Australian Government

Australian Pesticides and Veterinary Medicines Authority

Public Release Summary

on the evaluation of the new active constituent bromethalin in the products Fastrac G Blox Rodenticide, Fastrac Pro Blox Rodenticide, Fastrac G Place Pacs Rodenticide, Fastrac G Pellets Rodenticide, Fastrac Pro Place Pacs Rodenticide, Fastrac Pro Pellets Rodenticide, Fastrac G Meal Bait Rodenticide, and Fastrac Pro Soft Bait Rodenticide

APVMA product numbers 88448, 88449, 88451, 88454, 88455, 88456, 88457 and 88458

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This publication is available from the APVMA website.

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Preface

The Australian Pesticides and Veterinary Medicines Authority (APVMA) is the Australian Government regulator responsible for assessing and approving agricultural and veterinary chemical products prior to their sale and use in Australia. Before approving an active constituent and/or registering a product, the APVMA must be satisfied that the statutory criteria, including the safety, efficacy, trade, and labelling criteria, have been met. The information and technical data required by the APVMA to assess the statutory criteria of new chemical products, and the methods of assessment, must be consistent with accepted scientific principles and processes. Details are outlined on the APVMA website.

The APVMA has a policy of encouraging transparency in its activities and seeking community involvement in decision making. Part of that process is the publication of Public Release Summaries for products containing new active constituents. This Public Release Summary is intended as a brief overview of the assessment that has been conducted by the APVMA and of the specialist advice received from advisory agencies, including other Australian Government agencies and state departments of primary industries. It has been deliberately presented in a manner that is likely to be informative to the widest possible audience to encourage public comment.

About this document

This Public Release Summary indicates that the APVMA is considering an application for registration of an agricultural or veterinary chemical. It provides a summary of the APVMA's assessment, which may include details of:

- the toxicology of both the active constituent and product
- the residues and trade assessment
- occupational exposure aspects
- environmental fate, toxicity, potential exposure and hazard
- efficacy and target crop or animal safety.

Comment is sought from interested stakeholders on the information contained within this document.

Making a submission

In accordance with sections 12 and 13 of the Agvet Code, the APVMA invites any person to submit a relevant written submission as to whether the application for registration of the products of Fastrac G Blox Rodenticide, Fastrac Pro Blox Rodenticide, Fastrac G Place Pacs Rodenticide, Fastrac G Pellets Rodenticide, Fastrac Pro Place Pacs Rodenticide, Fastrac Pro Pellets Rodenticide, Fastrac G Meal Bait Rodenticide, and Fastrac Pro Soft Bait Rodenticide should be granted. Submissions should relate only to matters that the APVMA is required, by legislation, to take into account in deciding whether to grant the application. These matters include aspects of public health, occupational health and safety, chemistry and manufacture, residues in food, environmental safety, trade, and efficacy and target crop or animal safety.

Submissions should state the grounds on which they are based. Comments received that address issues outside the relevant matters cannot be considered by the APVMA.

Submissions must be received by the APVMA by close of business on 2 July 2021 and be directed to the contact listed below. All submissions to the APVMA will be acknowledged in writing via email or by post.

Relevant comments will be taken into account by the APVMA in deciding whether the product should be registered and in determining appropriate conditions of registration and product labelling.

When making a submission please include:

- contact name
- company or organisation name (if relevant)
- email or postal address (if available)
- the date you made the submission.

Please note: submissions will be published on the APVMA's website, unless you have asked for the submission to remain confidential, or if the APVMA chooses at its discretion not to publish any submissions received (refer to the public consultation coversheet).

Please lodge your submission using the public consultation coversheet, which provides options for how your submission will be published.

Note that all APVMA documents are subject to the access provisions of the *Freedom of Information Act 1982* and may be required to be released under that Act should a request for access be made.

Unless you request for your submission to remain confidential, the APVMA may release your submission to the applicant for comment.

Written submissions should be addressed to:

Executive Director Registration Management

Australian Pesticides and Veterinary Medicines Authority

GPO Box 3262

Sydney NSW 2001

Phone: +61 2 6770 2300

Email: enquiries@apvma.gov.au

Further information

Further information can be obtained via the contact details provided above.

Copies of technical evaluation reports covering chemistry, efficacy and safety, toxicology, occupational health and safety aspects, residues in food and environmental aspects are available from the APVMA on request.

Further information on Public Release Summaries can be found on the APVMA website.

Introduction

This publication provides a summary of the data reviewed and an outline of the regulatory considerations for the proposed registration of the primary product Fastrac G Blox Rodenticide and associated secondary products of Fastrac Pro Blox Rodenticide, Fastrac G Place Pacs Rodenticide, Fastrac G Pellets Rodenticide, Fastrac Pro Place Pacs Rodenticide, Fastrac Pro Pellets Rodenticide, Fastrac G Meal Bait Rodenticide, and Fastrac Pro Soft Bait Rodenticide, and approval of the new active constituent, bromethalin.

Applicant

Bell Laboratories, Inc.

Purpose of application

Bell laboratories, Inc. has applied to the APVMA for registration of the new product Fastrac G Blox Rodenticide and associated secondary products, containing 0.1 g/kg, as ready-to-use bait formulations of the new active constituent bromethalin.

This publication provides a summary of the data reviewed and an outline of the regulatory considerations for the proposed registrations of the primary product Fastrac G Blox Rodenticide and associated secondary products, and approval of the new active constituent bromethalin.

Proposed claims and use pattern

The proposed product Fastrac G Blox Rodenticide and associated secondary products are intended for use in control of rats and mice, including those resistant to anticoagulant in and around industrial, commercial, agricultural and domestic buildings.

Mode of action

Bromethalin is a neurotoxic rodenticide that damages the central nervous system by uncoupling oxidative phosphorylation during ATP synthesis. This, in turn, results in vacuolisation of myelin and increased intracranial pressure through the build-up of cerebral spinal fluid, which permanently damages neural axons, thereby causing paralysis, convulsions, and death.

Overseas registrations

The products are currently registered as ‘Fastrac’ and ‘Tomcat with Bromethalin’ containing bromethalin (0.1 g/kg bromethalin, bait formulation) in the United States of America (USA).

Registered uses for 0.1 g/kg bromethalin bait formulation in the USA are predominantly used to kill anticoagulant-resistant Norway rats, roof rats, house mice and meadow voles.

Chemistry and manufacture

Active constituent

The active constituent bromethalin is manufactured overseas. Details of the chemical name, structure, and physicochemical properties of bromethalin are listed below in Tables 1 to 2.

Bromethalin is a yellow solid granular powder. It is practically insoluble in water (1.17 mg/L) and in most organic solvents. It is hydrophobic in nature and may have a potential for bioaccumulation. There are no safety (e.g. flammability, explosive, and/or oxidizing) properties of concern regarding bromethalin.

Table 1: Nomenclature and structural formula of the active constituent bromethalin

Common name (ISO):	Bromethalin
IUPAC name:	*N*-Methyl-2,4-dinitro-*N*-(2,4,6-tribromophenyl)-6-(trifluoromethyl)aniline
CAS name:	*N*-methyl-2,4-dinitro-*N*-(2,4,6-tribromophenyl)-6-(trifluoromethyl)benzenamine
CAS registry number:	63333-35-7
Molecular formula:	$C_{14}H_7Br_3F_3N_3O_4$
Molecular weight:	577.9 g/mol
Structural formula:	

Table 2: Key physicochemical properties of the active constituent bromethalin

Physical form:	Solid granular powder
Colour:	Yellow
Odour:	Odourless
Melting point:	151 to 153°C
Stability:	At ambient temperature, bromethalin is stable over the period of one year without decomposition. In an accelerated storage stability study, 1.4% decomposition of the active is observed after 2 weeks at 54ºC. No adverse reaction to metal or metal ions, including iron and aluminium (and their acetate salts), has been observed following storage for 2 weeks at 54ºC.
Safety properties:	Not considered flammable. Not explosive. Not corrosive with tin plate and sheet metal.
Solubility in water:	1.17 mg/L (pure water) at 20ºC.
Organic solvent solubility:	It is practically insoluble within 30 minutes in most organic solvents including methanol or hexane at 20 to 25ºC.
PH:	pH 6.2 at a 1% dilution in pure water at 22ºC
Octanol/water partition coefficient (Log K_{ow}/K_{OW}):	log P_{ow} = 5.52, pH 7
Bulk density:	Pour = 0.722 g/mL Tap = 1.049 g/mL at 22ºC
UV/VIS absorption spectra:	λ_{max} = 206 nm (neutral solution)

Formulated product

Fastrac G Blox Rodenticide and the other proposed products containing bromethalin will be manufactured overseas. Tables 3 to 18 outline some key aspects and physicochemical properties of Fastrac G Blox Rodenticide and associated products of Fastrac Pro Blox Rodenticide, Fastrac G Place Pacs Rodenticide, Fastrac G Pellets Rodenticide, Fastrac Pro Place Pacs Rodenticide, Fastrac Pro Pellets Rodenticide, Fastrac G Meal Bait Rodenticide and Fastrac Pro Soft Bait Rodenticide.

Fastrac G Blox Rodenticide and its associated secondary products will be available in 150 g to 10 kg high density polyethylene (HDPE) containers with low density polyethylene (LDPE) lids.

Table 3: Key aspects of the formulation of the product Fastrac G Blox Rodenticide

Distinguishing name:	Fastrac G Blox Rodenticide
Formulation type:	Ready-to-use bait (RB)
Active constituent concentration:	0.1 g/kg bromethalin

Table 4: Physicochemical properties of the product Fastrac G Blox Rodenticide

Physical form:	Green coloured solid block, sweet pleasant odour
PH:	Not dispersible in water
Density:	1.16 g/mL at 20ºC
Safety properties:	Not classified as a flammable liquid or an explosive and/or as an oxidising or reducing substance
Storage stability:	There were sufficient data to conclude that the product is expected to remain within specifications for at least 2 years when stored under normal conditions

Table 5: Key aspects of the formulation of the product Fastrac Pro Blox Rodenticide

Distinguishing name:	Fastrac Pro Blox Rodenticide
Formulation type:	Ready to use bait (RB)
Active constituent concentration:	0.1 g/kg bromethalin

Table 6: Physicochemical properties of the product Fastrac Pro Blox Rodenticide

Physical form:	Purple coloured solid block, combination of grains and fish odour
PH:	Not dispersible in water
Density:	1.19 g/mL at 20ºC
Safety properties:	Not classified as a flammable liquid or an explosive and/or as an oxidising or reducing substance
Storage stability:	There were sufficient data to conclude that the product is expected to remain within specifications for at least 2 years when stored under normal conditions

Table 7: Key aspects of the formulation of the product Fastrac G Place Pacs Rodenticide

Distinguishing name:	Fastrac G Place Pacs Rodenticide
Formulation type:	Ready to use bait (RB)
Active constituent concentration:	0.1 g/kg bromethalin

Table 8: Physicochemical properties of the product Fastrac G Place Pacs Rodenticide

Physical form:	Green coloured solid pellets, sweet odour
PH:	Not dispersible in water
Density:	1.32 g/mL at 20ºC
Safety properties:	Not classified as a flammable liquid or an explosive and/or as an oxidising or reducing substance
Storage stability:	There were sufficient data to conclude that the product is expected to remain within specifications for at least 2 years when stored under normal conditions

Table 9: Key aspects of the formulation of the product Fastrac G Pellets Rodenticide

Distinguishing name:	Fastrac G Pellets Rodenticide
Formulation type:	Ready-to-use bait (RB)
Active constituent concentration:	0.1 g/kg bromethalin

Table 10: Physicochemical properties of the product Fastrac G Pellets Rodenticide

Physical form:	Green coloured solid pellets, sweet grain-like odour
PH:	Not dispersible in water
Density:	1.32 g/mL at 20ºC
Safety properties:	Not classified as a flammable liquid or an explosive and/or as an oxidising or reducing substance
Storage stability:	There were sufficient data to conclude that the product is expected to remain within specifications for at least 2 years when stored under normal conditions

Table 11: Key aspects of the formulation of the product Fastrac Pro Place Pacs Rodenticide

Distinguishing name:	Fastrac Pro Place Pacs Rodenticide
Formulation type:	Ready to use bait (RB)
Active constituent concentration:	0.1 g/kg bromethalin

Table 12: Physicochemical properties of the product Fastrac Pro Place Pacs Rodenticide

Physical form:	Purple coloured solid pellets, grain-like odour
PH:	Not dispersible in water
Density:	1.29 g/mL at 20ºC
Safety properties:	Not classified as a flammable liquid or an explosive and/or as an oxidising or reducing substance
Storage stability:	There were sufficient data to conclude that the product is expected to remain within specifications for at least 2 years when stored under normal conditions

Table 13: Key aspects of the formulation of the product Fastrac Pro Pellets Rodenticide

Distinguishing name:	Fastrac Pro Pellets Rodenticide
Formulation type:	Ready-to-use bait (RB)
Active constituent concentration:	0.1 g/kg bromethalin

Table 14: Physicochemical properties of the product Fastrac Pro Pellet Rodenticide

Physical form:	Purple coloured solid pellets, grain-like odour
PH:	Not dispersible in water
Density:	1.29 g/mL at 20ºC
Safety properties:	Not classified as a flammable liquid or an explosive and/or as an oxidising or reducing substance
Storage stability:	There were sufficient data to conclude that the product is expected to remain within specifications for at least 2 years when stored under normal conditions

Table 15: Key aspects of the formulation of the product Fastrac G Meal Bait Rodenticide

Distinguishing name:	Fastrac G Meal Bait Rodenticide
Formulation type:	Ready to use bait (RB)
Active constituent concentration:	0.1 g/kg bromethalin

Table 16: Physicochemical properties of the product Fastrac G Meal Bait Rodenticide

Physical form:	Green granules with beige seeds, grain molasses-like odour
PH:	6.57 for a dispersion in distilled water
Density:	1.28 g/mL at 20ºC
Safety properties:	Not classified as a flammable liquid or an explosive and/or as an oxidising or reducing substance
Storage stability:	There were sufficient data to conclude that the product is expected to remain within specifications for at least 2 years when stored under normal conditions

Table 17: Key aspects of the formulation of the product Fastrac Pro Soft Bait Rodenticide

Distinguishing name:	Fastrac Pro Soft Bait Rodenticide
Formulation type:	Ready-to-use bait (RB)
Active constituent concentration:	0.1 g/kg bromethalin

Table 18: Physicochemical properties of the product Fastrac Pro Soft Bait Rodenticide

Physical form:	Purple oily solid, odourless
PH:	6.57 for a dispersion in distilled water
Density:	1.22 g/mL at 20ºC
Safety properties:	Not classified as a flammable liquid or an explosive and/or as an oxidising or reducing substance
Storage stability:	There were sufficient data to conclude that the product is expected to remain within specifications for at least 2 years when stored under normal conditions

Recommendations

The APVMA Chemistry section has evaluated the chemistry of the active constituent bromethalin and the proposed end use products containing bromethalin, including the physicochemical properties, manufacturing processes, quality control procedures, stability, batch analysis results and analytical methods, and found

them to be acceptable. The available storage stability data indicate that the formulated products are expected to remain stable for at least 2 years when stored under normal conditions.

