

SAFETY DATA SHEET

BROMADIOLONE 0.005% Wax Block

Issue date: 02.01.2016 (v11.2)

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1. – Identification of the substance/mixture and of the company/ undertaking

1.1 Product identifier:

Brand name: **Pest Free Zone Wax Block Rat Bait**
Authorisation number IE/BPA 70144
Chemical name : Bromadiolone 0.005 %
IUPAC name : [3-{ 3-(4'-bromobiphenyl-4-yl)-3-hydroxy-1-phenylpropyl-4-hydroxycoumarin]
Preparation number :
CE number : 249-205-9
CAS number : 28772-56-7

1.2 Relevant identified uses of the substance or mixture and uses advised against

Formulated bait to control rodent infestation

1.3 Details of the supplier of the safety data sheet

Manufacturer: Pied Piper Chemicals Ltd
Ballinure, Thurles,
Co. Tipperary - IRELAND
Tel: 052 9156422 Fax: 052 9156613.
e-mail: pied.piper1@hotmail.com

Distributor: McLoughlin RS
Unit 5, Northern Cross Business Park,
North Road, Dublin 11 - IRELAND
Tel: 01 8239200 Fax: 01 82392222.
e-mail: info@mcl.ie

1.4 Emergency telephone number:

The National Poisons Information Centre, Beaumont Hospital, Dublin (Ireland): 01 - 8092166

2.- Hazards identification

2.1 Classification of the substance or mixture

Directive 67/548/EEC classification

Symbols: Xn

Indications of danger: Harmful

Risk Phrases: R48/21/22 Harmful: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed

Safety Phrases: S2 Keep out of the reach of children
S13 Keep away from food, drink and animal foodstuffs
S20/21 When using do not eat, drink or smoke
S37 Wear suitable gloves
S46 If swallowed, seek medical advice immediately and show this container or label
S49 Keep only in the original container

Regulation (EC) n° 1272/2008 classification

Specific toxicity for the target organs (STOT RE) cat 2; H373

Harmful effects will be described in sections 9 and 12

2.2 Label elements

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Warning word: Warning

Hazard pictograms:



Hazard statements:

H373 May cause damage to organs (Liver) through prolonged or repeated exposure in contact with the skin or if swallowed

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves and protective clothing protection.
301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P234 Keep only in original container.

2.3 Other hazards

None

3.- Composition/information on ingredients

CAS No.	CE No.	Index No.	Classification	Concentration
BROMADIOLONE				
28772-56-7	249-205-9	N.A.	Acute Tox.:1; Tox. Reproduction:1 A; STOT RE 1; Acute Aquatic:1; Chronic Aquatic: 1; H300, H310, H330; H360D; H372; H400; H410 ; R26/27/28; R48/23/24/25; R50-53; R61	0.005 %
PROPYLENGLYCOL				
57-55-6	200-338-0	N.A.	Not Classified	2.00 %
DENATONIUM BENZOATE				
3734-33-6	223-095-2	N.A.	Xn; R22	0.002 %
OTHER SUBSTANCES				
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4.- First aid measures.

4.1. Description of first aid measures

Remove the affected person/s from the contaminated zone and seek medical advice.

After skin contact: Wash the affected areas with plenty of water and soap. Take off the contaminated clothes.

After eye contact: Flush eyes with plenty of water for several minutes. Seek medical attention.

After ingestion: If the ingestion was recent (< 3h.) induce vomiting only if the person is conscious.

After inhalation: Bring person to open air.

4.2. Most important symptoms and effects, both acute and delayed

Substance is an anticoagulant and the risk is a potential internal haemorrhage.

Could be absorbed in contact with the skin and cause internal haemorrhage.

If swallowed serious risk of internal haemorrhage.

Other symptoms: pallor, abdominal or back pain.

4.3. Indication of any immediate medical attention and special treatment needed

As a rule, symptomatic treatment for compensating the observed effects.

Stomach-wash if haemorrhage symptoms are not observed.

In the event of haemorrhages, inject vitamin K1, control coagulation time, and if necessary give fresh blood transfer.

Antidote: **Vitamin K1** (Konakion ®).

5. - Fire-fighting measures

5.1. Extinguishing media

Dry chemical, foam and CO₂ are to be used.

Avoid the use of water jets. Water can be used to refresh contiguous zones, objects, recipients and containers exposed to heat.

