



SAFETY DATA SHEET

Cyanara50 Cyanide Paste. For the control of possums

revised 09/02/2009

1. Identification of the Material and the Supplier.
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Product Name	Cyanara50 Cyanide Paste
Article Number	CYANARA
Other Names	Potassium Cyanide 50%
Product Uses	Vertebrate Pest Control (Possums)
Company Name	Connovation Limited
Address	36B Sir William Avenue East Tamaki Manukau 2013 New Zealand
Telephone number	(09) 273-4333
Fax Number	(09) 374-4334
Website	www.connovation.co.nz
Emergency Telephone	0800- 764-766
National Poisons Centre	(03) 479-7248

2. Hazards Identification.

HAZARDOUS SUBSTANCE AND DANGEROUS GOODS

Classified as hazardous according to the criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.
 Classified as a Dangerous Goods according to NZS 5433.
 Environmental Risk Management Authority Classifications.

Class 6 Toxicity	6.1B	Acutely Toxic.
	6.3B	Skin Irritant
	6.4A	Eye Irritant.
	6.5B	Sensitization.
	6.8B	Reproductive/ Developmental.
	6.9A	Target Organ Systemic.
Class 9 Ecotoxicity	9.1A	Aquatic.
	9.2A	Soil.
	9.3A	Terrestrial Vertebrate.
	9.4A	Terrestrial Invertebrate.
Risk Phrases	R26	Very Toxic by inhalation.
	R27	Very Toxic in contact with skin.
	R28	Very Toxic if swallowed.
	R32	Contact with acids liberates very toxic gas.
	R34	Causes burns.
	R50/53	Very toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment.

Safety Phrases

S1/2	Keep locked up and out of reach of children.
S7	Keep container tightly closed
S28	After skin contact, wash immediately with plenty of water.
S29	Do not empty into drains
S36	Wear suitable protective clothing
S37	Wear suitable gloves
S39	Wear eye/face protection
S45	In case of accident or if you feel unwell, seek medical advice immediately.
S60	This material and/or container must be disposed of as hazardous waste.

3. Composition/Information on Ingredients.

Ingredient Common Name	Potassium Cyanide
CAS Number	151-50-8
% by weight	50%
Chemical Name	Potassium Cyanide.
Molecular Weight	65.119
U.N. Number	1680
Other ingredients to 100% are not classified as hazardous	

4. First Aid Measures.

Ingestion	If the victim is losing consciousness after ingestion of cyanide and is unconscious or convulsing, DO NOT give anything by mouth. Have the victim rinse mouth thoroughly with water. DO NOT induce vomiting. If vomiting occurs naturally, rinse mouth thoroughly with water. Break open an Amyl Nitrite vial to aid recovery. NO mouth to mouth or mouth to nose resuscitation, 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 the heart has stopped.
Inhalation	If the victim has inhaled cyanide gas, take proper precautions to ensure your own safety before attempting rescue, such as wearing appropriate protective equipment and using the 'buddy system'. Move the victim from the endangered area to fresh air if this can be done safely. Remove any contaminated clothing. Break open an Amyl Nitrite vial to aid recovery. NO mouth to mouth or mouth to nose resuscitation, use a suitable device or apparatus to give artificial respiration if breathing has stopped. Administer oxygen if breathing has is shallow or irregular and cardiopulmonary resuscitation (CPR) if the heart has stopped
Skin Contact	Avoid any skin contact with the paste material. If skin becomes contaminated, flush the contaminated area with lukewarm water for 20 minutes under running water. Immediately remove all contaminated clothing. Decontaminate all contaminated articles before reuse or discard safely.
Eye Contact	Immediately flush the contaminated eye(s) with lukewarm flowing water for at least 15 minutes. Take care not to rinse contaminated water into a non affected eye. Use anti-histamine eye drops.
Medical Attention and Other Special Treatment	OBTAIN IMMEDIATE MEDICAL ATTENTION. Immediately call an Ambulance, using keywords 'Cyanide Poisoning'. Prepare the patient against heat loss using an emergency blanket. A Doctor can slowly administer 50ml 25% Sodium Thiosulphate intravenously if indicated.
Mild Poisoning.	(Patient is conscious, breathing regularly and is able to say what has happened.) Keep the patient under observation for some time. No specific antidote is required break open an Amyl Nitrite Vial to aid recovery if necessary, administer oxygen if condition worsens.
Serious Poisoning.	(Patient is unconscious or incoherent; breathing is irregular possible vomiting and/or convulsions). Slowly inject 50ml 25% Sodium Thiosulphate intravenously, administer oxygen.