Based on a review of the chemistry and manufacturing details, the registration of Fastrac G Blox Rodenticide and its associated secondary products of Fastrac Pro Blox Rodenticide, Fastrac G Place Pacs Rodenticide, Fastrac G Pellets Rodenticide, Fastrac Pro Place Pacs Rodenticide, Fastrac Pro Pellets Rodenticide, Fastrac G Meal Bait Rodenticide, and Fastrac Pro Soft Bait Rodenticide, and approval of the active constituent bromethalin, are supported from a chemistry perspective.

Toxicological assessment

Overall, there are no objections on human health grounds to the approval of bromethalin or the registrations of Fastrac G Blox Rodenticide; Fastrac Pro Blox Rodenticide; Fastrac G Place Pacs Rodenticide; Fastrac G Pellets Rodenticide; Fastrac Pro Place Pacs Rodenticide; Fastrac Pro Pellets Rodenticide; Fastrac G Meal Bait Rodenticide; and Fastrac Pro Soft Bait Rodenticide.

Evaluation of toxicology

Chemical class

Bromethalin is a pro-biocide rodenticide acting via neurotoxic mechanisms.

Pharmacokinetics

Bromethalin is rapidly absorbed from the gastrointestinal tract. Peak plasma levels occur within several hours following ingestion. Bromethalin is demethylated in the liver to the more toxic desmethylbromethalin, the major metabolite. There are species differences in the extent and speed of hepatic desmethylation, which are correlated with the toxic dose and speed of onset of effects. Bromethalin and desmethylbromethalin are widely distributed through the body, with detectable residues found in the liver, kidney, brain and fat. They are highly lipophilic, with the fat and brain (the key targe organ) achieving the highest tissue concentrations. Bromethalin is slowly excreted via biliary excretion, and its plasma half-life is approximately 5 to 6 days. There is evidence of accumulation in the brain following repeated dose exposure.

No studies on dermal absorption were submitted.

Acute toxicity (active constituent)

Bromethalin is highly toxic by the oral, dermal, and inhalation routes of administration. It is a slight eye irritant and is expected to be a slight skin irritant. It is not a skin sensitiser.

Acute toxicity (products)

All products proposed for registration are considered to be of low acute oral toxicity and low acute dermal toxicity. A waiver for acute inhalational toxicity has been accepted. The products are considered to be slight eye irritants, but are not skin irritants or skin sensitisers.

Repeat-dose toxicity

In a 13 week oral toxicity study in rats at doses up to 0.125 mg/kg bw/day, there were no effects on mortality, clinical signs, bodyweight, or food intake. No ocular changes were observed. At the high dose, microscopic examination showed lesions of the nervous tissue. The no observed adverse effect level (NOAEL) for the study was 0.025 mg/kg bw/day.

In a 13 week oral toxicity study in dogs at doses up to 0.2 mg/kg bw/day, neurotoxic signs were observed at the high dose. No treatment-related adverse effects were observed at doses up to 0.125 mg/kg bw/day. On microscopic examination of nervous tissue, microscopic signs of spongy degeneration were seen as doses of 0.125 and 0.2 mg/kg bw/day. The NOAEL for the study was 0.025 mg/kg bw/day.

Chronic toxicity and carcinogenicity

No chronic toxicity studies were available for consideration

Reproductive and developmental toxicity

A developmental toxicity study was conducted in rats at doses up to 0.5 mg/kg bw/day. Maternal deaths were seen at the top dose, along with signs of toxicity such as hind leg weakness and decrease muscle tone. Other observations included poor grooming, weakness, hind leg paralysis and dehydration, along with significant body weight reduction. A slight decrease in the live litter size and increase in resorption was also seen at 0.5 mg/kg bw/day. An overall NOAEL for maternal and developmental toxicity was 0.3 mg/kg bw/day.

In a developmental toxicity study in rabbits, maternal deaths were seen at the high dose of 0.5 mg/kg bw/day. Signs of toxicity, including nasal discharge, loss of muscle tone, and decreased respiration were seen in rabbits at 0.25 and 0.5 mg/kg bw/day. There were no effects on implantations, resorptions, live foetuses, or foetal weight related to treatment. The NOAEL for maternal toxicity was 0.1 mg/kg bw/day, with the NOAEL for foetal effects being 0.5 mg/kg bw/day.

Genotoxicity

Bromethalin, and its impurities, have high genotoxic potential based on the results of appropriately validated bacterial reverse mutation tests (Ames test) and read-across evaluation. These results concur with the outcome of two forms (statistically-based and rules-based) of QSAR evaluation.

Neurotoxicity/immunotoxicity

In an acute neurotoxicity study, rats were dosed by gavage at doses up to 3.0 mg/kg bw/day. There were no unscheduled deaths or effects on food or water consumption or bodyweight. There were no remarkable changes observed in the functional observation battery or assessment of motor activity, with no dose-dependent changes. The NOAEL for neurotoxicity was 3 mg/kg bw/day, the highest dose tested.

In an acute delayed neurotoxicity study in chickens, an initial dose of 9 mg/kg bw bromethalin, and a second dose of 15 mg/kg bw bromethalin on day 3 were administered. Mortality was observed in the bromethalin group, along with ataxia (staggering gait) and decreased bodyweight, which later recovered during days 15 to 24. Microscopic examination of nervous system tissues revealed spongy degeneration in the brain and spinal cord, while the positive control demonstrated axonal degeneration. Bromethalin was not considered to cause delayed peripheral neurotoxicity.

Reports related to human toxicity

Retrospective poisons information data for bromethalin use in the USA indicates that the overwhelming majority of human poisonings occur in children ages 16 days to 12 years. No deaths were associated with accidental exposure and the overwhelming majority of exposures resulted in no adverse effects or only minor effects. Most human poisoning cases in the USA were associated with the residential and domestic use of formulations not confined to a secure, tamper-resistant bait station.

Health-based guidance values and poisons scheduling

Poisons Standard

Bromethalin is listed in Schedule 7 of the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) except when included in Schedule 6. Bromethalin is included in Schedule 6 in rodent baits containing 0.01% or less of bromethalin.

Health-based guidance values

Acceptable daily intake

An acceptable daily intake (ADI) was not established as bromethalin residues are not expected to be present in the food supply. A tolerable daily intake (TDI) of 0.0019 µg/kg bw/day (based on 80 kg bw) will be established to serve as a guideline with which potential dietary exposure assessments can be undertaken in the event of unintentional presence in food.

Acute reference dose

An acute reference dose (ARfD) was not established as bromethalin residues are not expected to be present in the food supply. A tolerable daily intake (TDI) of 0.0019 µg/kg bw/day (based on 80 kg bw) will be established to serve as a guideline with which potential dietary exposure assessments can be undertaken in the event of unintentional presence in food.

Recommendations

There are no objections on human health grounds to the approval of bromethalin manufactured at the specified site overseas.

There are no objections on human health grounds to the registration of the following products containing 0.1 g/kg bromethalin: Fastrac G Blox Rodenticide; Fastrac Pro Blox Rodenticide; Fastrac G Place Pacs Rodenticide; Fastrac G Pellets Rodenticide; Fastrac Pro Place Pacs Rodenticide; Fastrac Pro Pellets Rodenticide; Fastrac G Meal Bait Rodenticide; and Fastrac Pro Soft Bait Rodenticide.

Residues assessment

The use of the proposed products: Fastrac G Blox Rodenticide; Fastrac Pro Blox Rodenticide; Fastrac G Place Pacs Rodenticide; Fastrac G Pellets Rodenticide; Fastrac Pro Place Pacs Rodenticide; Fastrac Pro Pellets Rodenticide; Fastrac G Meal Bait Rodenticide; and Fastrac Pro Soft Bait Rodenticide, containing 0.1 g/kg bromethalin are not proposed for use in food crops or in food-producing animals and are therefore not expected to present an undue hazard to the safety of people exposed to residues of the products.

Assessment of overseas trade aspects of residues in food

The use of the new products: Fastrac G Blox Rodenticide; Fastrac Pro Blox Rodenticide; Fastrac G Place Pacs Rodenticide; Fastrac G Pellets Rodenticide; Fastrac Pro Place Pacs Rodenticide; Fastrac Pro Pellets Rodenticide; Fastrac G Meal Bait Rodenticide; and Fastrac Pro Soft Bait Rodenticide, containing 0.1 g/kg bromethalin are not proposed for use in food producing crops or animals and the use of these products is not expected to result in detectable residues in any major Australian export commodities. Therefore the use of the products as proposed, is not expected to adversely affect trade between Australia and places outside Australia.

Work health and safety assessment

Health hazards

The products proposed for registration have low acute oral and dermal toxicity, and are considered to be slight eye irritants, but not to be skin irritants or skin sensitisers. However, bromethalin and its impurities are considered to be genotoxic, and the assessment of exposure were therefore conducted using the threshold of toxicological concern (TTC) for genotoxicity.

Occupational exposure

Exposure during use

Occupational handlers may be exposed to the product from dermal and/or inhalation routes during placing the bait blocks/packs/sachets in bait station, loading and refilling the bait stations with loose baits (pellets and meal bait). The product is only intended for use in securable, tamper-resistant, refillable bait stations.

A securable bait station means a bait station that: is capable of being anchored securely to resist efforts to move the station; and includes a mechanism for the bait to be secured within the bait compartment.

Tamper-resistant bait station means a bait station that: is capable of displaying precautionary statements in a prominent location, can contain bait inside with minimal spillage or tracking, and prevents displacement of bait outside of the bait station by actions such as moving or shaking. If the bait station is refillable, it is capable of being locked or sealed so children and non-target animals cannot gain access through the opening or procedures used to fill the bait compartment(s) and includes entrances that allow target animals to access bait, but not non-target species larger than the target species or children under 6 years of age (i.e., does not have openings larger than 65 mm in diameter); and prohibits opening, entry, or destruction by children under 6 years of age (with access to common objects) and non-target animals such as dogs.

Exposure during re-entry or rehandling

Dermal exposure to bromethalin is anticipated to occur during re-handling activities including handling of carcasses, unused or degraded/used bait clean-up operations. Minor or accidental oral or inhalation exposure may also occur.

Public exposure

Exposure to the public may occur from accessing applied baits in indoor as well as outdoor areas. The application of bait products in domestic and commercial situations will be undertaken by pest control specialists. In domestic situations, the products are to be used only in securable, tamper-resistant non-refillable bait stations, limiting access to children or the general public. Secondly, the bait contains a bittering agent to make them less palatable and soluble dye (violet/green) which may provide a visible alert (mouth and tongue) that a child has consumed/mouthed baits.

Recommendations

The following first aid instructions, safety directions and precautionary (warning) statements are recommended for the product labels.

First aid instructions

The following first aid instructions and warning statements are recommended for inclusion on the product labels:

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131 126; New Zealand 0800 764 766.

If poisoning occurs, get to a doctor or hospital quickly.

Safety directions

Fastrac G Place Pacs Rodenticide, Fastrac Pro Place Pacs Rodenticide, and Fastrac Pro Soft bait Rodenticide

Harmful if swallowed. May irritate the eyes and skin. Do not open or cut individual baits (sachets, paper sachets or place packs). Avoid contact with eyes and skin. Do not touch the bait. If on skin and after each baiting, wash thoroughly with soap and water. When using the product do not eat, drink or smoke. When using the product wear cotton overalls, buttoned to the neck and wrist (equivalent clothing) gauntlet length (chemical resistant) gloves. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.

