# Using Rodenticide Safely & Efficiently



Rodenticide for the control of Brown Rats (*Rattus norvegicus*) and House Mice (*Mus domesticus*)

Rodenticide is an effective tool for the control of rodents. However, the use of rodenticide can be a complex process and should not be underestimated.

**Always** read and follow the label and baiting instructions on the rear of your rodenticide packaging. This guidance leaflet should not be considered a replacement to the instructions on the rodenticide packaging.

Roshield can provide three different rodenticide active ingredients; Difenacoum, Bromadiolone and Brodifacoum. All of these approved rodenticides have a chronic effect and it will take on average between 5-10 days for control to be achieved. It should be noted that it is common for rats and house mice to be cautious before they consume the bait. The name of the active ingredient you have bought can be found on the rodenticide packaging.



Difenacoum and Bromadiolone are the recommended initial active ingredients to use for the treatment of rats and house mice and the most commonly used rodenticides. These active ingredients are termed 'multi-feeds', this allows rats and house mice to consume the bait without suffering any initial ill effects and promotes ongoing feeding of the rodenticide until control is achieved.

The active ingredient Brodifacoum is somewhat different, although still chronic, taking a number of days to achieve control. It is labelled as a 'single-feed' rodenticide and is best used for stubborn infestations or areas with known resistance, this bait comes with additional risks as it is more toxic to non-target animals.

Whichever active ingredient is used it is important to prevent non-target animals and people from gaining access to the bait. It is also important to locate and remove any carcasses from the treatment area as soon as possible.

Regulations within the UK and EU require all amateur use rodenticide, those below 0.003% of active ingredient, to be **used** within tamper-resistant bait stations. These helps prevent non-target animals and people from gaining access to the rodenticides.

# **Before Placement of Rodenticide**

It is important to remove all food and water that rodents have been using before undertaking the rodent control treatment. This will encourage rats and house mice to look for alternative food sources and will speed up the baiting process.

It is recommended that foods which have not been protected by packaging or stored in sealed boxes which may have come into contact with rats and house mice are discarded as they may be contaminated. If there is any sign of damage to packaged foods, such as gnawing to cereal boxes, the pack should be thrown away. Food should be stored in containers until you are sure that there are no rodents present.

Before baiting it is important to identify any risks to non-target animals. If placing bait outside or in an area where non-target animals cannot be excluded you must always use a bait box designed for the safe placement of rodenticide bait.

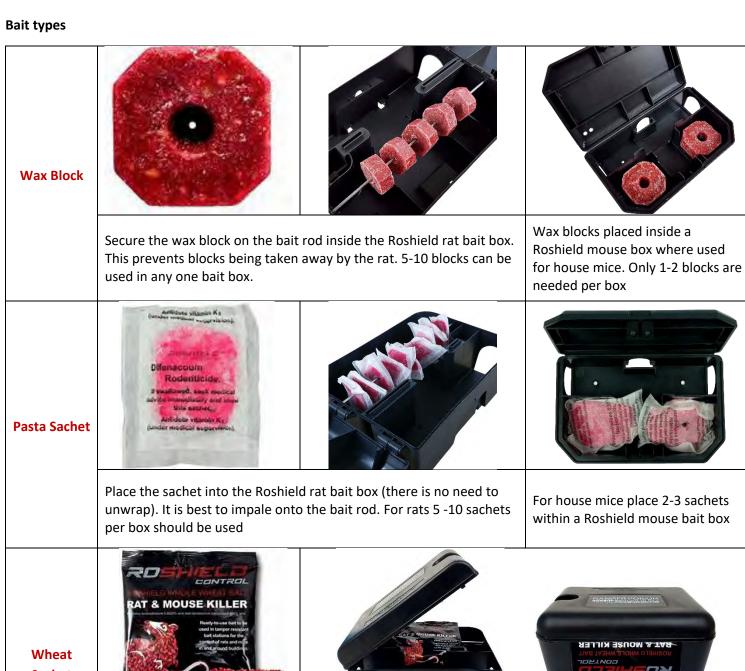
Rodents are often present within hard to access areas such as attics. Should you be unable to gain access to your attic space or other closed areas we would recommend that you seek help from your landlord or building supervisor in order to gain access as baiting in these areas is often the quickest way to control rats and house mice. Communication with neighbours may also be beneficial in shared buildings as rodents may move between buildings.

A common baiting mistake is to underestimate the size of an infestation. It is important not to 'under bait' and lay too few baits as this can lead to poor control. During the treatment continuous access to the bait for all rodents should be maintained until no further take or activity is noted. Once no further activity is noted for a few days baits should be removed.

Never touch rodents or their associated waste with your bare hands, always wear gloves when handling rodenticide or bait boxes. At the end of the work hands should be washed thoroughly.

#### **Treatment with Rodenticide**

The amount of bait required to control an infestation will vary depending on the size of the population, it is important to note that many people underestimate the size of rodent populations, in many situations it is not 'just one' rat or mouse. You should always bait on the assumption that the infestation is larger than you expect. Be prepared to use 3-4 baiting stations for rats and at least 5 - 10 for house mice. This number will vary as each property and individual situation will be vastly different.



This sachet should be placed into the Roshield rat bait box (no need to unwrap). A small hole pierced in the

sachet will help encourage bait take, the rats will readily chew through the rest.

Sachet

#### Where to Bait

Successful baiting relies on placing the bait in the areas of main rodent activity.

