

MUSKIL®



MUSKIL blends two different Second Generation Anticoagulant Rodenticides (SGARs), difenacoum and bromadiolone, together to create a rodenticide that outperforms any other product in the market in terms of speed of kill and reduced risk to pets.

MUSKIL has also been uniquely formulated to provide improved palatability.

And MUSKIL's FLUO-NP Technology helps overcome Bait Shyness and allows you to track rodents and bait consumption for improved monitoring and higher standards of safety in HACCP managed food establishments.

POWER FROM SYNERGY

By combining two actives we create a unique product that kills the toughest rodents, including those resistant to other anti-coagulant rodenticides. The two actives combine together to create a synergistic effect with each dynamically intensifying the effects of the other, to create a more potent solution than either alone, yet at the same time achieving reduced risk to people and pets.

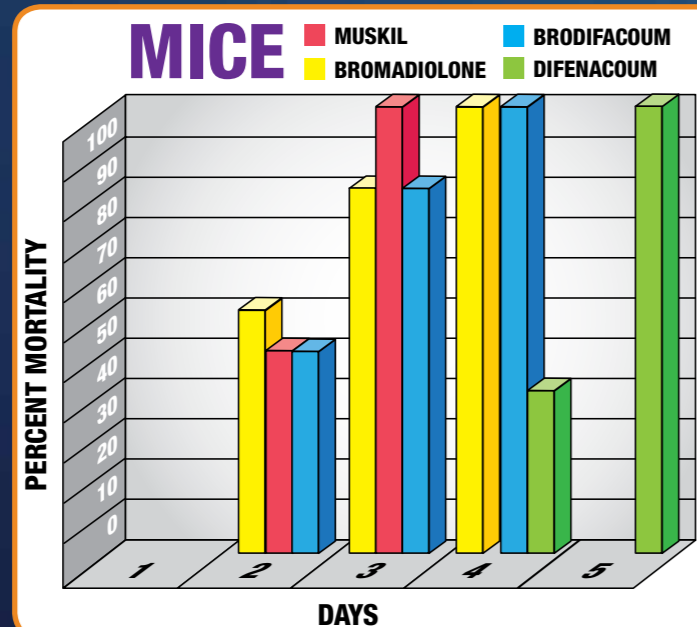
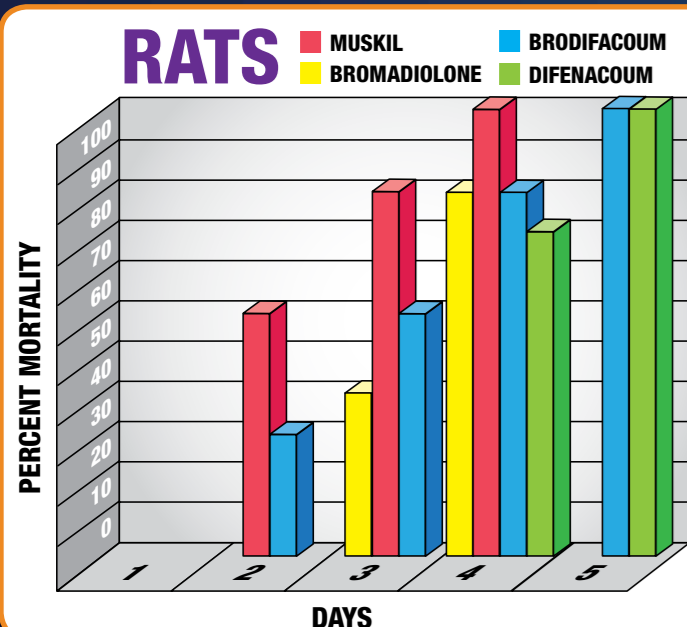
SUPER FAST KILL

MUSKIL outperforms the leading rodenticides in the market in terms of speed of kill. In independent laboratory trials, MUSKIL achieved 100% mortality against both anti-coagulant resistant and susceptible strains of mice and rats, faster than any other anti-coagulant product.

COST EFFECTIVE

MUSKIL kills rodents faster, so often less bait is consumed, which helps reduce the costs of needless over-feeding. Plus the neophobic response to MUSKIL is much lower than with traditional baits using standard dyes, therefore bait is accepted more quickly, more palatable and more efficient in use.