Fastrac G Blox Rodenticide and Fastrac Pro Blox Rodenticide

Harmful if swallowed. May irritate the eyes and skin. Do not cut individual baits, Avoid contact with eyes and skin. Do not touch the bait. If on skin and after each baiting, wash thoroughly with soap and water. When using the product do not eat, drink or smoke. When using the product wear cotton overalls, buttoned to the neck and wrist (equivalent clothing) gauntlet length (chemical resistant) gloves. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.

Fastrac G Pellets Rodenticide, Fastrac Pro Pellets Rodenticide, and Fastrac G Meal Bait Rodenticide

Harmful if swallowed. May irritate the eyes and skin. Avoid contact with eyes and skin. Do not touch the bait. If on skin and after each baiting, wash thoroughly with soap and water. When using the product do not eat, drink or smoke. Use a scoop or measure cup when using the product and wear cotton overalls, buttoned to the neck and wrist (or equivalent clothing) elbow-length chemical resistant gloves. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.

Precautionary (warning) statements

Re-handling statement

- Do not re-handle bait, bait waste or rodent carcasses unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves and a disposable dust facemask, covering mouth and nose. Rodent carcasses should be collected and sealed in plastic bags prior to disposal in accordance with the disposal statement. Clothing must be laundered after each day's use.
- During cleaning/disposal operations of bait/bait stations (for example, sweeping/pan broom, washing/hosing) wear cotton overalls buttoned to neck and wrist (or equivalent clothing), chemical resistant gloves and a disposable dust facemask, covering mouth and nose.

Warning statements

- 19: WARNING – Skin contact may be dangerous. Take every precaution to avoid contact. Wash off after spillage and after use
- 43: Should not be used in areas accessible to children
- 52: Possible risk of irreversible effects

General safety precautions/restraints (APVMA recommended)

- DO NOT use refillable bait stations in domestic situations.
- Refillable bait station - professional use only in commercial (non-domestic/non-residential) situations. Use measure cup to refill the bait station (for loose bait products only).
- DO NOT place bait in areas where there is a possibility of contaminating water, surfaces that come into direct contact with water.

General safety precautions/restraints (applicant recommended)

- DO NOT place bait in places accessible to children, domestic animals, livestock and non-target wildlife.
- DO NOT place bait in areas where there is a possibility of contaminating food, livestock feed, or surfaces that come into direct contact with food.
- DO NOT apply bait to crops.

Storage statements: the following statements are recommended for inclusion for the protection of human health reasons. They may be appropriately located in the ‘Storage’ instructions:

- Store product in original container, tightly closed and away from feed or foodstuffs.
- Bait storage facility to be locked at all times when not in use.

Environmental assessment

Fate and behaviour in the environment

Soil

Bromethalin is expected to persist in soil. Laboratory results are available for four different soils with DT_{50} values ranging 164 to 235 days (geomean 197 days). A single field dissipation study was undertaken to consider bromethalin degradation following application to a small surface area after formulating as a rodenticide bait at a concentration of 50 ppm. Degradation was biphasic with a slow phase DT_{50} of 137 days.

Bound residues in the laboratory studies accounted for 9.4% to 47% applied radioactivity after 120 to 123 days and mineralisation was negligible (<0.1% AR). The major metabolites were identified as desnitrobromethalin (max 46% at 184 days) and was still present at 44% AR by the end of the 365 day study. Desmethylbromethalin was also formed up to 14%. Several other non-identified metabolites were detected but none exceeded 4% AR.

Mobility of bromethalin was assessed through standard batch equilibrium studies in five soils with organic carbon contents ranging from 0.51% to 3.0%. Bromethalin was sorbed strongly to all soils with Kf values ranging 270 to 1014 mL/g (Kfoc 24,200 to 76,100 mL/g). There was a positive relationship between sorption and organic carbon content of soils, and a regression equation was applied to determine a Kf values at specific %OC for risk assessment purposes. Predicted Kf values were 472, 791 and 1746 mL/g at 1%, 2% and 5% OC, respectively.

Water

Bromethalin is stable to hydrolysis in the environmental pH range. Based on the soil adsorption/desorption data, bromethalin is expected to be adsorbed to suspended solids and sediments if released into aquatic systems. No further studies were available to consider the fate of bromethalin in the aquatic environment.

Air

Although resistant to reaction with hydroxyl radicals (predicted DT_{50} 5.2 days), bromethalin is not volatile and is therefore not expected to be present in the air to any significant extent. Therefore, it is not expected to be transported long distances through the air.

Effects and associated risks to non-target species

Terrestrial vertebrates

Bromethalin has high toxicity to mammals (lowest LD_{50} 4.8 mg ac/kg bw, *Canis familiaris*) and birds (geomean LD_{50} 7.2 mg ac/kg bw, *Colinus virginianus*). In longer-term oral gavage and teratology studies, physical signs of toxicity and maternal toxicity was observed in mammals at doses as low as 0.25 mg ac/kg/d (NOEC 0.10 mg ac/kg bw/d, *Oryctolagus cuniculus*). Following dietary administration in birds, the lowest

LC_{50} was 210 mg ac/kg diet (*Colinus virginianus*), while the LC_{10} in the same study was 94 mg ac/kg diet. A protection statement is required on the labels to identify the hazard to birds and mammals.

Acceptable risks of primary poisoning could not be concluded should non-target species gain access to the baits. Similarly, acceptable risks of secondary poisoning of species feeding on poisoned rodents or slugs could not be concluded. To mitigate risks of both primary and secondary poisoning, the baits must be placed so as to prevent access to non-target animals. Tamper-resistant bait stations must be used at locations where access to non-target animals cannot otherwise be prevented. Bait stations cannot be placed in the open or in crops. Risks of secondary poisoning are further mitigated by restricting the distance to no more than 30 metres from buildings or structures and animal carcasses should be recovered to the extent possible. In addition, the products must not be used on sites where vulnerable, threatened, endangered, or critically endangered species are known to occur.

Aquatic species

Bromethalin has high toxicity to fish (LC_{50} 0.60 mg ac/L, *Lepomis macrochirus*), aquatic invertebrates (EC_{50} 0.0051 mg ac/L, *Daphnia magna*), and low toxicity to algae at the limit of solubility (E_rC_{50} >0.54 mg ac/L, *Raphidocelis subcapitata*). A protection statement is required on the label to identify the hazard to fish and aquatic invertebrates.

In very high infestations and when using larger bait stations, more baits per station will be used and shorter distances between bait stations will be applied. For rat control, assuming a maximum of 60 mg applied per station and 110 baits per hectare, the maximum rate of bromethalin applied is 6.6 g ac/ha. For mice control, assuming a maximum of 23 mg applied per station and 220 baits per hectare, the maximum rate of bromethalin applied is 5.1 g ac/ha. Runoff risks of bromethalin to aquatic species at these rates under a realistic worst-case scenario were determined to be acceptable. However, as a precautionary measure, baits must not be placed in areas liable to flooding.

Bees and other non-target arthropods

No data were provided on the toxicity of bromethalin to bees or other non-target arthropods. Given the use pattern, risks to bees and other non-target arthropods are considered to be low.

Soil organisms

Bromethalin has low toxicity to soil macro-organisms such as earthworms (LC_{50corr} >50 mg ac/kg dry soil, *Eisenia fetida*). Assuming the worst case scenario of 600 g bagged bait product containing 0.0001% bromethalin used at each bait station around buildings, a maximum localised soil concentration of 0.22 mg ac/kg dry soil was predicted due to use around buildings on unpaved ground. Considering the maximum predicted soil concentration is very low, risks to soil macro-organisms were considered to be acceptable.

No data were available on toxicity to soil micro-organisms; however, given the use pattern and mode of action, risks to soil micro-organisms are also considered to be low. No protection statements are required for soil organisms.

Non-target terrestrial plants

No data were provided on the toxicity of bromethalin to non-target terrestrial plants. Given the use pattern and mode of action, risks to non-target terrestrial plants are considered to be low. No protection statements are required for non-target terrestrial plants.

PBT and POP assessments

Annex D of the Stockholm Convention provides scientifically based criteria for potential persistent organic pollutants (POPs). The criteria for persistence, bioaccumulation and toxicity are also applied to identify persistent, bioaccumulative and toxic (PBT) substances.

Bromethalin was persistent in soil under laboratory and field conditions with half-lives ranging 137 to 235 days. It is stable to hydrolysis and expected to exceed the criterion for persistence in sediment. Based on the available data, bromethalin is considered to meet the criterion for persistence (DT_{50} >60 days in water; DT_{50} >180 days in soil or sediment).

The log K_{ow} for bromethalin is 7.7 and no other information is available to suggest it will not bioaccumulate in biota. Therefore, bromethalin is considered to meet the criterion for bioaccumulation (log K_{ow} >5).

Bromethalin has high toxicity to terrestrial vertebrates, fish and aquatic invertebrates. No information is available on the long-term sublethal effects of low concentrations of bromethalin on non-target species. Based on limited information, bromethalin is not excluded from meeting the criterion for toxicity (i.e. chronic data to indicate potential for damage).

Although resistant to reaction with hydroxyl radicals (predicted DT_{50} 5.2 days), bromethalin is not volatile and is therefore not expected to be present in the air to any significant extent. Therefore, it is not expected to be transported long distances through the air. Therefore, bromethalin is not considered to be a POP substance.

In conclusion, bromethalin is not volatile and is not considered to be a POP substance; however, bromethalin cannot be excluded as a PBT substance based on the available information. Direct release of bromethalin to the environment can be minimised by using ready for use baits and following the strict control measures described in connection with secondary poisoning. The proposed uses of the bait products require that bait should be positioned to avoid exposure of non-target wildlife and all unused bait and rodent remains should be disposed of safely. These precautions are considered sufficient to minimise environmental releases and, irrespective of the PBT status of bromethalin, the products are considered to be acceptable.

Recommendations

The restraints, protection statements, and disposal statements are recommended for the product labels.

Restraints

DO NOT exceed 3 m between bait stations for mice, or 9 m for rats.

DO NOT place baits more than 30 m from buildings or structures.

DO NOT place baits in the open.

DO NOT apply baits in crops.

DO NOT place baits in areas liable to flooding.

Protection of wildlife, fish, crustaceans and environment

Toxic to birds and other native wildlife. Place baits so as to prevent access to non-target animals. Securable, tamper resistant bait stations must be used at all locations to prevent access to non-target animals. DO NOT use on sites where vulnerable, threatened, endangered or critically endangered species are known to occur. Any incidents where it is suspected that non-target animals may have been poisoned should be reported to State or Territory authorities.

Very toxic to aquatic life. DO NOT contaminate wetlands or watercourses with this product or used containers.

Disposal

To the extent possible, animal carcasses should be recovered during and for 14 days after a baiting campaign and be destroyed by burning or burial according to the requirements of the state or territory in which use has occurred.

Efficacy and safety assessment

Proposed product use pattern

Fastrac G Blox Rodenticide and Fastrac Pro Blox Rodenticide

This assessment has considered applications for registration of Fastrac G Blox Rodenticide and Fastrac Pro Blox Rodenticide, both containing the new active constituent bromethalin at 0.1 g/kg in a ready-to-use wax block bait for use to control rats and mice in damp or dry situations in and around industrial, commercial, agricultural, and domestic buildings. The claims for use and the proposed labels (except for the product name) are the same for both products. Fastrac G Blox Rodenticide is green and Fastrac Pro Blox Rodenticide is purple, and there are other differences in formulation.

For Fastrac G Blox Rodenticide, the applicant has provided 6 laboratory cage studies in support of the application, all using green wax block baits containing 0.01% bromethalin. For Fastrac Pro Blox Rodenticide, the applicant has provided 4 laboratory cage studies in support of the application, all using purple wax block baits containing 0.01% bromethalin. For both products, choice feeding (mortality and palatability) studies were provided for rats and mice, using protocols consistent with standard tests for the evaluation of palatability and mortality recommended for rodenticide efficacy evaluation by the US EPA and the European Commission. A one day bait exposure period was used as the products are claimed to kill in a single feed. Both products also claim to be suitable for damp as well as dry conditions, therefore tests were conducted with both fresh and 'weathered' blocks (subjected to 90% to 100% humidity at ~38°C for 15 days). The studies were carried out and reported in an appropriate scientific fashion, with no deviations from the study protocols affecting their integrity or quality.

For both products, it can be concluded that in laboratory cage studies with a single day (24 hours ± 2 hours) exposure period to the test product ('single feed' scenario) under choice feeding conditions, fresh blocks were palatable to and effective against young adult Norway rats (*Rattus norvegicus*, Wistar strain) and young adult house mice (*Mus musculus*, Swiss Webster strain). Similar tests with weathered blocks (incubated under specified conditions to simulate weathering) found that palatability and mortality remained satisfactory, supporting the claim for use in damp conditions.

For Fastrac G Blox Rodenticide, studies were also undertaken with rats and mice to evaluate onset of mortality with ongoing availability of the test diet. These confirmed that evaluation of the product with a single feed scenario was appropriate and indicated that the onset of mortality was 24 hours after the initial sign of test material consumption for rats and 12 hours after the initial sign of test material consumption for mice. 100% mortality was obtained in 144 hours (6.0 days) after the initial sign of test material consumption with the rats, and 120 hours (5.0 days) after the initial sign of test material consumption with mice (except for one mouse that survived).

