(In accordance with the Regulation (EU) No 2015/830)

MURIBROM BLOCK (Bromadiolone 0.005% p/p bait block)



Version: 2

Date of review: 26/01/2018

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING.

1.1 Product identifier.

Name of the product:

MURIBROM BLOCK (Bromadiolone 0.005% p/p bait block)

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

Rodenticide bait intended for the pest control of rodents.

Uses advised against:

Uses other than those recommended.

1.3 Details of the supplier of the safety data sheet.

| Company: | QUIMICA DE MUNGUIA S.A. |
|------------|-------------------------|
| Address: | DERIO BIDEA 51 |
| City: | MUNGIA |
| Province: | VIZCAYA |
| Telephone: | 946741085 |
| Fax: | 946744829 |
| E-mail: | j.calzada@quimunsa.com |
| Web: | www.qumunsa.com |

1.4 Emergency telephone number: National Poisons Information Service (NPIS): NHS 111 (England), NHS 24 (Scotland) or NHS Direct (Wales) or by mail to director.birmingham.unit@npis.org

SECTION 2: HAZARDS IDENTIFICATION.

An anticoagulant agent of the coumarin family. It inhibits the metabolism of vitamin K and causes the depletion of dependent clotting factors. It causes a reduction of the rate of prothrombin.

2.1 Classification of the mixture.

According to Regulation (EC) No. 1272/2008: Repr. 1B : May damage the unborn child.

STOT RE 1 : Causes damage to organs through prolonged or repeated exposure.

2.2 Label elements.

Labelling according to Regulation (EC) No. 1272/2008: Pictograms:



Signal word:

Danger

H Phrases: H360D H372

May damage the unborn child. Causes damage to organs through prolonged or repeated exposure.

P Phrases: P201

> P260 P264

> P280

| Obtain special | instructions | before use. | |
|----------------|--------------|-------------|--|
|----------------|--------------|-------------|--|

- Do not breathe dust/fume/gas/mist/vapours/spray.
- Wash ... thoroughly after handling.
 - Wear protective gloves/protective clothing/eye protection/face protection.

(In accordance with the Regulation (EU) No 2015/830)

MURIBROM BLOCK (Bromadiolone 0.005% p/p bait block)



Version: 2

Date of review: 26/01/2018

P308+P313IF exposed or concerned: Get medical advice/attention.P314Get medical advice/attention if you feel unwell.P501Dispose of contents/container in accordance with the legislation in force.

Additional hazard indications:

Reserved exclusively to professional users.

Contents:

Bromadiolone

Active agents: Bromadiolone, 0.005%;

2.3 Other hazards.

The product may pose the following additional hazards: If dispersed, it may form an explosive mixture of dust and air.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

3.1 Substances.

Not Applicable.

3.2 Mixtures.

Substances that pose a danger to health or the environment in accordance with Regulation (EC) No. 1272/2008, are assigned a Community exposure threshold in the workplace, are classified as PBT/vpvb or included in the Candidate List:

| | | | (*)Classification 1272 | - Regulation No. 2008 |
|-----------------------------------------------------------------------------------|--------------------------------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Identifiers | Name | Concentration | Classification | Specific concentration limits |
| CAS No.: 57-50-1 EC No.: 200-334-9 | [1] sucrose | 2.5 - 10 % | - | - |
| CAS No.: 128-37-0 EC No.: 204-881-4 Register No.: 01- 2119565113-46-XXXX | [1] 2,6-di-terc-butil-p-cresol | 0 - 0.25 % | Aquatic Acute 1, H400 - Aquatic Chronic 1, H410 | - |
| CAS No.: 102-71-6 EC No.: 203-049-8 Register No.: 01- 2119486482-31-XXXX | [1] 2,2',2"-nitrilotrietanol | 0 - 10 % | Eye Irrit. 2, H319 | - |
| CAS No.: 28772-56-7 EC No.: 249-205-9 Register No.: Directive 2092/92/EC | Bromadiolone | 0.005 - 0.25 % | Acute Tox. 1, H310 - Acute Tox. 1, H330 - Acute Tox. 1, H300 - Aquatic Acute 1, H400 (M=1) - Aquatic Chronic 1, H410 (M=1) - Repr. 1B, H360D - STOT RE 1, H372 | Repr. 1B, H360D: C ≥ 0.003% STOT RE 2, H373: 0.0005% < C < 0.005% STOT RE 1, H372: C ≥ 0.005 |

(*) The full text of the H phrases is detailed in paragraph 16 of this Safety Data Sheet.