Laboratory trials data comparing the speed of kill of MUSKIL against three Second Generation Anticoagulant Rodenticides against Rats (*Rattus norvegicus*) and Mice (*Mus musculus*)



MUSKIL®

DUAL ACTIVE RODENTICIDE BLOCKS

with **FLUO-NP TECHNOLOGY™**



REDUCED RISK

One of the most remarkable attributes of MUSKIL is that whilst displaying super fast kill of rodents, it displays a lower toxicology profile against non-target animals including family pets, when compared to most other rodenticide baits.

Grams of bait required to reach the LD ₅₀ value for a 10 kg dog*		
Product/Active	grams of bait	No. of 15 g Blocks
Flocoumafen	15 g	1
Brodifacoum	52 g	3
Bromadiolone	2,000 g	183
Difethialone	1,600 g	106
MUSKIL	3,333 g	222
Difenacoum	10,000 g	666

* The Pesticide Manual, British Crop Protection Council (BCPC).

TECHNICAL DETAILS	
ACTIVES:	0.025 g/kg difenacoum, 0.025 g/kg bromadiolone.
BLOCKS:	15 g fluorescent red, high melting point extruded block.
SHAPE:	Cube with gnawing edges and hole for nailing in place or mounting on rods in rodent bait stations.
PACKS:	PROT1042 3 kg PROT1043 8 kg PROT1048 180 g (coming soon) PROT1049 500 g (coming soon)
ALLERGENS:	Product contains no peanuts.

CUSTOMER SERVICE 1800 420 144 www.protect-us.com.au

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SUPER FAST KILL

MUSKIL®

DUAL ACTIVE RODENTICIDE BLOCKS

with **FLUO-NP TECHNOLOGY™**



- ⚡ Kills rats and mice **FASTER** than other rodenticides!
- ⚡ Palatability optimised to rodent's sense of sight, smell and taste
- ⚡ First rodenticide in Australia to include fluorescent tracking