Very Serious Poisoning. (Patient is unconscious, convulsing and/or vomiting. Dyspnea, breathing and/or heart has stopped). Slowly inject 50ml 25% Sodium Thiosulphate intravenously. Apply artificial respiration and/or CPR.

5. Fire Fighting Measures.

For major fires call the Fire Brigade without delay. Ensure that an escape path is available from any fire.

Type of Hazard In the case of fire combustion products include Hydrogen Cyanide Gas, carbon monoxide, carbon dioxide, nitrogen oxides and ammonia. To minimize hazards, move product containers from the fire area if possible.

Fire Hazard Properties	Flashpoint	Not Applicable
	Upper Flammable Limit	Not Applicable
	Lower Flammable Limit	Not Applicable
	Auto-ignition Temperature	Not Applicable
	Flammability Classification	Non combustible material but releases flammable vapours.
	Flame Propagation Rate	Not Applicable
	Dust Explosion Potential	Not Applicable
	Fast Burning Characteristics	Not Applicable
	Release of Vapours	Releases flammable vapours.

Suitable Extinguishing Use alkali powder if possible and water only if **Media** absolutely necessary. If water is used ensure that extinguishing water does not enter drainage systems or soil. Contaminated water must be decontaminated in accordance with regulations issued by the appropriate local authorities. DO NOT use acidic foam or powder or Carbon Dioxide extinguishers.

HazChem Code 4XE
Equipment for Fire Chemical exposure risk exists that can only be **Fighters** managed by a gas tight suit. Fire Fighters should wear

- A gas tight suit
- Self contained breathing apparatus.
- Helmet
- Protective underclothes

6. Accidental Release Measures.

Methods for Containment And Clean-up Scrape up any spilt paste and dispose of safely. Place in a sealable container for disposal. Prevent product from entering waterways, DO NOT wash away with water. Dispose of as per section 13 of this SDS.

Personal Safety Precautions Avoid skin contact, wear protective clothing when cleaning up spills.

7. Handling and Storage.

Safe Handling The Active Ingredient is encapsulated in a soft paste and packaged in bottles providing ample protection and safety from mechanical shock likely to be encountered during normal handling and storage situations. DO NOT repack into other containers for storage. DO NOT store with Class 1, 3, 5.1, or 8 products, foodstuffs or foodstuff packaging. Ensure appropriate equipment is available for emergency use. Ensure staff is trained in safe handling and emergency procedures. Ensure that 'cyanide first aid kits' are available, and that the kit contains Amyl Nitrite Vials.

Safe Storage An Approved Handler Certificate showing Class 6.1B and Class 9A is required to be responsible for the storage of this product. Store in the original container tightly secured, in a cool, dry area out of direct sunlight. Store under lock and key and away from foodstuffs and incompatible materials such as acids, oxidizing agents and water. Keep out of reach of children and domestic animals. Post appropriate signage on the storage area.

8. Exposure Controls/Personal Protection.

National Exposure Standards	for Cyanide TEL water (Cyanides, as CN) = 0.08mg/litre TEL air (Cyanides, as CN) = 0.009mg/m ³ WES (Cyanides, as CN) = 5mg/m ³ TWA EEL freshwater = 18µg/Litre EEL marine = 14µg/Litre
Engineering Controls	Exercise awareness, as for any toxic substance. Maintain a clean and tidy workplace at all times.
Personal Protective Equipment	Respiratory Protection. No respiratory protection is required unless dealing with wet or reacting paste when a respirator is required Body Protection Wear protective clothing such as overalls and boots when applying this product. Hand Protection Hand protection is not required unless dealing with wet or reacting paste when non porous gloves are required. Eye Protection Eye protection is not required unless dealing with wet or reacting paste when protective glasses or goggles are required General Always wash hands after handling paste before eating, drinking, smoking or chewing.