Common areas of internal activity include; attic space (especially at pipe work entrance points), under the kitchen kickboard plinths (boards under the cupboards), airing cupboard (pipe work), pantry (ventilation gaps), general pipe work into walls, breeze blocks and ventilation gaps, soil pipe entrance points.

For external baiting, bait boxes should be placed in areas within close proximity of rat nesting sites or the original food source. Common areas include rockery areas of garden ponds, under the base of sheds or decking, compost heaps or bins, unusual holes in plant beds. Bait must not be placed in open areas or directly on any established runs.

The external bait box must be secured down with a heavy object or alternatively screw the box to a wall or fence for additional security. If pets are present or baiting is in an area at high risk of non-target animals it is advised to place additional protection near to the entrance of the boxes, such as some sheets of ply.

Always make sure that the box is closed and secure before leaving the bait unattended.

## What to Expect after Placement of Rodenticide

Bait should be left unchecked for 3-4 days and then checked regularly depending on the take of bait. If all the bait has been taken it is important that additional bait is placed down. Rebaiting should continue until no further activity is noted. Once bait take ceases the rodenticide should be removed.

If no bait is taken or a percentage of the bait has been taken this indicates the infestation is still active. Bait should be topped up and checks repeated within a few days. If no additional signs of activity are identified after a week of the last sign it is likely the infestation is no longer active and the rodenticide can be removed.

Rats and house mice can be cautious towards new items placed in their territory. This is a common issue and not a sign of a defective product. For this reason, it can take some time before bait take is first noted. On average this is between 3-5 days but this can be longer, up to 14 days in some rat populations.

Large quantities of bait consumption by rats is not unexpected and can be a sign of a larger than expected infestation. Where full bait take is noted consider placing extra baiting points, as a continuous supply of bait is needed for the whole population.

Rodents that have taken the bait will generally go back to their nests to die but it is important to regularly check your site to find and remove any carcasses that present a risk to non-target species. This is particularly important if using Brodifacoum bait. Activity may become more visible during treatment as the rodents can become slow after consuming bait. Slow moving rodents moving around in daylight hours is a typical sign of the rodenticide working.

Dead rodents should be disposed of by double bagging the carcass, sealing the bag and disposing through the domestic waste system. For commercial business customers the waste should be treated under EWC code 20 01 99 (non-hazardous entry).

### **Cleaning of Infected Areas**

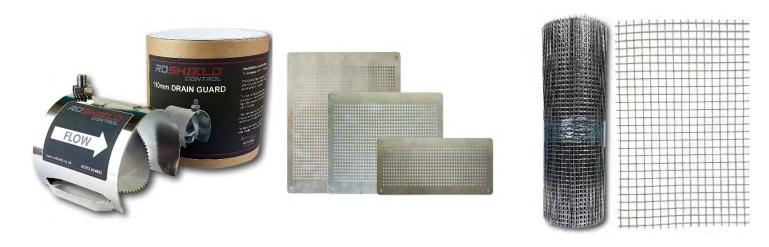
Internal areas in which rodents have been active may become contaminated and pose a risk of transmissions of bacteria and viruses associated with rodents. By using an appropriate cleaning biocide spray such as the Roshield Sanitiser & Cleaner Spray these can be removed and the risk reduced. An alternative is our Roshield Rodent Disinfectant Aerosol which disinfects rooms and voids with a one-shot trigger mechanism without the need of additional equipment.

Always wear personal protective equipment including an appropriate mask when cleaning in confined spaces or untreated environments.



## **Proofing of Infected Area**

All attempts should be undertaken to prevent future rodent ingress. Following a successful treatment, Roshield always recommend proofing any accessible holes with a suitable material such as a combination of wire wool and adhesive to prevent future access. Weep holes and air bricks are common entry points and should be proofed with mesh. Repairing broken drains can also help stop rat re-infestations, however sometimes an outside contractor may be required to inspect underground pipework to identify unseen drainage issues. Our Roshield drain guard is a perfect addition to protect drainage systems.



#### **Technical Issues**

- The vast majority of baiting failures can be avoided by ensuring enough bait is placed, continuously checked and replenished where needed to ensure bait is always available to the rodents.
- Resistance can be an issue in some areas and it is recommended that should control not be achieved using
  Bromadiolone or Difenacoum, switching to Brodifacoum will negate the issue of resistance. Brodifacoum does
  however carry additional risks and these should be understood before using this active ingredient. A handy map to
  check if resistance is an issue in your location can be found at www.rrac.info
- It should be remembered that rats are extremely intelligent, adaptable and can quickly learn from negative
  experiences.
- If rats are actively running around throughout the day or if any bait is consumed in a short time frame it may be assumed that the infestation is larger than first thought. Additional bait stations should be added.
- In order to increase the likelihood of the rodent accepting the bait it is often good to match the bait type to the food the rodent has been eating. Using a pasta bait where rats have been feeding from high fat items is more likely to be accepted as normal than cereal baits.
- Rodents will only feed where they feel comfortable. In order to increase the likelihood of bait consumption avoid disturbing their environment until the end of the treatment. The only exception to this is the removal of food and water which must be conducted at the start to make the rodents switch from their normal food to the bait.
- Rats need water. When thinking about where to place the bait also consider where the rat is obtaining its water and if possible, stop access to this. A large proportion of rat activity in domestic properties is linked to defective drainage, ensure after treatment that checks and repairs are completed to prevent a reoccurrence of activity.
- Bait should be removed at the end of treatment to prevent access to non-target animals but also to prevent insects from breeding in the grains, blocks or pasta which may support an insect infestation over time.