5.2. Special hazards arising from the substance or mixture

Toxic smoke and fumes can form due to the combustion or exposure to heat.

5.3. Advice for fire-fighters

Wear usual fire protection and self contained breathing equipment.

AVOID INHALATION OF FUMES AND SMOKE.

FIRES PRODUCED IN CONFINED SPACES SHOULD BE DEALT WITH BY QUALIFIED PERSONEL WEARING CERTIFIED BREATHING EQUIPMENT.

6. - Accidental release measures.

6.1. Personal precautions, protective equipment and emergency procedures

Do not inhale the powder that could be generated.

Stay upwind from the spillage.

Be protected adequately using aprons, gloves, eye protection and dust filter mask. (See section 8).

6.2. Environmental precautions

Avoid that the product reaches drains, water drains, and penetrates in the soil.

In the case of spillage in water, use adequate barrier devices to avoid the dispersion of the product.

Contact the competent authorities if situation cannot be controlled.

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6.3. *Methods and material for containment and cleaning up*

Contain the spilled product. Avoid spillage of the product into drains or riverbeds, in order to minimize the risk of pollution.

Collect the spillage with a spade and deposit it in a secure and closed container, mentioning the relative risks of the product and deliver it to a company duly authorized for its destruction. Incineration is the recommended treatment.

6.4. *Reference to other sections*

See sections 8 and 13.

7. - Handling and storage

7.1. *Precautions for safe handling*

Insure correct ventilation. Avoid inhaling the smoke, vapours or dust generated during handling.

Avoid extended or frequent contact of the product with the skin. Use special protective gloves for chemical products (nitrile). Wash the gloves with plenty water and soap after handling.

Wash hands after each utilization. Moisturizing creams after washing hands can avoid skin dryness and chapping.

Avoid contact with the eyes. In the event of risk, use adequate ocular protection.

Personal hygiene after work.

7.2. *Conditions for safe storage, including any incompatibilities*

Store in fresh and dry place. Keep away from sources of ignition and heat.

Keep locked up and out of the reach of children and domestic animals.

Keep away from foods and drinks.

Keep in its original packing.

Packing material to avoid: None.

7.3. *Specific end use(s)*

Formulated bait to control rodent infestation

8. - Exposure controls / personal protection.

8.1. *Control parameters*

(*) *Referred to active ingredient Bromadiolone*

AOEL sub chronic / chronic: 0.0012 µg/kg bw /day (*)

AOEL acute: 0.0023 µg/kg bw /day (*)

8.2. *Exposure controls*

Respiratory protection: Respiratory protection equipment is not necessary when the concentration of dust, vapour and smokes is maintained at a correct level, but it is recommended.

The use of respiratory equipment must be done according to the instructions of the manufacturer and to the regulation and rules for its utilization. Filter P2 (for solid and liquid particles, DIN 3181).

Hand protection: Use gloves to prevent skin contact.

Eye protection: Use safety goggles or face shield when eye contact can occur.

Skin protection: Use wear-once-only clothes and eliminate them when contaminated. Dry wash and starch are recommended.

Industrial hygiene: Eye fountain and washing facilities in the working area. Personal hygiene after work.

9.- Physical and chemical properties.

a - Appearance: Red or Blue Wax Blocks

b - Odour: Aromatic

c - Odour threshold; N.A.

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d - pH:	N.A.
e - Melting point;	N.A.
f - Initial boiling point and boiling range;	N.A.
g - Flash point;	N.A.
h - Evaporation rate;	N.A.
i - Flammability (solid, gas) ;	N.A.
j - Upper/lower flammability or explosive limits;	N.A.
k - Vapour pressure;	N.A.
l - Vapour density;	N.A.
m - Relative density;	N.A.
n - Solubility(ies) at 20 ° C.;	N.A.
o - Partition coefficient: n-octanol/water;	Log P 4.10 at pH 7 (*)
p - Auto-ignition temperature;	N.A.
q - Decomposition temperature;	N.A.
r - Viscosity;	N.A.
s - Explosive properties;	Not explosive
t - Oxidising properties.	Not highly oxidizing

(*) *Referred to active ingredient Bromadiolone*

9.2. Other information

None

10. - Stability and reactivity.