9. Physical and Chemical Properties.

Appearance	A soft paste with white specks of cyanide spread throughout. A pea sized bait will contain a lethal dose for a possum.
Odour	Slightly sweetish, minimal odour of cyanide.
pH	Not Applicable
Vapour Pressure	Not Applicable
Vapour Density	Not Applicable
Boiling Point	Not Applicable
Solubility	Paste is not soluble in water but will wash away in persistent rainfall. Potassium Cyanide is soluble in water, 72g/100grams at 25°C
Specific Gravity	Not Applicable
Flash Point	Not Applicable
Lower Flammability Limit	Not Applicable
Upper Flammability Limit	Not Applicable
Auto Ignition Temperature	Not Applicable

10. Stability and Reactivity.

Chemical Stability	Stable when dry.
Incompatible Materials	<ul style="list-style-type: none">Acids and acid salts (toxic and flammable Hydrogen Cyanide is released when in contact with paste.

- Strong Oxidizing Agents. (Nitrates, peroxides, chlorates) can cause violent or explosive reactions with paste.
- Carbon Dioxide (reacts with paste to produce Hydrogen Cyanide gas)
- Water (reacts with paste slowly to produce Hydrogen Cyanide gas)

Hazardous Decomposition Products Ammonia, potassium hydroxide

Polymerization Does not occur.

Conditions to Avoid Do not store this product with foodstuffs or food containers.

11. Toxicological Information.

Toxicity Data LD50 Oral Rat 7.49 mg/kg
In humans 200 – 300mg of cyanide can result in unconsciousness and death.

Routes of Exposure Ingestion of paste, skin contact, or eye contact with paste.

Health Effects from Likely Routes of Exposure
Ingestion
Can be fatal if paste comes in contact with the mouth; Signs of poisoning include dyspnea, tachypnea, nausea, dizziness, vomiting, headache, sweating, and convulsions.

Inhalation
This can only happen when the paste is reacting to give off hydrogen cyanide gas. Signs of poisoning include dizziness, headache, nausea, weakness and vomiting.

Eye Contact
This can happen if the paste is splashed or rubbed into the eye(s). Symptoms include stinging, burning, extreme redness, watering, and dizziness.

Skin Contact
Contact with the skin can sting, especially in cuts or abrasions. Caustic burns are likely if paste material is not promptly removed from the skin. Wash away with plenty of soap and water. Do not scrub the skin.

Medical Conditions Aggravated by Exposure Cyanosis
Carcinogenicity No data available.
Reproductive Effects No data available.
Teratogenic Effects No data available.
Organ Toxicity No data available.

12. Ecological Information

Ecotoxicity
Environmental Exposure Limits:
TEL water (Cyanides, as CN) = 0.08mg/litre
TEL air (Cyanides, as CN) = 0.009mg/m³
WES (Cyanides, as CN) = 5mg/m³ TWA
EEL freshwater = 18µg/Litre
EEL marine = 14µg/Litre

Effects on Aquatic Organisms. Very harmful to aquatic organisms. Marine pollutant, avoid contamination of any waterways with pellets or containers.

Persistence/Degradability
Paste will breakdown within days of becoming completely wet. The Potassium Cyanide in the paste will react to liberate Hydrogen Cyanide gas which will dissipate into the atmosphere where it is further degraded into non toxic molecules.

13. Disposal Considerations.

Disposal Methods and

Cyanara50 Cyanide paste is degraded by water, product which is surplus or spoiled should be disposed of by burying with other organic material on the active tip face of an appropriately managed landfill or buried with the biologically active layer of soil elsewhere within a secure area. Ensure that a good covering of earth is applied over the bait immediately to prevent access. Alternatively burn unwanted bait material in a suitably constructed and appropriately located incinerator and bury any residues as above. Burn or bury as containers above. DO NOT use the containers for any other purpose.

Special Precautions for Landfill or incineration

Disposal of baits in a designated landfill must be in accordance with regulations applicable to Class 6 substances. Refer to the ERMA User Guide to HSNO Regulations for more information.

14. Transport Information.

UN Number	1680
Proper Shipping Name	Potassium Cyanide.
Dangerous Goods Class	6.1
HazChem Code	4XE
Packing Group	II

15. Regulatory Information.

HSNO Approval Code	HSR001607
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ACVM Registration Number	V05623
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16 Other Information.

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.

Please read the label before using this product.