SAFETY DATA SHEET

Trade Name: D3 Rat One Feed Bait
Product No: RC210
Version Number: 2018.1

Document Number: SDS01/07D3RA
Revision Date: 16/05/18

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

Manufacturers Code:	LDC Feracol (Cholecalciferol Paste)
Use:	Vertebrate Toxic Agent for use 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: HSR100456

HSNO Hazard Classification: 6.8B, 6.3C

Refer to www.epa.govt.nz for controls for this substance

Signal word: WARNING

Hazard Statements

H361	Suspected of damaging fertility or the unborn child.
H433	Harmful to terrestrial vertebrates.

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.
P273	Avoid release to environment.
P281	Use personal protective equipment as required.

Response Statements

P308+P313	If exposed or concerned: Get medical advice.

Storage Statements

P405 Store locked up.

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
Cholecalciferol	67-97-0	0.40
Other ingredients	Proprietary	>99.5

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 medical attention if ingested.
Rinse mouth with water. Do NOT induce vomiting.
Do not give anything by mouth to an unconscious person.

Skin contact

Remove any contaminated clothing. Wash affected area thoroughly to ensure all product is removed.

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

Not expected to be a route of exposure.

First Aid facilities

Eye and hand washing.

Advice to doctor

Product contains Cholecalciferol (Vitamin D3)

SECTION 5: FIRE-FIGHTING MEASURES

Flash Point: Not Applicable

Flammable limits:	LFL: Not determined UFL: Not Determined
Extinguishing Media:	Water spray, foam, CO2 or dry chemical appropriate to surrounding materials.
Fire and Explosion Hazards:	Avoid breathing smoke.
Fire Fighting Equipment:	Wear self-contained breathing apparatus and personal protection clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Spills:	Contain spill. Do not allow to contaminate watercourses or the ground. Wear personal protective equipment and sweep up and transfer to suitable labeled container for re-use if suitable, 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:	Correct dispensing into bait stations and bait laying procedures are required. Refer to product label for use and application. Wear gloves when handling.
Storage:	Store in tightly closed original container and secure (locked up) at room temperature out of reach of children and domestic animals.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:	No Workplace Exposure Standard (WES) has been set by WorkSafe NZ for this substance.
Biological limits:	None set
Engineering Controls:	None set

Personal Protective Equipment (PPE)

Face/Eye Protection:	Not required
Skin Protection:	Impervious rubber or neoprene gloves.
Respiratory Protection:	Not specific recommendation. Not expected as exposure risk.
Other:	Wash hands after use and before eating.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Unit of measurement	Typical value
Appearance	-	Blue grainy paste
Odour	-	Non specific
Specific gravity	g/cc	Not determined
Flashpoint	^{0}C	Non-flammable

SECTION 10: STABILITY AND REACTIVITY

Stability (Conditions to avoid): Stable under normal storage and use conditions.
Incompatibility (Materials to avoid): None identified.
Hazardous decomposition products: No specific hazardous compounds identified.
Hazardous polymerization: Not known to occur.

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE EFFECTS

Ingested

May be harmful if swallowed. Cholecalciferol ingested in large amounts causes elevated levels of calcium in the blood. Delayed symptoms include anorexia, lassitude, nausea, vomiting, diarrhoea, profuse sweating, headache and extreme thirst.

Skin Contact
May cause mild irritation.

Eye Contact
Grainy components in the paste may result in irritation and redness if they contaminate the eye.

Inhalation
Not an expected exposure route and no specific adverse health effects identified.

Chronic Effects
Cholecalciferol suspected of damaging fertility or the unborn child. Repeated or prolonged exposure by ingestion may cause damage to blood and hematopoietic system.

Other Health Effects Information
Persons with hypocalcaemia may have medical condition aggravated by exposure to cholecalciferol.

Toxicological information

Cholecalciferol LD_{50} (oral), rabbit	Rabbit 9.0mg/kg b.w. Possum 16.8mg/kg b.w. Norway rat 42.5mg/kg b.w. Mouse 43.6mg/kg b.w. Dog 80mg/kg b.w.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Avoid exposure to non-target species including domestic pets. If poisoning is suspected of domestic animals or livestock, consult a veterinarian immediately. Avoid placing near waterways.

