

SAFETY DATA SHEET

Trade Name: Feratox
Product No: RC101, RC102, RC103
Version Number: 2018.2

Document Number: SDS01/01FTX
Revision Date: 02/11/18

SECTION 1: IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Manufacturers Code: Feratox 475g/kg
Use: Feratox for control of possums and Dama Wallaby
Vertebrate Toxic Agent for use in bait stations or bait
devices as per label instructions.
Company Name: Connovation Ltd
Company Physical Address: 36B Sir William Avenue
East Tamaki
Auckland 2013
Company Postal Address: PO Box 58613
Botany
Auckland 2163
Telephone: +64 9 273 4333
Fax: +64 9 273 4334
Emergency Numbers: NATIONAL POISONS CENTRE 0800 764 766
POLICE, FIRE, AMBULANCE 111

SECTION 2: HAZARD IDENTIFICATION

EPA New Zealand Approval Code: HSR001673
HSNO Hazard Classification: 6.1B (oral), 6.3B, 6.4A, 6.5B, 6.8B, 6.9A (oral),
9.1A, 9.2A, 9.3A, 9.4A



Signal word: DANGER

Hazard Statements

H300 Fatal if swallowed.
H316 Causes mild skin irritation
H317 May cause an allergic skin reaction.
H320 Causes eye irritation.
H361 Suspected of damaging fertility or the unborn child.
H370 Causes damage to organs.
H400 Very toxic to aquatic life.
H421 Very toxic to the soil environment.
H431 Very toxic to terrestrial vertebrates.
H441 Very toxic to terrestrial invertebrates.

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Prevention Statements

P102 Keep out of reach of children.
P103 Read label before use.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/fumes/vapours.
P264 Wash hands and exposed skin thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to environment.
P280 Wear protective gloves, protective clothing and eye protection.
P281 Use personal protective equipment as required.

Response Statements

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTRE or doctor.
P330 Rinse mouth.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P333 + P313 If skin irritation or rash occurs: Seek medical advice.
P363 Wash contaminated clothing before re-use.
P305 + P51 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation occurs seek medical advice.
P307 + P311 If exposed: Call a POISON CENTRE or doctor.
P391 Collect Spillage.

Storage Statements

P405 Store in secure locked storage.

Disposal Statements

P501 Dispose of containers and product in accordance with any local regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Ingredient	CAS No	% w/w
Potassium Cyanide	151-50-8	47.5
Other ingredients (including filler, encapsulating compounds, coating, colourant)	Proprietary	> 52.5

SECTION 4: FIRST AID MEASURES

If exposed or concerned or if medical advice is needed, have product container or label at hand. Consult the National Poisons Centre, 0800 764 766 [0800 POISON] or a doctor.

Swallowed

Obtain immediate medical attention if ingested.

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Call 111 FOR AMBULANCE AND USE KEYWORDS 'Cyanide Poisoning'.

Use emergency blanket to protect patient from heat loss. A doctor can slowly administer 50 ml 25% sodium thiosulphate intravenously if indicated (patient unconscious or incoherent, breathing irregular, possibly vomiting and/or with convulsions).

If person is losing consciousness after ingestion, or is unconscious or convulsing, then do NOT give anything by mouth.

Rinse mouth thoroughly with water. Do NOT give anything to drink. Do NOT induce vomiting. If vomiting occurs naturally, rinse mouth thoroughly again with water.

If patient is conscious, breathing regularly and able to say what has happened, keep under observation. Get medical assistance.

Do NOT use mouth to mouth or mouth to nose resuscitation, but instead use a suitable device or apparatus to give artificial respiration if breathing has stopped. Administer oxygen if breathing is shallow or irregular and cardiopulmonary resuscitation (CPR) if heart has stopped.

Skin contact

Remove any contaminated clothing. Wash affected area thoroughly with running water for 20 minutes to ensure all product is removed. Launder decontaminated clothing immediately (and separate to household laundry) before re-use or discard safely.

Eye contact

Flood eye gently with clean fresh running water. Continue rinsing for at least 15 minutes. Take care not to rinse contaminated water into a non-affected eye. Remove contact lenses, if present and easy to do after first 5 minutes then continue rinsing. Use anti-histamine eye drops. Obtain medical advice if irritation occurs.

