What is cyanide?

Cyanide is a poison that is used in New Zealand for possum control. It has been used here for several decades and elsewhere for thousands of years. It is synthesized by a simple chemical process that yields potassium cyanide or sodium cyanide.

As with all toxins it must be used safely as it is potentially dangerous to non-target species and people. For that reason, its use is governed by strict regulations that control who may use it, and where and how it is applied.

Who uses it and why?

Pest control professionals and farmers use it for possum control to limit the spread of Tb, which can be carried by possums; to protect endangered species and native habitats from possum predation and competition; and to collect possum fur. Results from using cyanide are quickly achieved and easy to evaluate.

What are the restrictions on the use of cyanide?

Only Licensed Operators with a Controlled Substances License may purchase and use cyanide. Permission is also required for its use from the local territorial authority, the land owner and the Medical Officer of Health.

How does cyanide kill possums?

Cyanide from pellets and paste is rapidly absorbed and inhaled. The poison stops oxygen uptake to the brain. Death occurs rapidly at lethal doses.

Why is cyanide used for possum control?

All pest control toxins have advantages and disadvantages that should be considered when deciding the appropriate control method to use. These are summarised for cyanide below.

Advantages	Disadvantages
Cheap	Potentially hazardous to users if not used carefully
Effective	Treatment of cyanide poisoning is difficult as the effects are rapid
Biodegradable	
Humane (very rapid action)	
Suitable for fur recovery from carcasses	
Low secondary-poisoning risk	

How can we keep ourselves safe?

The easiest way for communities to keep safe is to:

- Obey all of the warning signs.
- Not touch any bait stations, green pellets or paste.
- Warn children of the danger.
- Keep children and pets under supervision and, if possible, away from the area.

CYANIDE
(Deadly Poison)
LAID FOR POSSUMS

Licensed operators must erect warning signs at all points of entry where poisoning operations are being undertaken, as well as around the perimeter. Signs must remain for at least 2 months after the last baits are retrieved from a bait station or at least 4 months after baiting if the baits are not retrieved.

In an Emergency and for further advice contact the National Poisons Centre 0800 POISONS (0800 764 766)

If you are concerned about the use of cyanide in your area, contact either:

- **The licensed operator involved, whose contact phone number should be clearly shown on warning signs, or**
- **The Hazardous Substances Compliance Line, ph: 0800-376-234.**

www.npca.org.nz

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CYANIDE
ITS USE FOR POSSUM CONTROL

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CYANIDE ITS USE FOR POSSUM CONTROL

What does cyanide look like?

It comes in two forms – paste and encapsulated pellets. Both are coloured green as a deterrent to birds and as a warning to people.

Look out for:

Green encapsulated cyanide pellets (Feratox®) as shown) or pea size dollops of green paste laid on trees and fence posts, often marked with white flour.

Cyanide pastes come in tubes so that pea-sized amounts can be readily dispensed. The tubes should always be safely disposed of off-site.

Small or large bait stations (or feeders) containing green paste pellets.

Bait bags containing a green cyanide pellet (Feratox®) mixed with palatable paste. These are labeled with a warning and fastened to a tree or post.

Blocks of green cyanide bait dispensed in bait stations

'Strikers', containing green cyanide bait, fastened to trees or posts.

Solid pellet, block or striker forms of cyanide are safer to handle than pastes and are presented in a variety of bait delivery systems and packaging.

REMEMBER! If it's coloured green, it is poisonous and should not be touched.

What are the risks to humans and animals?

Humans, livestock, dogs and other pets will be poisoned if they eat bait. As little as one or two encapsulated cyanide pellets, or a similar amount of cyanide paste, could kill a person.

Therefore, extreme care is required, to prevent accidental poisoning.

What are the risks to the environment?

Once in contact with water or damp soil, cyanide breaks down. The toxin does not remain in the soil.

After a poisoning operation, uneaten paste and pellets are retrieved or buried by the operator and operators must dispose of all used cyanide containers safely off-site.

Will cyanide get into water?

Residues of cyanide will not get into streams unless baits are placed right beside a waterway. Should pellets or paste enter a waterway, they will disintegrate and the cyanide breaks down quickly.

Can dogs be killed by eating poisoned possum carcasses?

Secondary poisoning following cyanide baiting is most unlikely. The poison in possum carcasses very quickly breaks down.

Is it humane?

Comparative welfare assessments demonstrate that cyanide kills possums humanely.

	Time to Death	Signs	Welfare Rating
Cyanide	15 mins	Unconscious after 6 minutes	High
1080	11.5 hours	Tremors, retching, vomiting, seizures	Moderate
Brodifacoum	21 days	Bleeding and lame	Low

How are the risks to humans and animals minimised?

Risks are minimised through careful use by licensed operators, including:

- Correct bait placement.
- Prescribed procedures that limit or negate the potential risk to non-target wild animals.
- Exclusion of humans, livestock, dogs and other pets from areas where cyanide is being used.
- Not laying poison near a house or public place.
- Prominent placement of warning signs around areas where cyanide is being used.
- Careful handling of cyanide products by operators to avoid personal exposure or accidental poisoning.

Note: only licensed operators are permitted to use cyanide.