A case study and field trial data provided by the applicant for Fastrac block and pellet formulations indicate efficacy in a range of field situations of Fastrac block and pellet baits against the common house mouse (*Mus musculus*). Two published papers citing field data from the initial US EPA assessment of bromethalin clearly show efficacy of other bromethalin bait formulations against Norway rat (*Rattus norvegicus*) and the common house mouse in a wide range of situations.

Fastrac G Pellets Rodenticide, Fastrac G Place Pacs Rodenticide, Fastrac Pro Pellets Rodenticide, and Fastrac Place Pacs Rodenticide

This assessment has considered applications for registration of Fastrac G Pellets Rodenticide, Fastrac G Place Pacs Rodenticide, Fastrac Pro Pellets Rodenticide, and Fastrac Place Pacs Rodenticide, which are pellet bait products containing the new active constituent bromethalin at 0.1 g/kg (packaged as loose pellets or in ready to use 'place packs') for control of rats and mice, including those resistant to anticoagulants in and around industrial, commercial, agricultural, and domestic buildings. The claims for use and proposed labels are the same for both Fastrac G Pellets Rodenticide and Fastrac Pro Pellets Rodenticide, and the labels for the respective place pack products containing those pellets also correspond. Fastrac G Pellets Rodenticide are green and Fastrac Pro Pellets Rodenticide are purple.

For Fastrac G Pellets Rodenticide, the applicant provided 2 laboratory cage studies in support of the application, both using green pellet bait containing 0.01% bromethalin. For Fastrac Pro Pellets Rodenticide, the applicant has provided 2 laboratory cage studies in support of the application, both using purple pellet bait containing 0.01% bromethalin. For both products, Choice Feeding (mortality and palatability) studies were provided for rats and mice, using protocols consistent with standard tests for the evaluation of palatability and mortality recommended for rodenticide efficacy evaluation by the US EPA and the European Commission. From the studies, it can be concluded that with a single day (24 hours ± 2 hours) exposure period to the test product ('single feed' scenario) under choice feeding conditions, the pellet baits were palatable to and effective against young adult Norway rats (*Rattus norvegicus*, Wistar strain) and young adult house mice (*Mus musculus*, Swiss Webster strain).

For Fastrac G Place Packs Rodenticide, the applicant provided 2 laboratory cage studies in support of the application, both using 30 g place packs containing green 0.01% bromethalin pellets. These used a 3 day bait exposure period, in accordance with US EPA protocols for acute place pack dry bait studies. The studies indicated Fastrac G Place Packs Rodenticide were effective against both rats and mice, with the place packs penetrated and showing evidence of test material consumption. Based on those results and given the demonstrated efficacy of Fastrac Pro Pellets Rodenticide, efficacy of those pellets in place packs can be assumed for Fastrac Pro Place Packs Rodenticide, without undertaking a separate study.

Suitable data to address field efficacy and also to support inclusion of Roof rats (*Rattus rattus*) as a target species have been considered in the assessment for Fastrac G Blox Rodenticide and Fastrac Pro Blox Rodenticide. The data clearly indicate efficacy against the common house mouse (*Mus musculus*) in a range of situations for Fastrac block and pellet formulations that were evidently similar to the current Fastrac G Rodenticide products, and for other formulations against Norway rat (*Rattus norvegicus*). European Commission guidance indicates that data from a field test with another product based on an already authorised active substance can be used to support field efficacy, so there are ample data to support field efficacy of bromethalin baits.

Fastrac G Meal Bait Rodenticide

The purpose of this application is for registration of Fastrac G Meal Bait Rodenticide, a meal-based bait product containing the new active constituent bromethalin at 0.1 g/kg for control of rats and mice, including those resistant to anticoagulants in and around industrial, commercial, agricultural and domestic buildings. Fastrac G Meal Bait Rodenticide is a green granular formulation with beige seeds.

The applicant provided 3 laboratory cage studies in support of the application, two using green meal identified as Bromethalin Mouse Seed and containing 0.01% bromethalin, and one using 15 g place packs containing the same bait. The studies with the loose bait were standard choice feeding (mortality and palatability) studies with rats and mice, using protocols recommended for rodenticide efficacy evaluation by the US EPA and the European Commission. From the studies, it can be concluded that with a two day exposure period to the test product under choice feeding conditions, the pellet baits were palatable to (acceptance ≥ 33%) and effective against (mortality ≥ 90%) young adult Norway rats (*Rattus norvegicus*, Wistar strain) and young adult house mice (*Mus musculus*, Swiss Webster strain). The place pack study was only conducted with mice, using a 3 day bait exposure period and in accordance with US EPA protocols for acute place pack dry bait studies. This study indicated the meal bait place packs were effective against mice (mortality ≥ 90%), with 18 out of 22 deployed place packs being penetrated and showing evidence of test material consumption.

Suitable data to address field efficacy and also to support inclusion of Roof rats (*Rattus rattus*) as a target species have been considered in the assessment for Fastrac G Blox Rodenticide and Fastrac Pro Blox Rodenticide. The data clearly indicate efficacy against the common house mouse (*Mus musculus*) in a range of situations for Fastrac block and pellet formulations that were evidently similar to the current Fastrac G products, and for other formulations against Norway rat (*Rattus norvegicus*). European Commission guidance indicates that data from a field test with another product based on an already authorised active substance can be used to support field efficacy, so there are ample data to support field efficacy of bromethalin baits.

Fastrac Pro Soft Bait Rodenticide

The purpose of this application is to obtain registration of Fastrac Pro Soft Bait Rodenticide, containing 0.1 g/kg bromethalin paste in ready to use 8 or 15 g sachets for control of rats and mice, including those resistant to anticoagulants in and around industrial, commercial, agricultural and domestic buildings. Applications for another seven 0.1 g/kg bromethalin bait products with wax block, pellet or meal formulations have been considered separately.

The applicant provided four laboratory cage studies in support of the application, two using purple paste bait identified as Bromethalin Soft Bait Rodenticide and containing 0.01% bromethalin, and two using 8 g place packs containing the same bait. The studies were standard choice feeding (mortality and palatability) studies with rats and mice, using protocols recommended for rodenticide efficacy evaluation by the US EPA and the European Commission. From the studies, it can be concluded that with a single day feeding scenario under choice feeding conditions, the soft baits were palatable to (acceptance ≥ 33%) and effective against (mortality ≥ 90%) young adult Norway rats (*Rattus norvegicus*, Wistar strain) and young adult house mice (*Mus musculus*, Swiss Webster strain). The place pack studies used a 3 day bait exposure period in accordance with US EPA protocols for acute place pack dry bait studies. These studies indicated the Bromethalin Soft Bait place packs were effective against rats and mice (mortality ≥ 90%), with results for place pack penetration providing evidence of test material consumption.

Suitable data to address field efficacy and also to support inclusion of Roof rats (*Rattus rattus*) as a target species have been considered in the assessment for Fastrac G Blox Rodenticide and Fastrac Pro Blox Rodenticide. The data clearly indicate efficacy against the common house mouse (*Mus musculus*) in a range of situations for Fastrac block and pellet formulations that were evidently similar to the current Fastrac G

Rodenticide products, and for other formulations against Norway rat (*Rattus norvegicus*). European Commission guidance indicates that data from a field test with another product based on an already authorised active substance can be used to support field efficacy, so there are ample data to support field efficacy of bromethalin baits.

Conclusions

Fastrac suite of products

The assessment considered applications for registration of a suite of products: Fastrac G Blox Rodenticide and Fastrac Pro Blox Rodenticide; Fastrac G Pellets Rodenticide; Fastrac G Place Pacs Rodenticide; Fastrac Pro Pellets Rodenticide and Fastrac Place Pacs Rodenticide; Fastrac G Meal Bait Rodenticide; and Fastrac Pro Soft Bait Rodenticide all containing the new active constituent bromethalin at 0.1 g/kg in ready-to-use formulations.

Data from multiple sources, including 18 laboratory standard choice feeding (mortality and palatability) studies with rats and mice; studies evaluating onset of mortality with ongoing availability of the test diet; and published data were evaluated.

All products include a claim for ‘kills in a single feed’. While this was not specifically evaluated with the two-day feed exposure period used for the meal bait studies, a one day feed exposure period was tested and found to be effective in studies provided for all other formulations tested in this suite of applications; therefore, the APVMA s satisfied that this claim is acceptable for all product formulations.

All products also include a claim for ‘control of rats and mice, including those resistant to anticoagulants’. Although the rodents tested were not likely to have been resistant to anticoagulants, this claim is acceptable because bromethalin has a different mode of action to anticoagulant rodenticides and effectiveness of bromethalin baits against a resistant mouse population has been demonstrated in a field trial.

The data clearly indicate efficacy against house mouse (*Mus musculus*), Norway rat (*Rattus norvegicus*) and Roof rats (*Rattus rattus*) in a range of situations.

Recommendations

Given the efficacy demonstrated for Fastrac G Pellets Rodenticide and Place Pacs Rodenticide, Fastrac Pro Pellets Rodenticide and Place Pacs Rodenticide, Fastrac Meal Baits Rodenticide and Fastrac Soft Bait Rodenticide in the laboratory and evidence for effectiveness of bromethalin baits in the field, it can be concluded that these products can be expected to be effective as claimed when used according to the proposed labels.

There are no objections on the grounds of efficacy, or safety to non-target animals, to the registration of the product Fastrac Rodenticide suite of products, containing bromethalin, for the control of rats and mice, including those resistant to anticoagulants in and around industrial, commercial, agricultural and domestic buildings as per the label directions.

Labelling requirements

POISON
KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Fastrac G Blox Rodenticide

Active constituent: 0.1 g/kg BROMETHALIN
Contains Denatonium Benzoate (Bittering agent)

Ready to use block bait to control rats and mice in damp or dry situations in and around industrial, commercial, agricultural and domestic buildings.
Kills in a single feed.
[For the non-refillable(disposable) bait stations]
[28 g] A pre-filled ready to use bait station to control mice in damp or dry situations in and around industrial, commercial, agricultural and domestic buildings.
[113 g] A pre-filled ready to use bait station to control rats and mice in damp or dry situations in and around industrial, commercial, agricultural and domestic buildings.

Net Contents 150 g – 10 kg
[Size of block:] 5 g, 10 g, 15 g, 20 g, 28 g, 113 g, 225 g blocks

Bell Laboratories Inc,
6551 N Towne Rd,
Windsor, WI 53598
USA

DIRECTIONS FOR USE
Restraints
DO NOT use refillable bait stations in domestic situations.
Refillable bait station - professional use only in commercial (non-domestic/non-residential) situations.
DO NOT exceed 3 m between bait stations for mice, or 9 m for rats.
DO NOT place baits more than 30 m from buildings or structures.
DO NOT place baits in the open.
DO NOT apply baits in crops.
DO NOT place baits in areas liable to flooding.
DO NOT place bait in areas where there is a possibility of contaminating water or surfaces that come into direct contact with water.

Situation: In and around domestic homes, industrial and commercial buildings, animal houses, farms, wharves, public service buildings, food factories, hospitals, inside transport vehicles (including ships) and around grain terminals.

Pest
Mice (*Mus musculus*)
Rats (*Rattus norvegicus, Rattus rattus*)

For 20 g and 28 g block:

Rate
Mice: 1-2 blocks per bait station or placement.
Rats: 2-20 blocks per bait station or placement.
For mice: use single blocks. In very high infestation or fast uptake of the bait use 2 blocks.
For rats: use 2 or more blocks depending on level of infestation. In very high infestation or fast uptake use more baits per bait station.
Baiting strategy
Set out baits in places frequented by mice and rats but not more than 30 m from buildings or structures. Bait stations must be secured. For rats: place 2 or more blocks per bait station at intervals of 5-9 m depending on level of uptake and infestation. For mice: place 1-2 blocks per bait station at 2-3 m intervals. In very high infestations and when using larger bait stations use more blocks per station and use the shorter distance between bait stations.

For 15 g block:

Rate
Mice: 2 - 6 blocks per bait station or placement.
Rats: 4 - 40 blocks per bait station or placement.
For mice: use 2 blocks. In very high infestation or fast uptake of the bait use 6 blocks.
For rats: use 4 or more blocks depending on level of infestation. In very high infestation or fast uptake use more baits per bait station.
Baiting strategy
Set out baits in places frequented by mice and rats but not more than 30 m from buildings or structures. Bait stations must be secured. For rats: place 4 or more blocks per bait station at intervals of 5-9 m depending on level of uptake and infestation. For mice: place 2-6 blocks per bait station at 2-3 m intervals. In very high infestations and when using larger bait stations use more blocks per station and use the shorter distance between bait stations.

***For 5 g and 10 g blocks*:**

Rate
Mice: 3-6 blocks per bait station or placement.

Rats: 6-60 blocks per bait station or placement.
For mice: use 3 or more blocks. In very high infestation or fast uptake of the bait use 6 blocks.
For rats: use 6 or more blocks depending on level of infestation. In very high infestation or fast uptake use more baits per bait station.

Baiting strategy

Set out baits in places frequented by mice and rats but not more than 30 m from buildings or structures. Bait stations must be secured. For rats: place 6 or more blocks per bait station at intervals of 5-9 m depending on level of uptake and infestation. For mice: place 3 or more blocks per bait station at 2-3 m intervals. In very high infestations and when using larger bait stations use more blocks per station and use the shorter distance between bait stations.