Protect-us

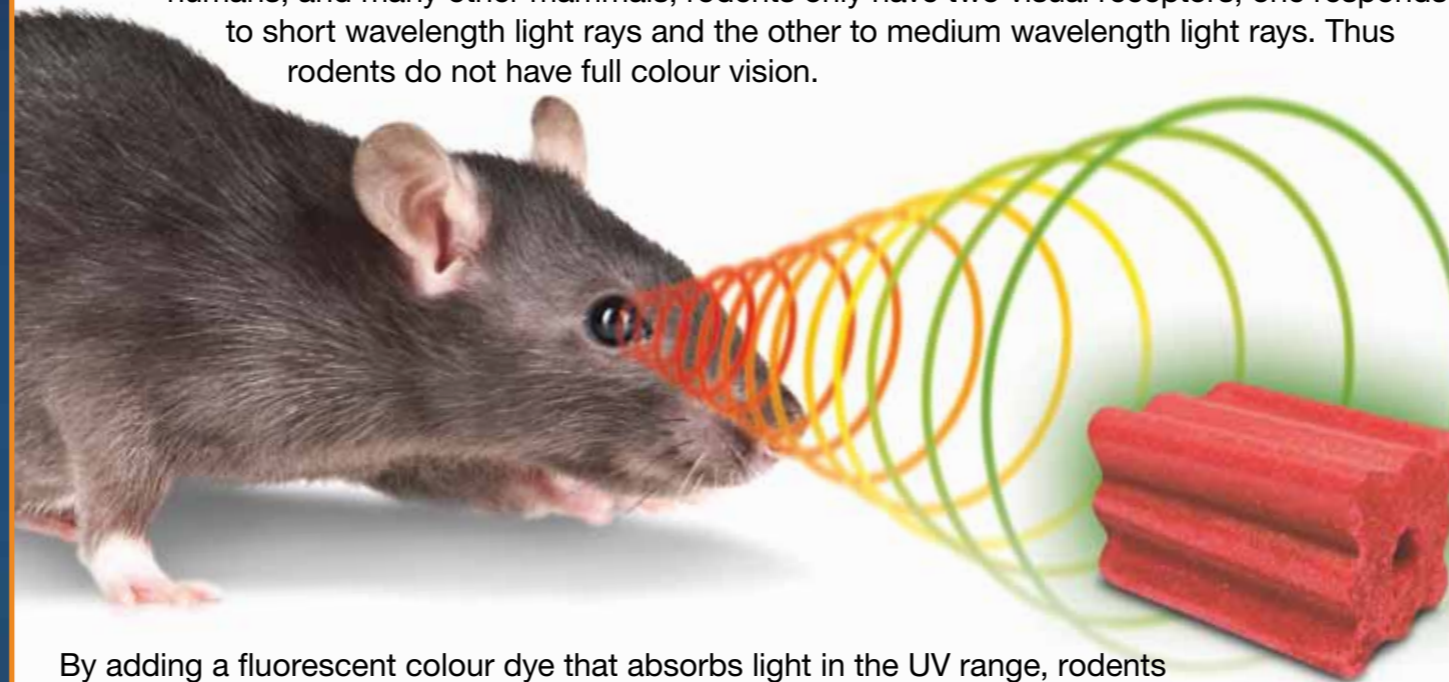
FLUO-NP TECHNOLOGY™

Lighting the way in the effective control of rats and mice

MUSKIL's FLUO-NP Technology is an abbreviation of Fluorescent No Phobia. The No Phobia aspect is in reference to how MUSKIL overcomes the rodent's natural neophobia, which relates to the commonly observed behaviour of bait shyness, where rodents are reticent to feed on a bait. Numerous field trials and commercial results have proven that MUSKIL can defeat bait shyness. The trial results presented here demonstrate how rodents start feeding on MUSKIL right away.

THE TRICK TO DEFEATING BAIT SHYNESS

MUSKIL defeats bait shyness (Neophobia) by employing fluorescent colour emission technology. MUSKIL uses a non-detectable fluorescent red dye that absorbs ultraviolet (UV) light. Unlike humans, and many other mammals, rodents only have two visual receptors, one responds to short wavelength light rays and the other to medium wavelength light rays. Thus rodents do not have full colour vision.



By adding a fluorescent colour dye that absorbs light in the UV range, rodents identify the bait as something that other members of their clan have already inspected or encountered. This means we 'trick' them into seeing the MUSKIL as being safe and non-hazardous. Hence reduced Neophobia, less bait shyness and increased bait attractiveness.

The FLUO-NP contributes to the primary bait acceptance of MUSKIL, thereafter, the formulated ingredients enhance the palatability.

IMPROVED PALATABILITY

MUSKIL has been prepared specifically for Australian conditions and provides improved palatability for our local rats and mice, especially the black rat (*Rattus rattus*).

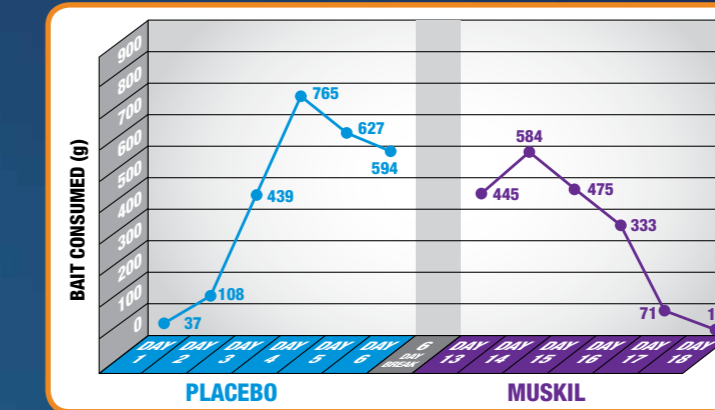
MUSKIL employs high quality aromatic ingredients to entice rodents to the bait coupled with high grade proteins to ensure optimal feeding.

All rodenticides have added colour dyes to deter feeding by birds and other animals with full colour vision. However all the usual dyes used in rodent baits can be detected by rodents and do slightly deter feeding. University trials have shown that the FLUO-NP dyes used in MUSKIL are non-detectable to rodents providing for further improvements in palatability.