Active Ingredient is Cholecalciferol Vitamin D3

General

If the animal is asymptomatic and there is no contraindication for emetics use apomorphine (dogs) or Xylanize (cats) or other acceptable emetic. Administer large quantities of fluid and electrolytes (no calcium) by mouth or intra venous (saline solution) with an appropriate diuretic like Frusemide. Give activated charcoal over several days to assist in removal of cholecalciferol and metabolites. Patient should be placed on a low calcium diet. Exposure to sunlight should be avoided.

Dogs: Amorphine may be effective as an emetic. Alternatively, sodium carbonate (washing soda), zinc sulphate, or other emetics may be used. If syrup of Ipecac (7%) is used, the recommended dose is 1-2ml/kg of body weight up to a maximum of 15ml. This may be repeated once if a lower dose is used.

Cats: Xylazine is used at a dose of 1 mg/kg of body weight intra muscular. Xylazine can be reversed with Yohimbine 0.1mg/kg of bodyweight intra venous. Alternatively use 5ml, 3% hydrogen peroxide per 4.5kg of body weight given one or two times. Hydrogen peroxide is most effective if given after a small meal. If syrup of Ipecac (7%) is used, the dose is 3.3ml/kg of body weight (2-6ml) (DO NOT REPEAT).

Please use veterinary discretion when choosing which of the following drugs to use:

Frusemide (1mg/kg TID). This inhibits calcium re-absorption by the kidney. Caution- the patient must first be rehydrated prior to Frusemide or dehydration may worsen.

Activated Charcoal. Administer over several days to remove cholecalciferol and metabolites from the serum. Activated charcoal may cause constipation so initially it is recommended to use AC plus Sorbitol (e.g. Carbosorb) but avoid repeated use of Sorbitol or electrolyte imbalances may occur. Do not use oils concurrently with AC.

Prednisone. (1-2mg/kg BID). This decreases gut absorption, promotes calcium excretion by the kidneys and may inhibit release of calcium in the bones.

Phosphate Binders. (Amphojel). May be beneficial if concurrent hypophosphatemia especially to decrease Ca and P.

Calcitonin. This is recommended by the manufacturer but see Pamidronate, as it appears to be more effective. It inhibits osteoclastic bone resorbtion and has a calciuria effect. The effect is short term. If serum levels are high, salmon calcitonin has been used as a treatment for hypocalcaemia to help bring down serum calcium levels. The dose is 4-6 iu/kg by subcutaneous injection (every 6-8 hours) until serum calcium levels stabilize.

Pamidronate Disodium. (1.3-2mg/kg of body weight). This is a bisphosphonate compound that lowers serum calcium and is used when normal treatment with fluid and diuretics fail to lower serum calcium. It is administered diluted in saline and given over two hours IV. The patient should remain on IV saline until the calcium levels are normalized. Monitor the calcium levels daily for up to 96 hours. One re-treatment may be indicated 5-7 days after the first Pamidronate treatment.

*Treatment with activated charcoal, diuretics and corticosteroids, monitor serum calcium daily. Administer other treatments if serum calcium levels do not normalize.

Toxicity to aquatic organisms
The product has identified as being harmful in the aquatic environment.

Persistence/degradability
No specific product information available. However no components have been identified as being persistent in the environment.

Mobility
No information available.

Environmental Exposure Standards
No EEL has been set for this substance.

SECTION 13: DISPOSAL CONSIDERATION

Dispose of waste in accordance with Regional Authority or local Council bylaws. Dispose of empty containers safely. Crush and dispose of clean dry containers by burying to a depth of 60 cm with biologically active organic matter or in an approved landfill. Do not use empty containers for storing other products. Incineration of waste material is also possible in suitably approved and located facilities.

SECTION 14: TRANSPORT INFORMATION

UN Number: Non regulated
Description:
Class:
Packing Group:
Hazchem:

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: HSR100456
For controls see www.epa.govt.nz

ACVM Registration Number: V009612
For Conditions of registration see www.mpi.govt.nz

SECTION 16: OTHER INFORMATION

Issue Date: 16/05/18

Reason for Issue: Review of document and changes to layout

Replaces: Safety Data Sheet dated 21/01/15

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