***For 225 g blocks*:**

Rate

Mice: 1 block per bait station or placement.
Rats: 1-2 blocks per bait station or placement.
For rats: use 1 or more blocks depending on level of infestation. In very high infestation or fast uptake use more baits per bait station.

Baiting strategy

Set out baits in places frequented by mice and rats but not more than 30 m from buildings or structures. Bait stations must be secured. For rats: place 1 or more blocks per bait station at intervals of 5-9 m depending on level of uptake and infestation. For mice: place 1 block per bait station at 2-3 m intervals. In very high infestations and when using larger bait stations use more blocks per station and use the shorter distance between bait stations.

28 g Non-refillable bait station

Baiting strategy

Set out baits in places frequented by mice and rats but not more than 30 m from buildings or structures. Bait stations must be secured. For mice: place the bait stations at 2-3 m intervals. In very high infestations use more bait stations and use the shorter distance between bait stations.

113g Non-refillable bait station

Baiting strategy

Set out baits in places frequented by mice and rats but not more than 30 m from buildings or structures. Bait stations must be secured. For rats: place bait station at intervals of 5-9 m depending on level of uptake and infestation. For mice: place bait station at 2-3 m intervals. In very high infestations use more bait stations and use the shorter distance between bait stations.

Critical Comments - the same for all sizes

Eliminate, as far as practicable, all alternative food sources. Bait areas where conditions might encourage rodent activity. Securable, tamper resistant bait stations must be used at all locations to prevent access to non-target animals. Inspect bait stations on a regular basis. Replace eaten or old/deteriorated baits. If eaten quickly, increase the number of bait stations. Continue observation and replenish until no more baits are taken. Baiting for at least two weeks may be necessary to reduce rat/mouse numbers.
NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.

GENERAL INSTRUCTIONS

Fastrac G Blox Rodenticide is a highly palatable block bait for the control of rats and mice including those resistant to anticoagulants. For use in and around buildings. One feed kills rats and mice.
Determine areas where rats and/or mice will most likely find and consume bait. Generally, these areas are along walls or rafters, by gnawed openings, in or beside burrows, in corners and concealed places between floors and walls or in locations where rodents or their signs have been observed. Wax blocks are particularly

suitable for use in damp situations where risk of contamination should be minimised. Replace contaminated or spoilt bait immediately. To prevent reinfestation, eliminate food, water and harbourage as much as possible. If reinfestation should occur, repeat treatment. Where a continuous source of reinfestation is present, establish permanent bait stations and replenish bait as needed. Baiting for at least two weeks may be necessary to reduce rat/mouse numbers.

RE-HANDLING

- Do not re-handle bait, bait waste or rodent carcasses unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves and a disposable dust facemask, covering mouth and nose. Rodent carcasses should be collected and sealed in plastic bags prior to disposal in accordance with the disposal statement. Clothing must be laundered after each day's use.

- During cleaning/disposal operations of bait/bait stations (for example, sweeping/pan broom, washing/hosing) wear cotton overalls buttoned to neck and wrist (or equivalent clothing), chemical resistant gloves and a disposable dust facemask, covering mouth and nose.

PRECAUTIONS

DO NOT place bait in areas where there is a possibility of contaminating food, livestock feed, or surfaces that come into direct contact with food.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Toxic to birds and other native wildlife. Place baits so as to prevent access to non-target animals. Securable, tamper resistant bait stations must be used at all locations to prevent access to non-target animals. DO NOT use on sites where vulnerable, threatened, endangered or critically endangered species are known to occur. Any incidents where it is suspected that non-target animals may have been poisoned should be reported to State or Territory authorities.

Very toxic to aquatic life. DO NOT contaminate wetlands or watercourses with this product or used containers.

STORAGE AND DISPOSAL

Store product in original container, tightly closed and away from feed or foodstuffs. Bait storage facility to be locked at all times when not in use. Store in a locked storage facility away from children, animals, food and feedstuffs, seed and fertilisers. Do not dispose of chemicals on site. Break, crush or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. Do not burn empty containers or product. Untaken baits should be recovered at the end of a baiting campaign and be destroyed by burning or burial according to the requirements of the State or Territory in which use has occurred.
To the extent possible, animal carcasses should be recovered during and for 14 days after a baiting campaign and be destroyed by burning or burial according to the requirements of the State or Territory in which use has occurred.

SAFETY DIRECTIONS

Harmful if swallowed. May irritate the eyes and skin. Do not cut individual baits. Avoid contact with eyes and skin. Do not touch the bait. If on skin and after each baiting, wash thoroughly with soap and water. When using the product do not eat, drink or smoke. When using the product wear cotton overalls, buttoned to the neck and wrist (equivalent clothing) and gauntlet length (chemical resistant) gloves. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day’s use, wash gloves and contaminated clothing.

FIRST AID
If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126; New Zealand 0800 764 766. If poisoning occurs, get to a doctor or hospital quickly.

ADDITIONAL USER SAFETY INFORMATION
WARNING – Skin contact may be dangerous. Take every precaution to avoid contact.
Wash off after spillage and after use. Should not be used in areas accessible to children. Possible risk of irreversible effects
Batch No.: Date of Manufacture:

POISON

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Fastrac Pro Blox Rodenticide

Active constituent: 0.1 g/kg BROMETHALIN

Contains Denatonium Benzoate (Bittering agent)

Ready to use block bait to control rats and mice in damp or dry situations in and around industrial, commercial, agricultural and domestic buildings.

Kills in a single feed.

[For the non-refillable (disposable) bait stations]

[28 g] A pre-filled ready to use bait station to control mice in damp or dry situations in and around industrial, commercial, agricultural and domestic buildings.

[113 g] A pre-filled ready to use bait station to control rats and mice in damp or dry situations in and around industrial, commercial, agricultural and domestic buildings.

Net Contents 150 g – 10 kg

[Size of block:] 5 g, 10 g, 15 g, 20 g, 28 g, 113 g, 225 g blocks

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DIRECTIONS FOR USE

Restraints

DO NOT use refillable bait stations in domestic situations.
Refillable bait station - professional use only in commercial (non-domestic/non-residential) situations.
DO NOT exceed 3 m between bait stations for mice, or 9 m for rats.
DO NOT place baits more than 30 m from buildings or structures.
DO NOT place baits in the open.
DO NOT apply baits in crops.
DO NOT place baits in areas liable to flooding.
DO NOT place bait in areas where there is a possibility of contaminating water, or surfaces that come into direct contact with water.

Situation: In and around domestic homes, industrial and commercial buildings, animal houses, farms, wharves, public service buildings, food factories, hospitals, inside transport vehicles (including ships) and around grain terminals.

Pest

Mice (*Mus musculus*)

Rats (*Rattus norvegicus, Rattus rattus*)

For 20 g and 28 g block:

Rate

Mice: 1-2 blocks per bait station or placement.

Rats: 2-20 blocks per bait station or placement.

For mice: use single blocks. In very high infestation or fast uptake of the bait use 2 blocks.

For rats: use 2 or more blocks depending on level of infestation. In very high infestation or fast uptake use more baits per bait station.

Baiting strategy

Set out baits in places frequented by mice and rats but not more than 30 m from buildings or structures. Bait stations must be secured. For rats: place 2 or more blocks per bait station at intervals of 5-9 m depending on level of uptake and infestation. For mice: place 1-2 blocks per bait station at 2-3 m intervals. In very high infestations and when using larger bait stations use more blocks per station and use the shorter distance between bait stations.

For 15 g block:

Rate

Mice: 2 - 6 blocks per bait station or placement.

Rats: 4 - 40 blocks per bait station or placement.

For mice: use 2 blocks. In very high infestation or fast uptake of the bait use 6 blocks.

For rats: use 4 or more blocks depending on level of infestation. In very high infestation or fast uptake use more baits per bait station.

Baiting strategy

Set out baits in places frequented by mice and rats but not more than 30 m from buildings or structures. Bait stations must be secured.For rats: place 4 or more blocks per bait station at intervals of 5-9 m depending on level of uptake and infestation. For mice: place 2-6 blocks per bait station at 2-3 m intervals. In very high infestations and when using larger bait stations use more blocks per station and use the shorter distance between bait stations.

***For 5 g and 10 g blocks*:**

Rate

Mice: 3-6 blocks per bait station or placement.

Rats: 6-60 blocks per bait station or placement.

For mice: use 3 or more blocks. In very high infestation or fast uptake of the bait use 6 blocks.

For rats: use 6 or more blocks depending on level of infestation. In very high infestation or fast uptake use more baits per bait station.

Baiting strategy

Set out baits in places frequented by mice and rats but not more than 30 m from buildings or structures. Bait stations must be secured. For rats: place 6 or more blocks per bait station at intervals of 5-9 m depending on level of uptake and infestation. For mice: place 3 or more blocks per bait station at 2-3 m intervals. In very high infestations and when using larger bait stations use more blocks per station and use the shorter distance between bait stations.

***For 225 g blocks*:**

Rate

Mice: 1 block per bait station or placement.

Rats: 1-2 blocks per bait station or placement.

For rats: use 1 or more blocks depending on level of infestation. In very high infestation or fast uptake use more baits per bait station.

Baiting strategy

Set out baits in places frequented by mice and rats but not more than 30 m from buildings or structures. Bait stations must be secured.For rats: place 1 or more blocks per bait station at intervals of 5-9 m depending on level of uptake and infestation. For mice: place 1 block per bait station at 2-3 m intervals. In very high infestations and when using larger bait stations use more blocks per station and use the shorter distance between bait stations.

28 g Non-refillable bait station

Baiting strategy
Set out baits in places frequented by mice and rats but not more than 30 m from buildings or structures. Bait stations must be secured. For mice: place the bait stations at 2-3 m intervals. In very high infestations use more bait stations and use the shorter distance between bait stations.

113g Non-refillable bait station

Baiting strategy
Set out baits in places frequented by mice and rats but not more than 30 m from buildings or structures. Bait stations must be secured. For rats: place bait station at intervals of 5-9 m depending on level of uptake and infestation. For mice: place bait station at 2-3 m intervals. In very high infestations use more bait stations and use the shorter distance between bait stations.

Critical Comments - the same for all sizes

Eliminate, as far as practicable, all alternative food sources. Bait areas where conditions might encourage rodent activity. Securable, tamper resistant bait stations must be used at all locations to prevent access to non-target animals. Inspect bait stations on a regular basis. Replace eaten or old/deteriorated baits. If eaten quickly, increase the number of bait stations. Continue observation and replenish until no more baits are taken. Baiting for at least two weeks may be necessary to reduce rat/mouse numbers.

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.

GENERAL INSTRUCTIONS

Fastrac Pro Blox Rodenticide is a highly palatable block bait for the control of rats and mice including those resistant to anticoagulants. For use in and around buildings. One feed kills rats and mice.

Determine areas where rats and/or mice will most likely find and consume bait. Generally, these areas are along walls or rafters, by gnawed openings, in or beside burrows, in corners and concealed places between floors and walls or in locations where rodents or their signs have been observed. Wax blocks are particularly suitable for use in damp situations where risk of contamination should be minimised. Replace contaminated or spoilt bait immediately. To prevent reinfestation, eliminate food, water and harbourage as much as possible. If reinfestation should occur, repeat treatment. Where a continuous source of reinfestation is present, establish permanent bait stations and replenish bait as needed. Baiting for at least two weeks may be necessary to reduce rat/mouse numbers.

RE-HANDLING

- Do not re-handle bait, bait waste or rodent carcasses unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves and a disposable dust facemask, covering mouth and nose. Rodent carcasses should be collected and sealed in plastic bags prior to disposal in accordance with the disposal

statement. Clothing must be laundered after each day's use.

- During cleaning/disposal operations of bait/bait stations (for example, sweeping/pan broom, washing/hosing) wear cotton overalls buttoned to neck and wrist (or equivalent clothing), chemical resistant gloves and a disposable dust facemask, covering mouth and nose.

PRECAUTIONS

DO NOT place bait in areas where there is a possibility of contaminating food, livestock feed, or surfaces that come into direct contact with food.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Toxic to birds and other native wildlife. Place baits so as to prevent access to non-target animals. Securable, tamper resistant bait stations must be used at all locations to prevent access to non-target animals. DO NOT use on sites where vulnerable, threatened, endangered or critically endangered species are known to occur. Any incidents where it is suspected that non-target animals may have been poisoned should be reported to State or Territory authorities.

Very toxic to aquatic life. DO NOT contaminate wetlands or watercourses with this product or used containers.

STORAGE AND DISPOSAL

Store product in original container, tightly closed and away from feed or foodstuffs. Bait storage facility to be locked at all times when not in use. Store in a locked storage facility away from children, animals, food and feedstuffs, seed and fertilisers. Do not dispose of chemicals on site. Break, crush or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. Do not burn empty containers or product. Untaken baits should be recovered at the end of a baiting campaign and be destroyed by burning or burial according to the requirements of the State or Territory in which use has occurred.

To the extent possible, animal carcasses should be recovered during and for 14 days after a baiting campaign and be destroyed by burning or burial according to the requirements of the State or Territory in which use has occurred.

SAFETY DIRECTIONS

Harmful if swallowed. May irritate the eyes and skin. Do not cut individual baits. Avoid contact with eyes and skin. Do not touch the bait. If on skin and after each baiting, wash thoroughly with soap and water. When using the product do not eat, drink or smoke. When using the product wear cotton overalls, buttoned to the neck and wrist (equivalent clothing) and gauntlet length (chemical resistant) gloves. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day’s use, wash gloves and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126; New Zealand 0800 764 766. If poisoning occurs, get to a doctor or hospital quickly.