[1] Substance assigned an EU limit value for exposure at the workplace (see section 8.1).

(In accordance with the Regulation (EU) No 2015/830)

MURIBROM BLOCK (Bromadiolone 0.005%) p/p bait block)



Version: 2

Date of review: 26/01/2018

Print date: 26/01/2018

SECTION 4: FIRST AID MEASURES.

4.1 Description of first aid measures.

Delayed effects can be expected after exposure to the product.

Inhalation.

Move the exposed individual to a place where there is fresh air, keep the individual warm and at rest; if breathing becomes irregular or stops, apply CPR.

If in eyes.

Remove contact lenses, if present and easy to do. Rinse eyes abundantly with clean, fresh water for at least 10 minutes while pulling the eyelids up. Seek medical assistance.

If on skin.

Remove any contaminated clothing. Wash the skin thoroughly using soap and water or a suitable skin cleaning agent. Do NOT use solvents or thinners.

Ingestion.

If accidentally ingested, seek medical assistance immediately. Keep the person at rest. DO NOT induce vomiting.

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

Long-term chronic exposures can cause damage to certain organs or tissues.

The substance is an anticoagulant and the potential risk is internal bleeding.

Haemorrhagic diathesis, derived from the antiprothrombine effect, prolonged prothrombin time, which may become apparent over a minimum period of 24 h. and a maximum of 72 h.

A normal prothrombin time on admission does not exclude the diagnosis.

Other symptoms are: Pale skin, abdominal pain, or back pain.

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

If in doubt, or if symptoms of discomfort persist, seek medical assistance. Do not administer anything via the mouth to people who are unconscious. Keep the person comfortable. Turn the patient on his/her left side and remain with the patient until medical help arrives.

- Symptomatic treatment based on the effects observed.

- If less than two hours have elapsed since the ingestion, perform gastric emptying procedures, and then administer a dose of activated charcoal (25 g.)

- Check the prothrombin time or INR and if necessary transfuse coagulation factors and/or fresh blood.

- Antidote: VITAMIN K1 (Phytonadione)

- In animals, in particular in domestic animals, administer Vitamin K1 even in the absence of blood clotting problems.

SECTION 5: FIRE-FIGHTING MEASURES.

The product does not present any particular fire hazard.

5.1 Extinguishing media.

Suitable extinguishing media:

Extinguishing powder or CO2. In the case of severe fires, also alcohol-resistant foam and water mist.

Unsuitable extinguishing media:

Do not use direct jets of water. In the presence of electrical voltage, do not use water or foam as extinguishing media.

5.2 Special hazards arising from the mixture.

Special hazards.

The fire may produce thick black smoke. As a result of thermal decomposition, hazardous by-products may be generated: carbon monoxide, carbon dioxide. Exposure to the products of combustion or decomposition may pose a health hazard.

5.3 Advice for fire-fighters.

Cool any tanks, cisterns or containers near the source of heat or fire with water. Take the direction of the wind into account. Prevent the products used during fire-fighting operations from entering sewers, drains or water courses.

(In accordance with the Regulation (EU) No 2015/830)

MURIBROM BLOCK (Bromadiolone 0.005% p/p bait block)



Version: 2

Date of review: 26/01/2018

Fire-fighting equipment.

Based on the size of the fire, the use of heat resistant garments, SCBA, gloves, goggles or face masks, and boots may be required.

SECTION 6: ACCIDENTAL RELEASE MEASURES.

6.1 Personal precautions, protective equipment, and emergency procedures.

For exposure control and personal protection measures, see section 8.