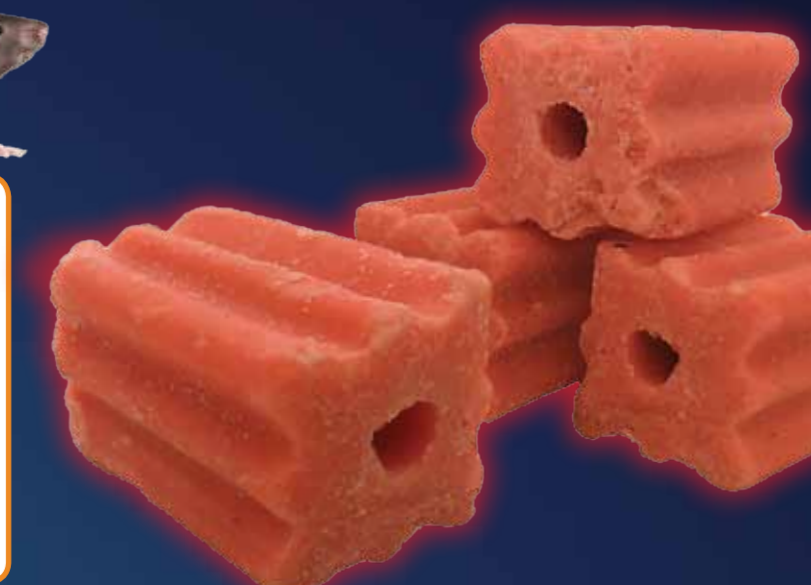
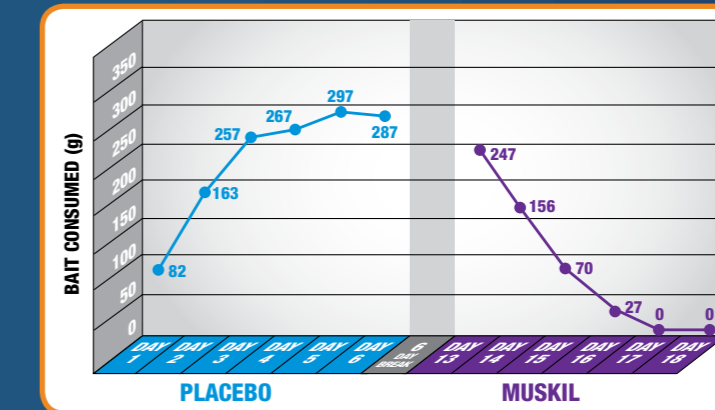
MUSKIL represents a generational breakthrough in rodenticide technology

FIELD TRIALS HIGHLIGHT EFFECTIVENESS OF MUSKIL IN OVERCOMING BAIT SHYNESS

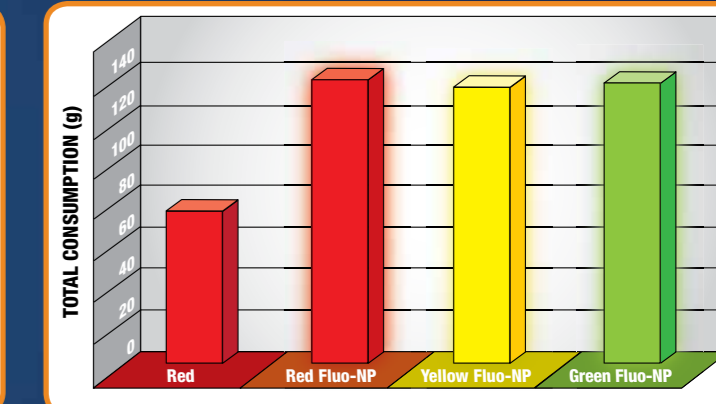
Bait acceptance and efficacy field trials of MUSKIL – RATS



Bait acceptance and efficacy field trials of MUSKIL – MICE



Total consumption of baits with and without FLUO-NP Technology



TRACKING AND CLEAN-UP IS NOW MUCH EASIER

NO MORE HIDING

MUSKIL's FLUO-NP Technology provides for traceability of ingested bait allowing for tracking of rodent movements and runs. This is because the non-toxic FLUO-NP dye is excreted into the rodent's droppings. So when you shine a UV Tracking Light onto the droppings, they will glow red, confirming the rodents have consumed MUSKIL.

Due to the fluorescence, the rodent droppings can easily be collected under UV light. You can then better trace the rodents movements to locate entry points and harbourages, and ultimately find where the rodents are dying; allowing you to retrieve the dead animals and avoid them smelling after decomposition.

REDUCED CONTAMINATION RISK

FLUO-NP Technology also allows you to better observe contamination in sensitive areas, since rodent droppings are more easily found. You can then stress the need to control the rodents and enable better cleaning of contaminated sensitive areas.

Moreover, if bait has been partly eaten and scattered by rodents, the use of a UV Tracking Light can enable you to detect even small amounts of bait spillage for clean-up.

