INFORMATION:	<p>Sodium fluoroacetate is water soluble and readily degraded by common soil bacteria and moulds which do not have metabolic pathways inhibited by fluoroacetate but do have defluridation mechanisms.</p> <p>Do not contaminate streams, rivers or waterways with the chemical or used containers. Information on non-target animal distribution, conservation status, habitat preference, diet, tolerance to 1080, body weight and size of home range can be used to reduce poisoning risks posed by baiting programs. Time baiting programs when non-target species are least active or least susceptible. Follow approved label directions to minimise risks to non-target animals.</p>
ISSUE NUMBER:	002
ISSUE DATE:	21 Dec 2016
	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:	Second issue Revised Primary SDS and updated to GHS requirements.
LITERARY REFERENCE:	ADG Code - Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition) AICS - Australian Inventory of Chemical Substances APVMA – Agricultural Pesticides and Veterinary Medicines Australia GHS - Globally Harmonised System of Classification and Labelling of Chemicals (3 rd revised edition) 2009 IARC - International Agency for Research on Cancer Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice (Feb 2016) 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. Animal Control Technologies 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