6.2 Environmental precautions.

Avoid contaminating drains, surface water or groundwater, as well as the land.

6.3 Methods and material for containment and cleaning up.

The contaminated area must be cleaned immediately using a decontaminant. Pour the decontaminant on the spill and leave it for several days until no further reaction takes place in an open container.

6.4 Reference to other sections.

For exposure control and personal protection measures, see section 8. Regarding the disposal of waste, follow the recommendations set out in section 13.

SECTION 7: HANDLING AND STORAGE.

7.1 Precautions for safe handling.

For personal protection issues, see section 8. Do not use pressure to empty containers, the containers are not pressure resistant. No smoking, eating or drinking in the area where the product is being applied. Comply with occupational Health & Safety legislation.

Store the product in containers made of a material that is identical to the original containers.

7.2 Conditions for safe storage, including any incompatibilities.

Store according to local legislation. Comply with the instructions on the label. Store containers between 5 and 35 $^{\circ}$ C, in a dry and well-ventilated place, away from heat sources and direct sunlight. Keep away from sources of ignition. Keep away from oxidizing agents and from highly acid or alkaline materials. No smoking. The entry of unauthorized persons is forbidden. Once the containers have been opened, they must be carefully closed and place vertically to avoid spills.

Storage classification and qualifying quantity in accordance with Annex I to Directive 2012/18/EU (Seveso III):

| | | Qualifying quant the applic | |
|------|-------------|--------------------------------|----------------------------|
| Code | Description | Lower-tier requirements | Upper-tier requirements |
| H1 | ACUTE TOXIC | 5 | 20 |

7.3 Specific end use(s).

Product formulated for rodent control

(In accordance with the Regulation (EU) No 2015/830)

MURIBROM BLOCK (Bromadiolone 0.005% p/p bait block)



Version: 2

Date of review: 26/01/2018

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters.

Exposure limit during work to:

| Name | CAS No. | Country | Limit value | ppm | mg/m ³ |
|----------------------------|----------|-----------|-------------|-----|-------------------|
| augreen a | 57-50-1 | Copin [1] | Eight hours | | 10 |
| sucrose | 57-50-1 | Spain [1] | Short-term | | |
| 2,6-di-tert-butyl-p-cresol | 128-37-0 | Copin [1] | Eight hours | | 10 |
| 2,6-di-tert-butyi-p-cresor | 120-37-0 | Spain [1] | Short-term | | |
| 2,2',2"-nitrilotriethanol | 102-71-6 | Copin [1] | Eight hours | | 5 |
| 2,2,2 -1101100100101 | 102-71-0 | Spain [1] | Short-term | | |

[1] According to the List of Occupational Exposure Limit Values adopted by the National Institute of Occupational Health & Safety (INSHT) for the year 2017.

The product does NOT contain substances with Biological Limit Values.

Levels of concentration DNEL/DMEL:

| Name | DNEL/DMEL | Туре | Value |
|---------------------------------------------------------------------|---------------------|---------------------------------------|------------------------------|
| 2,6-di-tert-butyl-p-cresol | DNEL | Inhalation, Chronic, Systemic effects | 3.5 |
| CAS No.: 128-37-0 EC No.: 204-881-4 | (Workers) | | (mg/m ³) |
| | DNEL (Workers) | Inhalation, Chronic, Local effects | 5 (mg/m ³) |
| | DNEL (Consumers) | Inhalation, Chronic, Local effects | 1.25 (mg/m ³) |
| 2,2',2"-nitrilotriethanol CAS No.: 102-71-6 EC No.: 203-049-8 | DNEL (Workers) | Inhalation, Chronic, Systemic effects | 5 (mg/m ³) |
| | DNEL (Consumers) | Inhalation, Chronic, Systemic effects | 1.25 (mg/m ³) |
| EC NO.: 203-049-8 | DNEL (Workers) | Skin, Chronic, Systemic effects | 6.3 (mg/kg bw/day) |
| | DNEL (Consumers) | Skin, Chronic, Systemic effects | 3.1 (mg/kg bw/day) |
| | DNEL (Consumers) | Oral, Chronic, Systemic effects | 13 (mg/kg bw/day) |

DNEL: Derived No Effect Level, exposure level below which no adverse effects are anticipated.

