MATERIAL SAFETY DATA SHEET

Emergency contact number: +27 11 365-8639



Publication date: December 1997 Revised on: 23 April 2008 Sheet number: BES/SA 0082 Revision number: 6

1) IDENTIFICATION OF THE SUBSTANCE / PREPARATION

RACUMIN® RAT AND MOUSE BAIT BLOCKS Commercial name:

Company identification: Bayer (Pty.) Ltd.

Reg. No. 1968/011192/07 P.O. Box 143, Isando 1600

SOUTH AFRICA

Company contact numbers: +27 11 365 8600

+27 11 921 5911

Tygerberg Poison Centre: +27 21 931 6129

2) COMPOSITION / INFORMATION ON THE INGREDIENTS

Bait (ready for use) (RB) Chemical nature:

Coumatetralyl 0.0375 %

Hazardous components:

Chemical Name	CAS-No. / EINECS-No.	Symbol(s)	R-phrase(s)	Concentration [%]
Coumatetralyl	5836-29-3	T+	R27/28, R48/24/25,	0,0375
	227-424-0		R52/53	

3) HAZARD IDENTIFICATION OF THE PRODUCT

Risk advice to man and the environment: Harmful if swallowed.

4) FIRST AID MEASURES

General advice: Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated

clothing immediately and dispose of safely.

Wash off thoroughly with plenty of water and soap, if available with polyethyleneglycol 400, subsequently rinse with Skin contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if Eye contact:

present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation develops and persists.

Ingestion: Rinse mouth. Do NOT induce vomiting. Call a physician or poison control center immediately.

IMMEDIATELY remove to fresh air. If not breathing give artificial respiration. If breathing of victim is difficult administer Inhalation:

oxygen for a maximum period of one hour. Have victim lie down and keep warm.

Notes to physician:

State of shock, nose bleeding, bloody vomiting, abdominal pain, back pain. Symptoms:

Treatment: Elementary aid, decontamination and symptomatic treatment. Antidote:

Vitamine K1 - 10 mg i.v., if necessary repeat; in cases of grave bleeding: prothrombin complex preparates.

In severe cases administration of coagulation factors or plasma, or even a blood transfusion may be necessary.

If ingested, irrigate the stomach using activated charcoal in addition.

5) FIRE FIGHTING MEASURES

Suitable extinguishing media: Water spray, carbon dioxide (CO₂), foam, sand.

Specific hazards during fire fighting: In the event of fire the following can be released: Carbon monoxide (CO).

Special protective equipment for fire-fighters: In the event of fire and/or explosion do not breathe fumes.

In the event of fire, wear self-contained breathing apparatus.

Further information: Contain the spread of the fire-fighting media.

Do not allow run-off from fire fighting to enter drains or water courses.

6) ACCIDENTAL RELEASE MEASURES

Avoid contact with spilled product or contaminated surfaces. Personal precautions:

Use personal protective equipment.

Do not allow to get into surface water, drains and ground water. Environmental precautions:

Methods for cleaning up: Use mechanical handling equipment.

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Clean contaminated floors and objects thoroughly, observing environmental regulations.

Keep in suitable, closed containers for disposal.

Additional advice: Information regarding personal protective equipment, see section 8.

Information regarding waste disposal, see section 13.

7) HANDLING AND STORAGE

Handling: No specific precautions required when handling unopened packs/containers; follow relevant manual handling advice.

Storage: Requirements for storage areas and containers

Store in original container.

Keep containers tightly closed in a dry, cool and well-ventilated place.

Store in a place accessible by authorized persons only.

Advice on common storage: Keep away from food, drink and animal feedingstuffs.

Storage stability: Storage temperature: < 40 °C.

Suitable materials: Polyethylene film within an outer package.

HDPE (high density polyethylene).

8) EXPOSURE CONTROLS AND PERSONAL PROTECTION

Personal protective equipment: In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the

following recommendations would apply.

Respiratory protection: No personal respiratory protective equipment normally required.

Hand protection: Wear CE Marked (or equivalent) nitrile rubber gloves (minimum thickness 0,40 mm). Wash when

contaminated. Dispose of when contaminated inside, when perforated or when contamination outside

cannot be removed. Wash hands always before eating, drinking, smoking or using the toilet.

Eye protection: Wear goggles conforming to EN166 (Field of Use 5 or equivalent).

Hygiene measures: Avoid contact with skin, eyes and clothing.

Keep working clothes separately.

Wash hands before breaks and at the end of workday.

Remove soiled clothing immediately and clean thoroughly before using again.

Garments that cannot be cleaned must be destroyed (burnt).