Inhalation

If person has inhaled cyanide, and same hazard exists, then ensure precautions taken to avoid exposure to yourself.

Refer to advice given for if swallowed.

Rinse mouth thoroughly with water. Do NOT give anything to drink. Do NOT induce vomiting. If vomiting occurs naturally, rinse mouth thoroughly again with water.

If patient is conscious, breathing regularly and able to say what has happened, keep under observation. Get medical assistance.

Do NOT use mouth to mouth or mouth to nose resuscitation, but instead use a suitable device or apparatus to give artificial respiration if breathing has stopped. Administer oxygen if breathing is shallow or irregular and cardiopulmonary resuscitation (CPR) if heart has stopped.

First Aid facilities

Eye and hand washing.

Advice to doctor

Product contains cyanide.

If indicated, slowly inject 50 ml 25% sodium thiosulphate intravenously and administer oxygen.

SECTION 5: FIRE-FIGHTING MEASURES

Flash Point: Not Applicable

Flammable limits: LFL: Not determined
UFL: Not Determined

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- Extinguishing Media:** Water spray, or alkali power only. Do NOT use acidic foam or powder or CO2 extinguishers.
- Fire and Explosion Hazards:** Avoid breathing smoke. Combustion products include hydrogen cyanide, carbon monoxide, carbon dioxide, nitrogen oxides and ammonia.
- Fire Fighting Equipment:** Wear self-contained breathing apparatus and personal protection clothing (gas tight suit, helmet).

SECTION 6: ACCIDENTAL RELEASE MEASURES

- Spills:** Contain spill. Keep dry. Do not allow pellets to contaminate watercourses or the ground. Wear personal protective equipment and sweep up and transfer to suitable labeled container for re-use if suitable (unbroken, dry) or for disposal. In event of major spill, inform Fire Service via 111 and then local Health Protection Officer at the Public Health Unit or hospital.
- Disposal:** Dispose of to an approved landfill in accordance with local regulations.

SECTION 7: HANDLING AND STORAGE

- Handling:** Feratox® requires an Approved Handler/Controlled Substance Licence and records for tracking of product. Refer to Feratox® product label for use and application.
During bait preparation, bait deployment, bait retrieval or opening sealed containers that hold Feratox®: Do not handle or consume food, drink or smoke. After handling and before meals, rest breaks, smoking and at the completion of work, remove protective clothing. Wash hands and any exposed skin thoroughly with soap and water, or wipes.
- Storage:** Store in tightly closed original container and secure (locked up) in a cool dry place out of reach of children and pets and away from any food, drink and animal foodstuffs.
Do not store with Class 1 (Explosives), 3 (Flammables), 5.1 (Oxidisers), 5.2 (Organic Peroxide Oxidizers), or 8 (Corrosive) products.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- Exposure Guidelines:** A Workplace Exposure Standard (WES) has been set by WorkSafe NZ for a component in this substance.
Cyanide as CN, _{skin} WES-TWA 5 mg/m³
- Biological limits:** None set
- Engineering Controls:** None set

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Personal Protective Equipment (PPE)					Comments
Safety equipment	Non-porous gloves	Safety glasses	Multi-gas respirator kit 97000 series (half mask)	Trousers outside boots, or gaiters	
Bait Preparation					
Feratox® in Ferafeed paste	Recommended	Not required	Not required	Not required	Wearing gloves minimises risk of moisture transfer from hands to Feratox® pellet
Deployment in field					
Feratox® and Ferafeed paste	Recommended	Not required	Not required	Not required	
Feratox® and Ferafeed pellets	Recommended	Not required	Not required	Recommended	Wearing gloves minimises risk of moisture transfer from hands to Feratox® pellet
Bait retrieval: broken or possibly degrading Feratox® pellets					
Bury Feratox® pellets on site	Required	Not required	Required	Required	
Extraction of Feratox® from bait stations in an open environment with free air flow	Required	Recommended	Recommended	Required	In open spaces, any possible cyanide gas is dissipated by the air currents.
Extraction of Feratox® pellets from bait stations in a closed environment	Required	Recommended	Required	Required	In closed spaces such as storage sheds, any possible cyanide gas may not be dissipated by the air currents
Placement of Feratox® in sealed container (unsealed) in open environment with free air flow	Required	Recommended	Recommended	Required	In open spaces, any possible build up of cyanide gas is dissipated by the air currents.
Placement of Feratox® in a container (sealed)	Required	Recommended	Required	Required	The danger to minimise is the build up of cyanide gas in a sealed container which may be released on opening.