ADDITIONAL USER SAFETY INFORMATION

WARNING – Skin contact may be dangerous. Take every precaution to avoid contact.

Wash off after spillage and after use. Should not be used in areas accessible to children. Possible risk of irreversible effects

Batch No.: Date of Manufacture:

POISON

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Fastrac G Place Pacs Rodenticide

Active constituent: 0.1 g/kg BROMETHALIN

Contains Denatonium Benzoate (Bittering agent)

For control of rats and mice, including those resistant to anticoagulants in and around industrial, commercial and agricultural buildings.

Kills in a single feed.

Net Contents 150 g – 10 kg

PRIMARY PACK CONTAINS # X 15 or 85 g PLACE PACS WHICH ARE ILLEGAL TO SELL SEPARATELY

DO NOT DESTROY OUTER CONTAINER WHILE PRODUCT STILL REMAINS

APVMA Approval No.

Bell Laboratories Inc,

6551 N Towne Rd,

Windsor, WI 53598

USA

DIRECTIONS FOR USE

Restraints

DO NOT use in domestic situations.
Refillable bait station - professional use only in commercial (non-domestic/non-residential) situations. Use measure cup to refill the bait station.
DO NOT exceed 3 m between bait stations for mice, or 9 m for rats.

DO NOT place baits more than 30 m from buildings or structures.
DO NOT place baits in the open.
DO NOT apply baits in crops.
DO NOT place baits in areas liable to flooding.
DO NOT place bait in areas where there is a possibility of contaminating water, or surfaces that come into direct contact with water.

Situation: In and around, industrial and commercial buildings, animal houses, farms, wharves, public service buildings, food factories, hospitals, inside transport vehicles (including ships) and around grain terminals.

Pest

Mice (*Mus musculus*)

Rats (*Rattus norvegicus, Rattus rattus*)

For 15 g place pacs

Rate

Mice: 2-6 place pacs per bait station or placement.

Rats: 4-40 place pacs per bait station or placement.

For mice: use 2 place pacs. In very high infestation or fast uptake of the bait use 6 place pacs.

For rats: use 4 or more place pacs depending on level of infestation. In very high infestation or fast uptake use more baits per bait station.

Baiting strategy

Set out baits in places frequented by mice and rats but not more than 30 m from buildings or structures. Bait stations must be secured. For rats: place 4 or more place pacs per bait station at intervals of 5-9 m depending on level of uptake and infestation. For mice: place 2-6 place pacs per bait station at 2-3 m intervals. In very high infestations and when using larger bait stations use more place pacs per station and use the shorter distance between bait stations.

***For 85 g place pacs*:**

Rate

Mice: 1 place pac per bait station or placement.

Rats: 1-2 place pacs per bait station or placement.

For rats: use 1 or more place pacs depending on level of infestation. In very high infestation or fast uptake use more baits per bait station.

Baiting strategy

Set out baits in places frequented by mice and rats but not more than 30 m from buildings or structures. Bait stations must be secured. For rats: place 1 or more place pacs per bait station at

intervals of 5-9 m depending on level of uptake and infestation. For mice: place 1 place pac per bait station at 2-3 m intervals. In very high infestations and when using larger bait stations use more place pacs per station and use the shorter distance between bait stations.

Critical Comments - the same for all sizes

Eliminate, as far as practicable, all alternative food sources. Bait areas where conditions might encourage rodent activity. Securable, tamper resistant bait stations must be used at locations to prevent access to non-target animals. Inspect bait stations on a regular basis. Replace eaten or old/deteriorated baits. If eaten quickly, increase the number of bait stations. Continue observation and replenish until no more baits are taken. Baiting for at least two weeks may be necessary to reduce rat/mouse numbers.

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.

GENERAL INSTRUCTIONS

Fastrac G Place Pacs Rodenticide is a highly palatable pellet bait packaged in ready to use place pacs for the control of rats and mice including those resistant to anticoagulants. For use in and around buildings. One feed kills rats and mice.

Determine areas where rats and/or mice will most likely find and consume bait. Generally, these areas are along walls or rafters, by gnawed openings, in or beside burrows, in corners and concealed places between floors and walls or in locations where rodents or their signs have been observed. Protect bait from rain or moisture. Replace contaminated or spoilt bait immediately. To prevent reinfestation, eliminate food, water and harbourage as much as possible. If reinfestation should occur, repeat treatment. Where a continuous source of reinfestation is present, establish permanent bait stations and replenish bait as needed. Baiting for at least two weeks may be necessary to reduce rat/ mouse numbers.

RE-HANDLING

- Do not re-handle bait, bait waste or rodent carcasses unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves and a disposable dust facemask, covering mouth and nose. Rodent carcasses should be collected and sealed in plastic bags prior to disposal in accordance with the disposal statement. Clothing must be laundered after each day's use.

- During cleaning/disposal operations of bait/bait stations (for example, sweeping/pan broom, washing/hosing) wear cotton overalls buttoned to neck and wrist (or equivalent clothing), chemical resistant gloves and a disposable dust facemask, covering mouth and nose.

PRECAUTIONS

DO NOT place bait in areas where there is a possibility of contaminating food, livestock feed, or surfaces that come into direct contact with food.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Toxic to birds and other native wildlife. Place baits so as to prevent access to non-target animals. Securable, tamper resistant bait stations must be used at all locations to prevent access to non-target animals. DO NOT use on sites where vulnerable, threatened, endangered or critically endangered species are known to occur. Any incidents where it is suspected that non-target animals may have been poisoned should be reported to State or Territory authorities.

Very toxic to aquatic life. DO NOT contaminate wetlands or watercourses with this product or used containers.

STORAGE AND DISPOSAL

Store product in original container, tightly closed and away from feed or foodstuffs. Bait storage facility to be locked at all times when not in use. Store in a locked storage facility away from children, animals, food and feedstuffs, seed and fertilisers. Do not dispose of chemicals on site. Break, crush or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. Do not burn empty containers or product. Untaken baits should be recovered at the end of a baiting campaign and be destroyed by burning or burial according to the requirements of the State or Territory in which use has occurred.

To the extent possible, animal carcasses should be recovered during and for 14 days after a baiting campaign and be destroyed by burning or burial according to the requirements of the State or Territory in which use has occurred.

SAFETY DIRECTIONS

Harmful if swallowed. May irritate the eyes and skin. Do not open or cut individual baits (sachets, paper sachets or place packs). Avoid contact with eyes and skin. Do not touch the bait. If on skin and after each baiting, wash thoroughly with soap and water. When using the product do not eat, drink or smoke. When using the product wear cotton overalls, buttoned to the neck and wrist (equivalent clothing) and gauntlet length (chemical resistant) gloves. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26; New Zealand 0800 764 766. If poisoning occurs, get to a doctor or hospital quickly.

ADDITIONAL USER SAFETY INFORMATION

WARNING – Skin contact may be dangerous. Take every precaution to avoid contact.

Wash off after spillage and after use. Should not be used in areas accessible to children. Possible risk of irreversible effects.

Batch No.: Date of Manufacture:

POISON

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Fastrac Pro Place Pacs Rodenticide

Active constituent: 0.1 g/kg BROMETHALIN

Contains Denatonium Benzoate (Bittering agent)

For control of rats and mice, including those resistant to anticoagulants in and around industrial, commercial and agricultural buildings.

Kills in a single feed.

Net Contents 150 g – 10 kg

PRIMARY PACK CONTAINS # X 15 or 85 g PLACE PACS WHICH ARE ILLEGAL TO SELL

SEPARATELY

DO NOT DESTROY OUTER CONTAINER WHILE PRODUCT STILL REMAINS

APVMA Approval No.

Bell Laboratories Inc,

6551 N Towne Rd,

Windsor, WI 53598

USA

DIRECTIONS FOR USE

Restraints

DO NOT use in domestic situations.
Refillable bait station - professional use only in commercial (non-domestic/non-residential) situations.
DO NOT exceed 3 m between bait stations for mice, or 9 m for rats.
DO NOT place baits more than 30 m from buildings or structures.

DO NOT place baits in the open.
DO NOT apply baits in crops.
DO NOT place baits in areas liable to flooding.
DO NOT place bait in areas where there is a possibility of contaminating water, or surfaces that come into direct contact with water.

Situation: In and around, industrial and commercial buildings, animal houses, farms, wharves, public service buildings, food factories, hospitals, inside transport vehicles (including ships) and around grain terminals.

Pest

Mice (*Mus musculus*)

Rats (*Rattus norvegicus, Rattus rattus*)

For 15 g place pacs

Rate

Mice: 2-6 place pacs per bait station or placement.

Rats: 4-40 place pacs per bait station or placement.

For mice: use 2 place pacs. In very high infestation or fast uptake of the bait use 6 place pacs.

For rats: use 4 or more place pacs depending on level of infestation. In very high infestation or fast uptake use more baits per bait station.

Baiting strategy

Set out baits in places frequented by mice and rats but not more than 30 m from buildings or structures. Bait stations must be secured. For rats: place 4 or more place pacs per bait station at intervals of 5-9 m depending on level of uptake and infestation. For mice: place 2-6 place pacs per bait station at 2-3 m intervals. In very high infestations and when using larger bait stations use more place pacs per station and use the shorter distance between bait stations.

***For 85 g place pacs*:**

Rate

Mice: 1 place pac per bait station or placement.

Rats: 1-2 place pacs per bait station or placement.

For rats: use 1 or more place pacs depending on level of infestation. In very high infestation or fast uptake use more baits per bait station.

Baiting strategy

Set out baits in places frequented by mice and rats but not more than 30 m from buildings or structures. Bait stations must be secured. For rats: place 1 or more place pacs per bait station at intervals of 5-9 m depending on level of uptake and infestation. For mice: place 1 place pac per

bait station at 2-3 m intervals. In very high infestations and when using larger bait stations use more place pacs per station and use the shorter distance between bait stations.

Critical Comments - the same for all sizes

Eliminate, as far as practicable, all alternative food sources. Bait areas where conditions might encourage rodent activity. Securable, tamper resistant bait stations must be used at locations to prevent access to non-target animals. Inspect bait stations on a regular basis. Replace eaten or old/deteriorated baits. If eaten quickly, increase the number of bait stations. Continue observation and replenish until no more baits are taken. Baiting for at least two weeks may be necessary to reduce rat/mouse numbers.

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.

GENERAL INSTRUCTIONS

Fastrac Pro Place Pacs Rodenticide is a highly palatable pellet bait packaged in ready to use place pacs for the control of rats and mice including those resistant to anticoagulants. For use in and around buildings. One feed kills rats and mice.

Determine areas where rats and/or mice will most likely find and consume bait. Generally, these areas are along walls or rafters, by gnawed openings, in or beside burrows, in corners and concealed places between floors and walls or in locations where rodents or their signs have been observed. Protect bait from rain or moisture. Replace contaminated or spoilt bait immediately. To prevent reinfestation, eliminate food, water and harbourage as much as possible. If reinfestation should occur, repeat treatment. Where a continuous source of reinfestation is present, establish permanent bait stations and replenish bait as needed. Baiting for at least two weeks may be necessary to reduce rat/ mouse numbers.

RE-HANDLING

- Do not re-handle bait, bait waste or rodent carcasses unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves and a disposable dust facemask, covering mouth and nose. Rodent carcasses should be collected and sealed in plastic bags prior to disposal in accordance with the disposal statement. Clothing must be laundered after each day's use.

- During cleaning/disposal operations of bait/bait stations (for example, sweeping/pan broom, washing/hosing) wear cotton overalls buttoned to neck and wrist (or equivalent clothing), chemical resistant gloves and a disposable dust facemask, covering mouth and nose.

PRECAUTIONS

DO NOT place bait in areas where there is a possibility of contaminating food, livestock feed, or surfaces that come into direct contact with food.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Toxic to birds and other native wildlife. Place baits so as to prevent access to non-target animals. Securable, tamper resistant bait stations must be used at all locations to prevent access to non-

target animals. DO NOT use on sites where vulnerable, threatened, endangered or critically endangered species are known to occur. Any incidents where it is suspected that non-target animals may have been poisoned should be reported to State or Territory authorities.

Very toxic to aquatic life. DO NOT contaminate wetlands or watercourses with this product or used containers.

STORAGE AND DISPOSAL

Store product in original container, tightly closed and away from feed or foodstuffs. Bait storage facility to be locked at all times when not in use. Store in a locked storage facility away from children, animals, food and feedstuffs, seed and fertilisers. Do not dispose of chemicals on site. Break, crush or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. Do not burn empty containers or product. Untaken baits should be recovered at the end of a baiting campaign and be destroyed by burning or burial according to the requirements of the State or Territory in which use has occurred.

To the extent possible, animal carcasses should be recovered during and for 14 days after a baiting campaign and be destroyed by burning or burial according to the requirements of the State or Territory in which use has occurred.

SAFETY DIRECTIONS

Harmful if swallowed. May irritate the eyes and skin. Do not open or cut individual baits (sachets, paper sachets or place packs). Avoid contact with eyes and skin. Do not touch the bait. If on skin and after each baiting, wash thoroughly with soap and water. When using the product do not eat, drink or smoke. When using the product wear cotton overalls, buttoned to the neck and wrist (equivalent clothing) and gauntlet length (chemical resistant) gloves. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26; New Zealand 0800 764 766. If poisoning occurs, get to a doctor or hospital quickly.