DMEL: Derived Minimal Effect Level, exposure level that corresponds to a low risk that should be considered a minimal tolerable risk.

PNEC levels:

| Name | Details | Value |
|---------------------------------------------------------------------|------------------------------|--------------|
| 2,2',2"-nitrilotriethanol CAS No.: 102-71-6 EC No.: 203-049-8 | aqua (freshwater) | 0.32 (mg/L) |
| | aqua (marine water) | 0.032 (mg/L) |
| | aqua (intermittent releases) | 5.12 (mg/L) |
| | PNEC STP | 10 (mg/L) |
| | sediment (freshwater) | 1.7 (mg/kg |
| | | sediment dw) |
| | sediment (marine water) | 0.17 (mg/kg |
| | | sediment dw) |
| | soil | 0.151 (mg/kg |
| | | soil dw) |

PNEC: Predicted No Effect Concentration of the substance below which no adverse effects on the environment are expected.

(In accordance with the Regulation (EU) No 2015/830)

MURIBROM BLOCK (Bromadiolone 0.005%) p/p bait block)



Version: 2

Date of review: 26/01/2018

8.2 Exposure controls.

<u>Measures of a technical nature:</u> Provide suitable ventilation. This can be achieved by appropriate local extraction-ventilation and a good general extraction system.