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Bait retrieval: Feratox® pellets intact					
Extraction of Feratox® from bait stations in an open environment with free air flow	Required	Recommended	Recommended	Required	In open spaces, any possible cyanide gas is dissipated by the air currents.
Extraction of Feratox® pellets from bait stations in a closed environment	Required	Recommended	Recommended	Required	In closed spaces such as storage sheds, any possible cyanide gas may not be dissipated by the air currents
Placement of Feratox® in sealed container (unsealed) in open environment with free air flow	Required	Recommended	Recommended	Required	In open spaces, any possible build up of cyanide gas is dissipated by the air currents.
Placement of Feratox® in a container (sealed)	Required	Recommended	Required	Required	The danger to minimise is the build up of cyanide gas in a sealed container which may be released on opening.
Bury Feratox® pellets on site	Required	Not required	Recommended	Recommended	
Opening Sealed Container that contains retrieved baits					
Opening sealed container that contains retrieved baits	Required	Recommended	Required	Not required	Always open any sealed container in a well ventilated area. DO NOT breathe any fumes that may have accumulated in sealed container.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Unit of measurement	Typical value
Appearance	-	Hard green round pellet, ~ 7mm diameter
Odour	-	Non specific
Specific gravity	g/cc	Not determined
Flashpoint	°C	Non-flammable

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SECTION 10: STABILITY AND REACTIVITY

Stability (Conditions to avoid):	Stable under normal storage and use conditions. Keep dry. Avoid contact with moisture, water, acidic conditions.
Incompatibility (Materials to avoid):	Acids, acid salts, strong oxidising compounds, carbon dioxide, water, Sodium Nitrite, Zinc Phosphide
Hazardous decomposition products:	Hydrogen cyanide, ammonia, potassium hydroxide.
Hazardous polymerization:	Not known to occur.

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE EFFECTS

Ingested

Can be fatal if swallowed when pellets damaged/broken or cracked in the mouth. Pellets swallowed whole may pass through digestive system unbroken. Symptoms of poisoning include difficulty breathing (dyspnea), rapid breathing (tachypnea), nausea, dizziness, vomiting, headache, sweating and convulsions.

Skin Contact

May cause mild irritation. Unbroken, dry pellets are safe to handle. Broken or decomposing pellets if contacting skin may sting especially if skin has cuts or abrasions. If the potassium cyanide pellet core contacts skin, then burns/ulceration might result so it is important to immediately wash any contaminated skin.

Eye Contact

Irritant. If pellets broken and core exposed symptoms could include stinging, burning, extreme redness, tearing and dizziness. Flushing eye promptly with water is required to avoid ill-effects.

Inhalation

Not an expected exposure route unless pellets is broken, or decomposing with risk of release of hydrogen cyanide gas. For symptoms of exposure, refer to Ingestion.

Chronic Effects

Classified as suspected of damaging fertility or the unborn child. Exposure by oral route can damage organs/systems; affects ability of cells to transfer oxygen.

Other Health Effects Information

The potassium cyanide active ingredient is encapsulated in a hard inert coating so provide protection from incidental contact. Ill-effects require the pellet to be broken or decomposing. Exposure to moisture/water will cause decomposition. This is accelerated under acidic conditions.

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Toxicological information

Potassium cyanide LD₅₀ (oral), rabbit 5 mg/kg b.w.
LD₅₀ (dermal), rabbit 13.3 – 33.3 mg/kg b.w. LC₅₀ (inhalation) 4 hr,
rat 0.015 mg/L

In humans, ingestion of 200 to 300 mg cyanide by an adult can result in unconsciousness and death.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Product is a Vertebrate Toxic Agent (VTA) so there is potential for harm to non-targetterrestrial vertebrates. Avoid exposure to non-target species including domestic pets. If poisoning is suspected of domestic animals or livestock, consult a veterinarian immediately. Advice to Veterinarians Product is a Vertebrate Toxic Agent (VTA) so there is potential for harm to non-targetterrestrial vertebrates. Avoid exposure to non-target species including domestic pets. If poisoning is suspected of domestic animals or livestock, consult a veterinarian immediately.