ADDITIONAL USER SAFETY INFORMATION

WARNING – Skin contact may be dangerous. Take every precaution to avoid contact.

Wash off after spillage and after use. Should not be used in areas accessible to children. Possible risk of irreversible effects.

Batch No.: Date of Manufacture:

POISON

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Fastrac G Pellets Rodenticide

Active constituent: 0.1 g/kg BROMETHALIN

Contains Denatonium Benzoate (Bittering agent)

For control of rats and mice, including those resistant to anticoagulants in and around industrial, commercial and agricultural buildings.

Kills in a single feed.

Net Contents 150 g – 10 kg

Bell Laboratories Inc,

6551 N Towne Rd,

Windsor, WI 53598

USA

DIRECTIONS FOR USE

Restraints

DO NOT use in domestic situations.
Refillable bait station - professional use only in commercial (non-domestic/non-residential) situations. Use measure cup to refill the bait station.
DO NOT exceed 3 m between bait stations for mice, or 9 m for rats.
DO NOT place baits more than 30 m from buildings or structures.
DO NOT place baits in the open.
DO NOT apply baits in crops.
DO NOT place baits in areas liable to flooding.
DO NOT place bait in areas where there is a possibility of contaminating water, or surfaces that come into direct contact with water.

Situation: In and around industrial and commercial buildings, animal houses, farms, wharves, public service buildings, food factories, hospitals, inside transport vehicles (including ships) and around grain terminals.

Pest

Mice (*Mus musculus*)

Rats (*Rattus norvegicus, Rattus rattus*)

Rate

Mice: 20 - 40 g per bait station or placement. Use scoop or measure.

Rats: 40 - 150 g per bait station or placement. Use scoop or measure.

Baiting strategy

Set out baits in places frequented by mice and rats but not more than 30 m from buildings or structures. Bait stations must be secured. For rats: place 40 – 150 g per bait station at intervals of 5-9 m depending on level of uptake and infestation. For mice: place 20 - 40 g per bait station at 2-3 m intervals. In very high infestations and when using larger bait stations use more pellets per station and use the shorter distance between bait stations.

Critical Comments

Eliminate, as far as practicable, all alternative food sources. Bait areas where conditions might encourage rodent activity. Securable, tamper resistant bait stations must be used at all locations to prevent access to non-target animals. Inspect bait stations on a regular basis. Replace eaten or old/deteriorated baits. If eaten quickly, increase the number of bait stations. Continue observation and replenish until no more baits are taken. Baiting for at least two weeks may be necessary to reduce rat/mouse numbers.

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.

GENERAL INSTRUCTIONS

Fastrac G Pellets Rodenticide is a highly palatable pellet bait for the control of rats and mice including those resistant to anticoagulants. For use in and around buildings. One feed kills rats and mice.

Determine areas where rats and/or mice will most likely find and consume bait. Generally, these areas are along walls or rafters, by gnawed openings, in or beside burrows, in corners and concealed places between floors and walls or in locations where rodents or their signs have been observed. Protect bait from rain or moisture. Replace contaminated or spoilt bait immediately. To prevent reinfestation, eliminate food, water and harbourage as much as possible. If reinfestation should occur, repeat treatment. Where a continuous source of reinfestation is present, establish permanent bait stations and replenish bait as needed. Baiting for at least two weeks may be necessary to reduce rat/ mouse numbers.

RE-HANDLING

- Do not re-handle bait, bait waste or rodent carcasses unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves and a disposable dust facemask, covering mouth and nose. Rodent carcasses should be collected and sealed in plastic bags prior to disposal in accordance with the disposal statement. Clothing must be laundered after each day's use.

- During cleaning/disposal operations of bait/bait stations (for example, sweeping/pan broom, washing/hosing) wear cotton overalls buttoned to neck and wrist (or equivalent clothing), chemical resistant gloves and a disposable dust facemask, covering mouth and nose.

PRECAUTIONS

DO NOT place bait in areas where there is a possibility of contaminating food, livestock feed, or surfaces that come into direct contact with food.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Toxic to birds and other native wildlife. Place baits so as to prevent access to non-target animals. Securable, tamper resistant bait stations must be used at all locations to prevent access to non-target animals. DO NOT use on sites where vulnerable, threatened, endangered or critically endangered species are known to occur. Any incidents where it is suspected that non-target animals may have been poisoned should be reported to State or Territory authorities.

Very toxic to aquatic life. DO NOT contaminate wetlands or watercourses with this product or used containers.

STORAGE AND DISPOSAL

Store product in original container, tightly closed and away from feed or foodstuffs. Bait storage facility to be locked at all times when not in use. Store in a locked storage facility away from children, animals, food and feedstuffs, seed and fertilisers. Do not dispose of chemicals on site. Break, crush or puncture and deliver empty packaging to an approved waste management facility.

If an approved waste management facility is not available bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. Do not burn empty containers or product.

Untaken baits should be recovered at the end of a baiting campaign and be destroyed by burning or burial according to the requirements of the State or Territory in which use has occurred.

To the extent possible, animal carcasses should be recovered during and for 14 days after a baiting campaign and be destroyed by burning or burial according to the requirements of the State or Territory in which use has occurred.

SAFETY DIRECTIONS

Harmful if swallowed. May irritate the eyes and skin. Avoid contact with eyes and skin. Do not touch the bait. If on skin and after each baiting, wash thoroughly with soap and water. When using the product do not eat, drink or smoke. Use scoop or measure cup when using the product and wear cotton overalls, buttoned to the neck and wrist (equivalent clothing) and elbow-length chemical resistant gloves. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126; New Zealand 0800 764 766. If poisoning occurs, get to a doctor or hospital quickly.

ADDITIONAL USER SAFETY INFORMATION

WARNING – Skin contact may be dangerous. Take every precaution to avoid contact.

Wash off after spillage and after use. Should not be used in areas accessible to children. Possible risk of irreversible effects

Batch No.:

Date of Manufacture:

POISON

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Fastrac Pro Pellets Rodenticide

Active constituent: 0.1 g/kg BROMETHALIN

Contains Denatonium Benzoate (Bittering agent)

For control of rats and mice, including those resistant to anticoagulants in and around industrial, commercial and agricultural buildings.

Kills in a single feed.

Net Contents 150 g – 10 kg

APVMA Approval No.: 88456/121368

Bell Laboratories Inc,

6551 N Towne Rd,

Windsor, WI 53598

USA

DIRECTIONS FOR USE

Restraints

DO NOT use in domestic situations.
Refillable bait station - professional use only in commercial (non-domestic/non-residential) situations. Use measure cup to refill the bait station.
DO NOT exceed 3 m between bait stations for mice, or 9 m for rats.
DO NOT place baits more than 30 m from buildings or structures.
DO NOT place baits in the open.
DO NOT apply baits in crops.
DO NOT place baits in areas liable to flooding.
DO NOT place bait in areas where there is a possibility of contaminating water, or surfaces that come into direct contact with water.

Situation: In and around industrial and commercial buildings, animal houses, farms, wharves, public service buildings, food factories, hospitals, inside transport vehicles (including ships) and around grain terminals.

Pest

Mice (*Mus musculus*)

Rats (*Rattus norvegicus, Rattus rattus*)

Rate

Mice: 20 - 40 g per bait station or placement. Use scoop or measure.

Rats: 40 - 150 g per bait station or placement. Use scoop or measure.

Baiting strategy

Set out baits in places frequented by mice and rats but not more than 30 m from buildings or structures. Bait stations must be secured. For rats: place 40 – 150 g per bait station at intervals of 5-9 m depending on level of uptake and infestation. For mice: place 20 - 40 g per bait station at 2-3 m intervals. In very high infestations and when using larger bait stations use more pellets per station and use the shorter distance between bait stations.

Critical Comments

Eliminate, as far as practicable, all alternative food sources. Bait areas where conditions might encourage rodent activity. Securable, tamper resistant bait stations must be used at all locations to prevent access to non-target animals. Inspect bait stations on a regular basis. Replace eaten or old/deteriorated baits. If eaten quickly, increase the number of bait stations. Continue observation and replenish until no more baits are taken. Baiting for at least two weeks may be necessary to reduce rat/mouse numbers.

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.

GENERAL INSTRUCTIONS

Fastrac Pro Pellets Rodenticide is a highly palatable pellet bait for the control of rats and mice including those resistant to anticoagulants. For use in and around buildings. One feed kills rats and mice.

Determine areas where rats and/or mice will most likely find and consume bait. Generally, these areas are along walls or rafters, by gnawed openings, in or beside burrows, in corners and concealed places between floors and walls or in locations where rodents or their signs have been observed. Protect bait from rain or moisture. Replace contaminated or spoilt bait immediately. To prevent reinfestation, eliminate food, water and harbourage as much as possible. If reinfestation should occur, repeat treatment. Where a continuous source of reinfestation is present, establish permanent bait stations and replenish bait as needed. Baiting for at least two weeks may be necessary to reduce rat/ mouse numbers.

RE-HANDLING

- Do not re-handle bait, bait waste or rodent carcasses unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves and a disposable dust facemask, covering mouth and nose. Rodent carcasses should be collected and sealed in plastic bags prior to disposal in accordance with the disposal statement. Clothing must be laundered after each day's use.

- During cleaning/disposal operations of bait/bait stations (for example, sweeping/pan broom, washing/hosing) wear cotton overalls buttoned to neck and wrist (or equivalent clothing), chemical resistant gloves and a disposable dust facemask, covering mouth and nose.

PRECAUTIONS

DO NOT place bait in areas where there is a possibility of contaminating food, livestock feed, or surfaces that come into direct contact with food.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Toxic to birds and other native wildlife. Place baits so as to prevent access to non-target animals. Securable, tamper resistant bait stations must be used at all locations to prevent access to non-target animals. DO NOT use on sites where vulnerable, threatened, endangered or critically endangered species are known to occur. Any incidents where it is suspected that non-target animals may have been poisoned should be reported to State or Territory authorities.

Very toxic to aquatic life. DO NOT contaminate wetlands or watercourses with this product or used containers.

STORAGE AND DISPOSAL

Store product in original container, tightly closed and away from feed or foodstuffs. Bait storage facility to be locked at all times when not in use. Store in a locked storage facility away from children, animals, food and feedstuffs, seed and fertilisers. Do not dispose of chemicals on site. Break, crush or puncture and deliver empty packaging to an approved waste management facility.

If an approved waste management facility is not available bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. Do not burn empty containers or product.

Untaken baits should be recovered at the end of a baiting campaign and be destroyed by burning or burial according to the requirements of the State or Territory in which use has occurred.

To the extent possible, animal carcasses should be recovered during and for 14 days after a baiting campaign and be destroyed by burning or burial according to the requirements of the State or Territory in which use has occurred.

SAFETY DIRECTIONS

Harmful if swallowed. May irritate the eyes and skin. Avoid contact with eyes and skin. Do not touch the bait. If on skin and after each baiting, wash thoroughly with soap and water. When using the product do not eat, drink or smoke. Use scoop or measure cup when using the product and wear cotton overalls, buttoned to the neck and wrist (equivalent clothing) and elbow-length chemical resistant gloves. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126; New Zealand 0800 764 766. If poisoning occurs, get to a doctor or hospital quickly.

ADDITIONAL USER SAFETY INFORMATION

WARNING – Skin contact may be dangerous. Take every precaution to avoid contact.

Wash off after spillage and after use. Should not be used in areas accessible to children. Possible risk of irreversible effects

Batch No.:

Date of Manufacture:

POISON

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Fastrac G Meal Bait Rodenticide

Active constituent: 0.1 g/kg BROMETHALIN

Contains Denatonium Benzoate (Bittering agent)

For control of rats and mice, including those resistant to anticoagulants in and around industrial, commercial and agricultural buildings.

Kills in a single feed.

Net Contents 150 g – 10 kg

APVMA Approval No. 88457/121370

Bell Laboratories Inc,

6551 N Towne Rd,

Windsor, WI 53598

USA

DIRECTIONS FOR USE

Restraints

DO NOT use in domestic situations.
Refillable bait station - professional use only in commercial (non-domestic/non-residential) situations. Use measure cup to refill the bait station.
DO NOT exceed 3 m between bait stations for mice, or 9 m for rats.
DO NOT place baits more than 30 m from buildings or structures.
DO NOT place baits in the open.
DO NOT place baits in areas liable to flooding.
DO NOT place bait in areas where there is a possibility of contaminating water, or surfaces that come into direct contact with water.

Situation: In and around industrial and commercial buildings, animal houses, farms, wharves, public service buildings, food factories, hospitals, inside transport vehicles (including ships) and around grain terminals.

Pest

Mice (*Mus musculus*)

Rats (*Rattus norvegicus, Rattus rattus*)

Rate

Mice: 20 - 40 g per bait station or placement. Use scoop or measure.

Rats: 40 - 150 g per bait station or placement. Use scoop or measure.

Baiting strategy

Set out baits in places frequented by mice and rats but not more than 30 m from buildings or structures. Bait stations must be secured. For rats: place 40 – 150 g per bait station at intervals of 5-9 m depending on level of uptake and infestation. For mice: place 20 - 40 g per bait station at 2-3 m intervals. In very high infestations and when using larger bait stations use more pellets per station and use the shorter distance between bait stations.