9) PHYSICAL AND CHEMICAL PROPERTIES

Form: Solid

Colour: Grey to blue

Odour: Weak

Vapour pressure: Approx 1x10Exp -9 mbar at 20 °C (Coumatetralyl)

Solubility in water: Insoluble

10) STABILITY AND REACTIVITY

Hazardous reactions: No hazardous reactions when stored and handled according to prescribed instructions.

11) TOXICOLOGICAL INFORMATION

This product contains an anticoagulant.

Acute toxicity:

 LD_{50} oral, rat: > 300 - < 2.000 mg/kg

Test conducted with a similar formulation.

 LD_{50} dermal, rat: LD50 (rat) > 4.000 mg/kg

Test conducted with a similar formulation.

Skin irritation: No skin irritation (rabbit).

Test conducted with a similar formulation.

Eye irritation: No eye irritation (rabbit).

Test conducted with a similar formulation.

12) ECOLOGICAL INFORMATION

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Fish toxicity: (active ingredient)

LC₅₀: Approx. 1000 mg/l (96 h) guppy (Lebistes reticulatus)

Daphnia: (active ingredient)

 EC_{50} : > 14 mg/l (48 h)(Water flea (*Daphnia magna*))

Algae: (active ingredient)

EC₅₀ Growth rate: > 18 mg/l (96 h) (Desmodesmus subspicatus)

13) DISPOSAL CONSIDERATIONS

Product: In accordance with current regulations and, if necessary, after consultation with the site operator and/or with the responsible

authority, the product may be taken to a waste disposal site or incineration plant.

Contaminated packaging: Rinsed packaging may be acceptable for landfill, otherwise incineration will be required in accordance with

local regulations.

Not completely emptied packaging should be disposed of as hazardous waste.

14) TRANSPORT INFORMATION

ADNR: Not dangerous goods ADR: Not dangerous goods GGVE: Not dangerous goods GGVS: Not dangerous goods Not dangerous goods IATA C: IATA_P: Not dangerous goods IMDG: Not dangerous goods RID: Not dangerous goods

15) REGULATORY INFORMATION

Risk phrases: R 25, 51, 55.

Safety phrases: S 1/2, 13, 28, 37, 46.

WHO Classification: III (moderately hazardous)

16) OTHER INFORMATION

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

Consult the label for directions for use.

THIS INFORMATION CONCERNS ONLY THE PRODUCT AS CONFORMING TO ITS SPECIFICATIONS AND LIMITED TO THE USES HEREIN STATED.

This sheet complements the technical sheet of use but does not replace it. The information contained on this sheet is based on knowledge of the product on the date of publication. It is given in good faith.

If the logo in this document is not in colour, this document is a photocopy and could be out of date.

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RACUMIN[®] Rat and Mouse Bait Blocks / Rot en Muis Lokaasblokke

See enclosed package insert for full particulars. Sien ingeslote voubiljet vir volle besonderhede.

REG. NO. L4284 Act No. 36 of 1947 NAMIBIAN REG. NO. N-AR 0334 REG. NR. L4284 Wet Nr. 36 van 1947 NAMIBIESE REG. NR. N-AR 0334

A BAIT BLOCK CONTAINING AN ANTI-COAGULANT FOR THE CONTROL OF RATS AND MICE IN AND AROUND HUMAN AND ANIMAL DWELLINGS, FACTORIES, WAREHOUSES, STORAGE PREMISES AND NEWLY ESTABLISHED PLANTATIONS.

LOKAAS MET BLOEDSTOLWEERMIDDEL VIR DIE BEHEER VAN ROTTE EN MUISE IN EN OM WOONHUISE, DIEREHOKKE, FABRIEKE, PAKHUISE, OPBERGPERSELE EN NUWE PLANTASIE-AANPLANTINGS.

ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL:

Coumatetralyl (anticoagulant)

0,375 g/kg

Kumatetralil (bloedstolweermiddel)

NET CONTENTS: / NETTO INHOUD: 480 g, 10 kg (334 x 30 g blokke)

REGISTRATION HOLDER / REGISTRASIEHOUER:

Bayer (Pty.) Ltd. / (Edms.) Bpk. Reg. No. / Nr. 1968/011192/07 P.O. Box / Posbus 143 ISANDO 1600 SOUTH AFRICA / SUID-AFRIKA

TEL: (011) 921 5911

Batch no: / Lotnommer:

Date of manufacture: / Datum vervaardig:

RACUMIN® is a registered trademark of Bayer / is 'n geregistreerde handelsmerk van Bayer.