10.1 Reactivity

None

10.2 Chemical stability

Stable at normal conditions

10.3 Possibility of hazardous reactions

None

10.4 Conditions to avoid

Exposure to high temperatures

10.5 Incompatible materials

Strong oxidant agents

10.6 Hazardous decomposition products

Thermal decomposition can generate toxic compounds

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11.- Toxicological information.

11.1. Information on toxicological effects

(*) Referred to active ingredient Bromadiolone

Bromadiolone

a - Acute toxicity:

Oral:	Rat:	Oral LD ₅₀	1.125	mg/kg (*)
	Rabbit:	Oral LD ₅₀	1.0	mg/kg (*)
	Dog:	Oral LD ₅₀	8.1	mg/kg (*)
	Cat:	Oral LD ₅₀	25.0	mg/kg (*)

Dermal: Rabbit Dermal LD₅₀ 1.71 mg/kg (*)

Inhalation: Rats Inhalation LC50 0.43 µg/L (males and females combined) (*)

b - Skin corrosion/irritation; Not irritant

c - Serious eye damage/irritation; Not irritant

d - Respiratory or skin sensitisation; Not sensitizer (Buehler test)

e - Germ cell mutagenicity; N.A.

f - Carcinogenicity; N.A.

g - Reproductive toxicity; N.A.

h - STOT-single exposure; N.A.

i - STOT-repeated exposure; N.A.

j - Aspiration hazard. N.A.

12- Ecological information.

12.1. Toxicity

(*) Referred to active ingredient Bromadiolone

Bromadiolone

Aquatic toxicity:

Oncorhynchus mykiss	LC ₅₀	2.86	mg/L (96 h.) (*)
Daphnia magna	EC ₅₀	5.79	mg/L (48 h.) (*)
Rainbow trout:	LC ₅₀	1.4	mg/L (96 h.) (*)
Pseudokirchneriella subcapitata	E _r C ₅₀	1.14	mg/L (72 h.) (*)
Activated sludge	EC ₅₀	132.8	mg/L (extrapolated) (3 h.) (*)

Effects on earthworms or other soil non-target organisms

Eisenia fetida LC₅₀ 918 mg/L wet soil - 13 days (*)

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Birds toxicity:

Japanese quail	LD ₅₀	134	mg/Kg. (*)
bobwhite quail)	LD ₅₀	138	mg/Kg. (*)

12.2. Persistence and degradability

Degradation in soil is slow.

Aerobic degradation: half life = 53 days

Anaerobic degradation: half life = 60 days

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

Considered as PBT substance.

12.6. Other adverse effects

N.A.

13 - Disposal considerations.

13.1. Waste treatment methods

Product:

In the EEC there is not a consensus on the regulation for the elimination of chemical residues. Their elimination is regulated by local laws and arrangements. We request contact with the competent authority so as to be informed about each particular case.

Containers:

Their elimination must be accomplished according to the local official arrangements. The same measures should be adopted for the contaminated containers as for the product.

Incineration is the preferred method.

14.- Transport information.

14.1. UN number

Not Classified

14.2. UN proper shipping name

Coumarin derivative pesticide, liquid, toxic.

14.3. Transport hazard class(es)

Rail and road transport ADR/RID: Not Classified

Sea shipment: Not Classified

Air shipment: Not Classified

14.4. Packing group

Rail and road transport ADR/RID: Not Classified

Sea shipment: Not Classified

Air shipment: Not Classified

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14.5. Environmental hazards

Rail and road transport ADR/RID: None

Sea shipment: None

14.6. Special precautions for user

N.A.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

N.A.

15.- Regulatory information.

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Directive 67/548/CE (Classification, bulking and labelling of the dangerous substances) and next modified.

Regulation EC N° 1907/2006 (Reach)

Regulation EC N°1272/2008 (CLP)

Regulations n°790/2009/CE (with modified, to promote the technical and scientific improvement, ATP of Regulations num. 1272/2008/CE)

Directive 98/8/CE (Biocide)

Sanco /10203/2011 rev 4

CAR Bromadiolone

15.2. Chemical safety assessment

Not available

16. - Other information.

Abbreviations

N.A. – Not available

PG – Packing Group / Grupo embalaje

PI – Packing Instructions / Instrucciones de embalaje

SP – Special Provisions / Disposiciones Especiales

The data supplied on this safety data sheet is based on our current knowledge and on the current ECC regulations, and describes only the safety measures in the managing of the product. No warranty, express o implied is made.