Critical Comments

Eliminate, as far as practicable, all alternative food sources. Bait areas where conditions might encourage rodent activity. Securable, tamper resistant bait stations must be used at all locations to prevent access to non-target animals. Inspect bait stations on a regular basis. Replace eaten or old/deteriorated baits. If eaten quickly, increase the number of bait stations. Continue observation and replenish until no more baits are taken. Baiting for at least two weeks may be necessary to reduce rat/mouse numbers.

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.

GENERAL INSTRUCTIONS

Fastrac G Meal Bait Rodenticide is a highly palatable grain/seed bait for the control of rats and mice including those resistant to anticoagulants. For use in and around buildings. One feed kills rats and mice.

Determine areas where rats and/or mice will most likely find and consume bait. Generally, these areas are along walls or rafters, by gnawed openings, in or beside burrows, in corners and concealed places between floors and walls or in locations where rodents or their signs have been observed. Protect bait from rain or moisture. Replace contaminated or spoilt bait immediately. To prevent reinfestation, eliminate food, water and harbourage as much as possible. If reinfestation should occur, repeat treatment. Where a continuous source of reinfestation is present, establish permanent bait stations and replenish bait as needed. Baiting for at least two weeks may be necessary to reduce rat/ mouse numbers.

RE-HANDLING

- Do not re-handle bait, bait waste or rodent carcasses unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves and a disposable dust facemask, covering mouth and nose. Rodent carcasses should be collected and sealed in plastic bags prior to disposal in accordance with the disposal statement. Clothing must be laundered after each day's use.

- During cleaning/disposal operations of bait/bait stations (for example, sweeping/pan broom, washing/hosing) wear cotton overalls buttoned to neck and wrist (or equivalent clothing), chemical resistant gloves and a disposable dust facemask, covering mouth and nose.

PRECAUTIONS

DO NOT place bait in areas where there is a possibility of contaminating food, livestock feed, or surfaces that come into direct contact with food.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Toxic to birds and other native wildlife. Place baits so as to prevent access to non-target animals. Securable, tamper resistant bait stations must be used at all locations to prevent access to non-target animals. DO NOT use on sites where vulnerable, threatened, endangered or critically endangered species are known to occur. Any incidents where it is suspected that non-target animals may have been poisoned should be reported to State or Territory authorities.

Very toxic to aquatic life. DO NOT contaminate wetlands or watercourses with this product or used containers.

STORAGE AND DISPOSAL

Store product in original container, tightly closed and away from feed or foodstuffs. Bait storage facility to be locked at all times when not in use. Store in a locked storage facility away from children, animals, food and feedstuffs, seed and fertilisers. Do not dispose of chemicals on site. Break, crush or puncture and deliver empty packaging to an approved waste management facility.

If an approved waste management facility is not available bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. Do not burn empty containers or product.

Untaken baits should be recovered at the end of a baiting campaign and be destroyed by burning or burial according to the requirements of the State or Territory in which use has occurred.

To the extent possible, animal carcasses should be recovered during and for 14 days after a baiting campaign and be destroyed by burning or burial according to the requirements of the State or Territory in which use has occurred.

SAFETY DIRECTIONS

Harmful if swallowed. May irritate the eyes and skin. Avoid contact with eyes and skin. Do not touch the bait. If on skin and after each baiting, wash thoroughly with soap and water. When using the product do not eat, drink or smoke. Use scoop or measure cup when using the product and wear cotton overalls, buttoned to the neck and wrist (equivalent clothing) and elbow-length chemical resistant gloves. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26; New Zealand 0800 764 766. If poisoning occurs, get to a doctor or hospital quickly.

ADDITIONAL USER SAFETY INFORMATION

WARNING – Skin contact may be dangerous. Take every precaution to avoid contact.

Wash off after spillage and after use. Should not be used in areas accessible to children. Possible risk of irreversible effects

Batch No.:

Date of Manufacture:

POISON

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Fastrac Pro Soft Bait Rodenticide

Active constituent: 0.1 g/kg BROMETHALIN

Contains Denatonium Benzoate (Bittering agent)

For control of rats and mice, including those resistant to anticoagulants in and around industrial, commercial, agricultural and domestic buildings.

Kills in a single feed.

Net Contents 150 g – 10 kg

PRIMARY PACK CONTAINS # X 8 or 15 g SACHETS WHICH ARE ILLEGAL TO SELL SEPARATELY

DO NOT DESTROY OUTER CONTAINER WHILE PRODUCT STILL REMAINS

APVMA Approval No.

Bell Laboratories Inc,

6551 N Towne Rd,

Windsor, WI 53598

USA

DIRECTIONS FOR USE

Restraints

DO NOT use refillable bait stations in domestic situations.
Refillable bait station - professional use only in commercial (non-domestic/non-residential) situations.
DO NOT exceed 3 m between bait stations for mice, or 9 m for rats.
DO NOT place baits more than 30 m from buildings or structures.
DO NOT place baits in the open.
DO NOT apply baits in crops.
DO NOT place baits in areas liable to flooding.
DO NOT place bait in areas where there is a possibility of contaminating water, or surfaces that come into direct contact with water.

Situation: In and around domestic homes, industrial and commercial buildings, animal houses, farms, wharves, public service buildings, food factories, hospitals, inside transport vehicles (including ships) and around grain terminals.
Pest

Mice (*Mus musculus*)

Rats (*Rattus norvegicus, Rattus rattus*)

For 8 g sachets

Rate

Mice: 4-12 sachets per bait station or placement.

Rats: 6-60 sachets per bait station or placement.

For mice: use 4 sachets. In very high infestation or fast uptake of the bait use 12 sachets.

For rats: use 6 or more sachets depending on level of infestation. In very high infestation or fast uptake use more baits per bait station.

Baiting strategy

Set out baits in places frequented by mice and rats but not more than 30 m from buildings or structures. Bait stations must be secured.For rats: place 6 or more sachets per bait station at intervals of 5-9 m depending on level of uptake and infestation. For mice: place 4-12 sachets per bait station at 2-3 m intervals. In very high infestations and when using larger bait stations use more sachets per station and use the shorter distance between bait stations.

For 15 g sachets

Rate

Mice: 2-6 sachets per bait station or placement.

Rats: 4-40 sachets per bait station or placement.

For mice: use 2 sachets. In very high infestation or fast uptake of the bait use 6 sachets.

For rats: use 4 or more sachets depending on level of infestation. In very high infestation or fast uptake use more baits per bait station.

Baiting strategy

Set out baits in places frequented by mice and rats but not more than 30 m from buildings or structures. Bait stations must be secured and placed so as to prevent non-target animal access to the bait station. For rats: place 4 or more sachets per bait station at intervals of 5-9 m depending on level of uptake and infestation. For mice: place 2-6 sachets per bait station at 2-3 m intervals. In very high infestations and when using larger bait stations use more sachets per station and use the shorter distance between bait stations.

30 g Non-refillable bait station

Baiting strategy

Set out baits in places frequented by mice and rats but not more than 30 m from buildings or structures. Bait stations must be secured. For mice: place the bait stations at 2-3 m intervals. In very high infestations use more bait stations and use the shorter distance between bait stations.

90 g Non-refillable bait station

Baiting strategy

Set out baits in places frequented by mice and rats but not more than 30 m from buildings or structures. Bait stations must be secured. For rats: place bait station at intervals of 5-9 m depending on level of uptake and infestation. For mice: place bait station at 2-3 m intervals. In very high infestations use more bait stations and use the shorter distance between bait stations.

Critical Comments - the same for all sizes

Eliminate as far as practicable, all alternative food sources. Bait areas where conditions might encourage rodent activity. Securable, tamper resistant bait stations must be used at all locations to prevent access to non-target animals. Inspect bait stations on a regular basis. Replace eaten or old/deteriorated baits. If eaten quickly, increase the number of bait stations. Continue observation and replenish until no more baits are taken. Baiting for at least two weeks may be necessary to reduce rat/mouse numbers.

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.

GENERAL INSTRUCTIONS

Fastrac Pro Soft Bait Rodenticide is a highly palatable soft bait packaged in ready to use sachets for the control of rats and mice including those resistant to anticoagulants. For use in and around buildings. One feed kills rats and mice.

Determine areas where rats and/or mice will most likely find and consume bait. Generally, these areas are along walls or rafters, by gnawed openings, in or beside burrows, in corners and concealed places between floors and walls or in locations where rodents or their signs have been observed. Protect bait from rain or moisture. Replace contaminated or spoilt bait immediately. To prevent reinfestation, eliminate food, water and harbourage as much as possible. If reinfestation should occur, repeat treatment. Where a continuous source of reinfestation is present, establish permanent bait stations and replenish bait as needed. Baiting for at least two weeks may be necessary to reduce rat/ mouse numbers.

RE-HANDLING

- Do not re-handle bait, bait waste or rodent carcasses unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves and a disposable dust facemask, covering mouth and nose. Rodent carcasses should be collected and sealed in plastic bags prior to disposal in accordance with the disposal statement. Clothing must be laundered after each day's use.

- During cleaning/disposal operations of bait/bait stations (for example, sweeping/pan broom, washing/hosing) wear cotton overalls buttoned to neck and wrist (or equivalent clothing), chemical resistant gloves and a disposable dust facemask, covering mouth and nose.

PRECAUTIONS

DO NOT place bait in areas where there is a possibility of contaminating food, livestock feed, or surfaces that come into direct contact with food.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Toxic to birds and other native wildlife. Place baits so as to prevent access to non-target animals. Securable, tamper resistant bait stations must be used at all locations to prevent access to non-target animals. DO NOT use on sites where vulnerable, threatened, endangered or critically endangered species are known to occur. Any incidents where it is suspected that non-target animals may have been poisoned should be reported to State or Territory authorities.

Very toxic to aquatic life. DO NOT contaminate wetlands or watercourses with this product or used containers.

STORAGE AND DISPOSAL

Store product in original container, tightly closed and away from feed or foodstuffs. Bait storage facility to be locked at all times when not in use. Store in a locked storage facility away from children, animals, food and feedstuffs, seed and fertilisers. Do not dispose of chemicals on site. Break, crush or puncture and deliver empty packaging to an approved waste management facility.

If an approved waste management facility is not available bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. Do not burn empty containers or product.

Untaken baits should be recovered at the end of a baiting campaign and be destroyed by burning or burial according to the requirements of the State or Territory in which use has occurred.

To the extent possible, animal carcasses should be recovered during and for 14 days after a baiting campaign and be destroyed by burning or burial according to the requirements of the State or Territory in which use has occurred.

SAFETY DIRECTIONS

Harmful if swallowed. May irritate the eyes and skin. Do not open or cut individual baits (sachets, paper sachets or place packs). Avoid contact with eyes and skin. Do not touch the bait. If on skin and after each baiting, wash thoroughly with soap and water. When using the product do not eat, drink or smoke. When using the product wear cotton overalls, buttoned to the neck and wrist (equivalent clothing) and gauntlet length (chemical resistant) gloves. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26, New Zealand 0800 764 766. If poisoning occurs, get to a doctor or hospital quickly.

ADDITIONAL USER SAFETY INFORMATION

WARNING – Skin contact may be dangerous. Take every precaution to avoid contact.

Wash off after spillage and after use. Should not be used in areas accessible to children. Possible risk of irreversible effects.

Batch No.:

Date of Manufacture:

Acronyms and abbreviations

Shortened term	Full term
ac	active constituent
ADI	Acceptable Daily Intake (for humans)
ai	active ingredient
ARfD	Acute Reference Dose
bw	Bodyweight
d	Day
DT_{50}	Time taken for 50% of the concentration to dissipate
EC_{50}	concentration at which 50% of the test population are immobilised
g	Gram
GAP	Good Agricultural Practice
h	Hour
ha	Hectare
HDPE	high density polyethylene
HPLC	High Pressure Liquid Chromatography *or* High Performance Liquid Chromatography
kg	Kilogram
K_{OC}	Organic carbon partitioning coefficient
L	Litre
LC_{50}	concentration that kills 50% of the test population of organisms
LD_{50}	dosage of chemical that kills 50% of the test population of organisms
Log K_{OW}	Log to base 10 of octanol water partitioning co-efficient, synonym P_{OW}
mg	Milligram
mL	Millilitre
NOEC/NOEL	No Observable Effect Concentration Level
NOAEL	No Observed Adverse Effect Level

Shortened term	Full term
ppb	parts per billion
PPE	Personal Protective Equipment
ppm	parts per million
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
USEPA	United States environmental Protection Agency

Glossary

Term	Description
Active constituent	The substance that is primarily responsible for the effect produced by a chemical product
Acute	Having rapid onset and of short duration
Carcinogenicity	The ability to cause cancer
Chronic	Of long duration
Codex MRL	Internationally published standard maximum residue limit
Desorption	Removal of a material from or through a surface
Efficacy	Production of the desired effect
Formulation	A combination of both active and inactive constituents to form the end use product
Genotoxicity	The ability to damage genetic material
Hydrophobic	Repels water
Leaching	Removal of a compound by use of a solvent
Metabolism	The chemical processes that maintain living organisms
Photodegradation	Breakdown of chemicals due to the action of light
Photolysis	Breakdown of chemicals due to the action of light
Subcutaneous	Under the skin
Toxicokinetics	The study of the movement of toxins through the body
Toxicology	The study of the nature and effects of poisons

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