CAUTION VERSIGTIG





RACUMIN® RAT AND MOUSE BAIT BLOCKS

Reg. No. L4284 Act No. 36 of 1947 Namibian Reg No. N-AR 0334

BAIT BLOCK CONTAINING AN ANTI-COAGULANT FOR THE CONTROL OF THE NORWAY RAT, ROOF RAT AND HOUSE MOUSE IN AND AROUND HUMAN AND ANIMAL DWELLINGS, FACTORIES, WAREHOUSES AND OTHER STORAGE PREMISES. ALSO CONTROLS HARMFUL RODENTS IN NEWLY ESTABLISHED PLANTATIONS.

ACTIVE INGREDIENT: Coumatetralyl (anticoagulant) 0,375 g/kg

REGISTRATION HOLDER:

Bayer (Pty.) Ltd. Reg. No. 1968/011192/07 P.O. Box 143 ISANDO, 1600 SOUTH AFRICA TEL: (011) 921 5911

CAUTION

WARNINGS:

Handle with care.

Poisonous when swallowed.

Toxic to fish, wildlife, pigs and other domestic animals.

Store away from food and feedstuffs.

Keep out of reach of children, uninformed persons, animals, poultry and livestock.

IN CASE OF POISONING, CALL A DOCTOR AND MAKE THE INSERT AVAILABLE TO HIM.

PRECAUTIONS:

Wear rubber gloves when handling the bait blocks.

Wash with soap and water immediately after accidental skin contact.

Do not eat, drink or smoke whilst mixing and applying or before washing hands and face.

Destroy the empty container and never use for any other purpose.

Prevent contamination of edible commodities, drinking water or eating utensils and areas not under treatment.

The bait block should be set out in such places where it will be completely inaccessible to children and domestic animals. The use of bait boxes or other special containers is strongly recommended. Unconsumed bait block residues must be removed and burned or buried at the end of the treatment.

DIRECTIONS FOR USE: USE ONLY AS DIRECTED.

SUGGESTIONS FOR EFFECTIVE BAITING: RATS:

Survey the problem area. Establish were the rats are running to and from (their runs are easily traced by the oily dirt smears along the walls and beams) and identify the type infesting your premises e.g. Roof Rat – tail is longer than head and body; Norway Rat – tail is shorter than head and body. The Roof Rat tends to nest in roof areas, whereas the Norway Rat tends to burrow and infest lower levels.

Rats are creatures of habit and prefer to use the same runs repeatedly. Place the bait blocks on or as close to the runs as possible, as rats seldom deviate from these runs to feed. Depending on the level of infestation more than 1 block may be required. Replace blocks as soon as they are finished and continue to do so until no more bait blocks are taken.

A recommended practice is to cover up the block (e.g. in a length of pipe) as precautionary measure to prevent domestic animals and children gaining access to blocks.

HOUSE MOUSE:

Mice in general do not move more than a couple of meters from their holes. It is advisable to establish where the mice holes are and then to place numerous cubes (break the block into smaller cubes) in close proximity to the holes. Replace cubes as soon as they are finished and continue to do so until no more bait block is taken. Place cubes where they are out of reach of children and pets.

RODENTS IN NEW PLANTATIONS:

Rodents often cause bark damage, which can lead to loss of saplings in recently established plantations. In such areas, it is recommended that **Racumin® Bait Blocks** are placed at a density of 25 % (every second tree in every second row) to 50 % (every second tree). Place blocks in openended bait stations (e.g. bamboo pipes) in rodent runways for best results and to limit ingestion of bait blocks by non-target species. It is recommended that other control measures (e.g. erection of rapture perches) be instituted in addition to the use of rodenticides.

NOTE:

Coumatetralyl, like other Coumarin compounds has a cumulative action, i.e. small quantities must be consumed on several consecutive days until the specific symptoms of poisoning appear. Consequently, it is the repeated intake of small dosages and not a single intake of a large quantity that causes eradication of the rodents. This multiple feed efficacy reduces the risk of secondary poisoning of non-target animals.

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RACUMIN® ROT EN MUIS LOKAASBLOKKE

Reg. Nr. L4284 Wet Nr. 36 van 1947 Namibiese Reg. Nr. N-AR 0334

LOKAASBLOK MET 'N BLOEDSTOLWEERMIDDEL VIR DIE BEHEER VAN DIE NOORWEEGSE ROT, DAKROT EN HUISMUIS IN EN OM WOONHUISE, DIEREHOKKE, FABRIEKE, PAKHUISE EN ANDER OPBERGPERSELE. BEHEER OOK SKADELIKE KNAAGDIERE IN NUWE PLANTASIE-AANPLANTINGS.