Active Ingredient is Potassium cyanide

General

Symptoms are generalized and include frothing at the mouth, slobbering, increased respiratory rate, mouth breathing, rapid but weak heart rate, and muscle twitching. Mucous membranes are bright red, indicating the lack of oxygen transfer throughout the body that is necessary for survival at the cellular level. Death from respiratory paralysis occurs during severe convulsions. The heart continues to beat for several minutes after struggling ceases and breathing stops. Bright red blood often comes out of the nostrils and mouth.

Treatment

Administration of an IV solution of sodium thiosulfate, or sodium nitrite and sodium thiosulfate to "neutralise" the production of hydrocyanic acid may be appropriate. Note clinical signs of cyanide poisoning and nitrate poisoning are similar. Ensure nitrate poisoning is not cause first. Blood from nitrate poisoning will be chocolate brown compared to cherry red for cyanide poisoning.

Toxicity to aquatic organisms

The product has identified as being very toxic in the aquatic environment.

Toxicity to terrestrial vertebrates

The product has identified as being very toxic to terrestrial vertebrates. Product is registered as a Vertebrate Toxic Agent for possum and Dama wallaby control.

Toxicity to terrestrial invertebrates

The product has identified as being very toxic to terrestrial invertebrates.

Persistence/degradability

Pellets will breakdown within days of becoming wet. The potassium cyanide in the core of the pellet will react to liberate hydrogen cyanide gas which will dissipate into the atmosphere. Pellets will degrade more rapidly in contact with mist acidic conditions.

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Mobility

Pellets will breakdown within hours of becoming wet. The potassium cyanide in the core of the pellet is soluble in water.

Threshold Effects Level

TEL water Cyanides as CN, 0.08 mg/L
TEL air Cyanides as CN, 0.009mg/m³

Environmental Exposure Standards

EEL freshwater 18 µg/L
EEL marine 14 µg/L

SECTION 13: DISPOSAL CONSIDERATION

Dispose of product (pellets) and waste as hazardous materials by burying with organic matter on active tip face of managed landfill, or bury with biologically active layer of soil in landfill, in accordance with Regional Authority or local Council bylaws. Ensure to dispose of empty containers safely to an approved landfill. Do not use empty containers for storing other products.

SECTION 14: TRANSPORT INFORMATION

UN Number: 2588
Description: PESTICIDE, TOXIC, SOLID, N.O.S (CONTAINS 47.5% POTASSIUM CYANIDE)
Class: 6.1
Packing Group: II
Hazchem: 2Z

Dangerous Goods Segregation

This product is classified as a Dangerous Good Class 6.1. Please consult the Land Transport Rule: Dangerous Goods 2005 plus amendments, and NZS 5433:2012 Transport of Dangerous Goods on Land for information.



SECTION 15: REGULATORY INFORMATION

Classified as hazardous under the HSNO Act 1996 according to criteria of Minimum Degrees of Hazard (Threshold) Regulations, 2001.

EPA New Zealand Approval Code: HSR001673 Feratox 475 g/kg
For controls see www.epa.govt.nz
For use in contained ground-based applications. Signage

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ACVM Registration Number: requirements. Approved Handler/Controlled Substance License necessary. Tracked substance.
V004713
For Conditions of registration see www.mpi.govt.nz

SECTION 16: OTHER INFORMATION

Issue Date: 02/11/18
Reason for Issue: Review of document and changes to layout
Replaces: Safety Data Sheet dated 16/05/18

Abbreviations:

ACVM	Agricultural Compounds and Veterinary
Medicines CAS No	Chemical Abstracts Services Number
EPA	Environmental Protection Authority (New Zealand)
HSNO	Hazardous Substances & New Organisms
STEL	Short Term Exposure Limit
TWA	Time Weighted Average
WES	Workplace Exposure Standard

The information contained in this Safety Data Sheet is provided in good faith and is believed to be accurate at the date of issue. Connovation makes no representation of the accuracy or comprehensiveness of the information and to the full extent allowed by law excludes all liability for any loss or damage related to the supply or use of the information in this Safety Data Sheet. The user is cautioned to make their own determinations as to the suitability of the information provided to the particular circumstances in which the product is used. Read the label before using this product.

End of Safety Data Sheet