

Diphacinone

Diphacinone is a first-generation anticoagulant poison. As an anticoagulant, it prevents blood clotting, thereby causing death from internal bleeding. Diphacinone requires multiple feeds for the target animal to consume enough toxin to be fatal. It can be used by landowners to control pests on their land without the need for a licence.



Diphacinone products. Left: D-Block®. Right: Ratabate® paste about to be loaded into a bait station

Diphacinone baits are primarily used to control rodents (e.g., rats and mice), which have well documented negative impacts on native flora and fauna. Diphacinone is less toxic to other pest species, so is not suitable for targeting other pest species. The baits are dyed green to be unattractive to birds, and other non-target species such as domestic pets. As a first generation toxin, there is minimal risk of secondary poisoning, e.g., other species scavenging on carcasses are unlikely to die. As with all toxins, appropriate care should be taken to avoid non-target species consuming baits and carcasses. Accordingly, diphacinone-based baits are a useful product to use on private properties or public reserves.

Trade names include: D-Block®, Ratabate®, Ditrac®, Double Tap® (this product also contains cholecalciferol).

Safe usage

Diphacinone must only be used in bait stations. To ensure that it is being used safely, always read and follow label instructions for the product you are using. This will generally include:

- Bait must be stored in a dry area away from foodstuffs or food preparation areas
- Bait must be stored in its original container in areas inaccessible to children or pets
- Warning signs must be placed at public accessways to areas where bait stations have been placed
- Bait stations must be out of reach of children, pets and stock (this can be achieved by using lockable bait stations to prevent access, e.g., Protecta Evo® range of bait stations)
- Wear suitable protective gear (e.g., gloves) when handling bait
- Do not eat, drink, smoke or vape when handling the bait
- Dispose of empty bait bags and spoiled bait as per label instructions
- Wash hands after working with bait

Risks

What are the risks to humans?

The risk to humans is very low because a significant amount needs to be ingested to cause illness or fatality. However, safety precautions should be taken to minimise exposure (see above).

Toxicity symptoms common to anticoagulant poisons may include:

- Bleeding gums and excessive bleeding from cuts
- Greater tendency to bruise
- Blood in urine and faeces
- Nausea and vomiting shortly after ingestion

In an emergency, contact National Poisons Centre 0800 764766

What are the risks to non-target animals?

If label instructions are followed there is a very low risk of primary poisoning of non-target species. Furthermore, research indicates that Diphacinone has a short half-life of approximately three days, meaning it breaks down in the environment quickly, reducing the chance of secondary poisoning by non-target species scavenging carcasses.

Although treatment may be possible (Vitamin K), prevention is the only sure way of protecting animals and pets from poisoning. This means:

- Keeping dogs on a lead in area where toxin is being used
- Do not allow pets to scavenge dead animals
- Keeping bait within the bait stations, and not allowing it to fall on the ground
- Safely disposing of dead animals by burying

Symptoms of poisoning are similar to those observed in human. If poisoning is suspected in your dog, take it to the vet immediately. Cats are unlikely to be attracted to the cereal-based bait.

Harvesting wild animals

It is recommended that you do not hunt animals from areas that have been treated with diphacinone for two months following the completion of baiting.

What are the risks to the environment?

Diphacinone poses a low risk in the environment due to its short half-life and rapid breakdown. It is also only to be deployed in bait stations that are not over water, meaning the risk of it entering waterbodies is low.

Disposal

Surplus or spoiled bait should be disposed of as per label instructions.