AKTIEWE BESTANDDEEL: Kumatetralil (bloedstolweermiddel) 0,375 g/kg

REGISTRASIEHOUER:

Bayer (Edms.) Bpk. Reg. Nr. 1968/011192/07 Posbus 143 ISANDO, 1600 SUID-AFRIKA TEL: (011) 921 5911

VERSIGTIG

WAARSKUWINGS:

Hanteer versigtig. Giftig wanneer ingeneem. Giftig vir vis, wild, varke en huisdiere. Bewaar weg van voedsel en voer.

Hou buite bereik van kinders, oningeligte persone, diere, pluimvee en lewende hawe.

ONTBIED DIE GENEESHEER EN TOON VOUBILJET AAN HOM IN GEVAL VAN VERGIFTIGING.

VOORSORGMAATREËLS:

Dra rubberhandskoene wanneer die lokaasblok hanteer word.

Was dadelik met seep en water na toevallige velkontak.

Moet nie eet, drink of rook tydens toediening en voordat hande en gesig gewas is nie.

Vernietig die leë houer en moet vir geen ander doel weer gebruik nie.

Voorkom besoedeling van enige eetbare produk, drinkwater, eetgerei en areas nie onder behandeling nie.

Die lokaasblok behoort uitgeplaas te word op so 'n wyse dat dit totaal onbereikbaar is vir kinders en huisdiere. Die gebruik van lokaaskassies of ander spesiale houers word sterk aanbeveel.

Onverbruikte lokaasblokreste moet verwyder en verbrand of begrawe word aan die einde van die behandeling.

GEBRUIKSAANWYSINGS: GEBRUIK SLEGS SOOS AANGEDUI.

WENKE VIR EFFEKTIEWE BEHEER:

ROTTE:

Ondersoek die probleemgebied. Stel vas waarlangs die rotte gewoonlik hardloop (volgens die olierige veegsels op mure en balke) en identifiseer die soort rot wat voorkom, bv. die Dakrot – die stert is langer as die kop en lyf; die Noorweegse Rot – stert is gewoonlik korter as die kop en lyf. Die Dakrot maak gewoonlik nes in die dak, terwyl die Noorweegse Rot geneig is om sy blyplek op laer vlakke te maak.

Rotte is gewoontediere wat verkies om dieselfde paadjies te gebruik. Aangesien rotte selde afwyk van hulle beweginspatroon, moet die lokaasblokke op of so naby moontlik aan hierdie paadjies geplaas word. Afhangend van die vlak van besmetting mag meer as een blok nodig wees. Vervang

blok sodra dit opgebruik is en hou aan met hierdie prosedure totdat geen lokaas meer gevreet word nie.

'n Gebruik wat aanbeveel word is om die lokaasblokke te bedek (bv. in 'n stuk pyp) om te verhoed dat huisdiere en kinders die blokke kan bereik.

HUISMUISE:

Gewoonlik beweeg muise nie meer as 'n paar meter van hulle gate af nie. Dit is noodsaaklik om uit te vind waar die muisgate is en om dan 'n paar blokkies (breek die blok in kleiner blokkies) in die nabyheid van die gat te plaas. Vervang blokkies sodra dit opgebruik is en hou aan met hierdie prosedure totdat geen lokaas meer gevreet word nie. Plaas blokkies buite die bereik van kinders en troeteldiere.

KNAAGDIERE IN PLANTASIE-AANPLANTINGS:

Knaagdiere veroorsaak dikwels skade aan die bas, wat jong boompies laat vrek, in nuut-aangeplante plantasies. Dit wod aanbeveel dat **Racumin® Lokaasblokke** in sulke gebiede teen 'n digtheid van 25 % (elke tweede boom in elke tweede ry) tot 50 % (elke tweede boom) geplaas word. Blokke moet verkieslik in lokaashouers met oop punte (bv. bamboespype) in knaagdierpaadjies geplaas word om die beste resultate te behaal en om inname van die blokke deur nie-teikendiere te bekamp. Dit word aanbeveel dat ander beheermaatreëls (bv. oprig van roofvoëlsitstokke), bykomend tot die gebruik van knaagdiergif getref word.

NOTA -

Kumatetralil soos ander Kumarienderivate, het 'n opbouende werking m.a.w. klein hoeveelhede moet op opeenvolgende dae ingeneem word totdat die spesifieke simptome van vergiftiging voorkom. Dit is gevolglik die herhaaldelike inname van klein hoeveelhede en nie 'n enkele inname van 'n groot dosis nie, wat tot gevolg het dat knaagdiere uitgeroei word. Hierdie veelvuldige voedingseffek beperk die risiko van sekondêre vergiftiging van nie-teikendiere tot 'n minimum.

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