| Concentration: 100 % Use: Rodenticide bait intended for the pest control of rodents. Breathing protection: PPE: Particle Filtration Respirator Specifications: and chin. CEN Standards: EN 149 Maintenance: Prior to use, check for cracks, deformations, etc. As a disposable item of protective equipment, it n renewed with every use. Note: If they are not correctly adjusted, they will not protect the worker. Follow the manufacturer's instru- regarding the appropriate use of the device. Type of filter p2 Hand protection: P2 Hand protection: P2 Maintenance: Gloves that provide protection against chemicals Specifications: «CE» Marking, Category III. CEN Standards: EN 374-1, EN 374-2, EN 374-3, EN 420 Store in a dry place, away from possible sources of heat; avoid exposure to the sun's rays to the e possible. Do not modify the gloves modifications in any way that may alter their resistance nor app paint, solvents or adhesives. Note: Gloves must be of the correct size, and adapt to the worker's hands. They must not be too loose o tight. Always use with clean, dry hands. Materials: PVC (polyvinyl chloride) Penetration time (min): 480 M | | | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--|--|--|--|
| Breathing protection: PPE: Particle Filtration Respirator Specifications: «CE» Marking, Category III. Manufactured in filter material, covering nose, mouth and chin. CEN Standards: EN 149 Maintenance: Prior to use, check for cracks, deformations, etc. As a disposable item of protective equipment, it renewed with every use. Note: If they are not correctly adjusted, they will not protect the worker. Follow the manufacturer's instructions: Type of filter P2 Hand protection: P2 PPE: Gloves that provide protection against chemicals Specifications: «CE» Marking, Category III. CEN Standards: EN 374-1, En 374-2, EN 374-3, EN 420 Maintenance: possible. Do not modify the gloves modifications in any way that may alter their resistance nor app paint, solvents or adhesives. Note: Gloves must be of the correct size, and adapt to the worker's hands. They must not be too loose or tight. Always use with clean, dry hands. Materials: PVC (polyvinyl chloride) Penetration time (min): > 480 (mm): 0.35 PPE: Glasses that provide protection agains the impact of particles. (mm): 0.35 Reatrials: PVC (polyvinyl chloride) Penetration time > 480 (mm): 0.35< | | | | | |
| Specifications: «CE» Marking, Category III. Manufactured in filter material, covering nose, mouth and chin. CEN Standards: EN 149 Maintenance: Prior to use, check for cracks, deformations, etc. As a disposable item of protective equipment, it n renewed with every use. Note: If they are not correctly adjusted, they will not protect the worker. Follow the manufacturer's instru- regarding the appropriate use of the device. Type of filter required: P2 Hand protection: P2 Maintenance: CE» Marking, Category III. CEN Standards: EN 374-1, En 374-2, EN 374-3, EN 420 Store in a dry place, away from possible sources of heat; avoid exposure to the sun's rays to the e possible. Do not modify the gloves modifications in any way that may alter their resistance nor app paint, solvents or adhesives. Note: Gloves must be of the correct size, and adapt to the worker's hands. They must not be too loose o tight. Always use with clean, dry hands. Materials: PVC (polyvinyl chloride) Penetration time (min): > 480 Material thickness (mm): 0.35 Eye protection: Glasses that provide protection agains the impact of particles. Specifications: «CE» Marking, Category II. Eye protection against dust and furmes. CEN Standards: EN 165, EN 166, EN 167, EN 168 The visibility through the lenses should be optimal; consequently, these devices must be clea | | | | | |
| specifications: and chin. CEN Standards: EN 149 Maintenance: Prior to use, check for cracks, deformations, etc. As a disposable item of protective equipment, it n renewed with every use. Note: If they are not correctly adjusted, they will not protect the worker. Follow the manufacturer's instring regarding the appropriate use of the device. Type of filter P2 Hand protection: P2 PPE: Gloves that provide protection against chemicals Specifications: «CE» Marking, Category III. CEN Standards: EN 374-1, En 374-2, EN 374-3, EN 420 Store in a dry place, away from possible sources of heat; avoid exposure to the sun's rays to the e possible. Do not modify the gloves modifications in any way that may alter their resistance nor app paint, solvents or adhesives. Note: Gloves must be of the correct size, and adapt to the worker's hands. They must not be too loose o tight. Always use with clean, dry hands. Materials: PVC (polyvinyl chloride) Penetration time (min): > 480 Material thickness (mm): 0.35 Eye protection: PPE: Glasses that provide protection agains the impact of particles. (CE» Marking, Category II. Eye protection against dust and fumes. (CEN Standards: EN 165, EN 166, EN 167, EN 168 Maintenance: The visibility through the lenses should be o | | | | | |
| Maintenance: Prior to use, check for cracks, deformations, etc. As a disposable item of protective equipment, it n renewed with every use. Note: If they are not correctly adjusted, they will not protect the worker. Follow the manufacturer's instructions regarding the appropriate use of the device. Type of filter required: P2 Hand protection: P2 PPE: Gloves that provide protection against chemicals Specifications: «CE» Marking, Category III. CEN Standards: EN 374-1, En 374-2, EN 374-3, EN 420 Maintenance: Store in a dry place, away from possible sources of heat; avoid exposure to the sun's rays to the exposure to order sun's rays to the exposure to the sun's rays to the exposure so the device. Note: Gloves must be of the correct size, and adapt to the worker's hands. They must not be too loose or tight. Always use with clean, dry hands. Materials: PVC (polyvinyl chloride) Penetration time (min): > 480 Material thickness (mm): 0.35 Eye protections: «CE» Marking, Category II. Eye protection against dust and fumes. CEN Standards: EN 165, EN 166, EN 167, EN 168 Maintenance: Materials: PVC (polyvinyl chloride) Protector against the impact of particles. 0.35 Eye protections: CEN Standards: EN 165, EN 166, EN 167, EN 168 CEN Marking, C | | | | | |
| Maintenance: renewed with every use. Note: If they are not correctly adjusted, they will not protect the worker. Follow the manufacturer's instru- regarding the appropriate use of the device. Type of filter required: P2 Hand protection: P2 PPE: Gloves that provide protection against chemicals «CE» Marking, Category III. CEN Standards: EN 374-1, En 374-2, EN 374-3, EN 420 Store in a dry place, away from possible sources of heat; avoid exposure to the sun's rays to the e possible. Do not modify the gloves modifications in any way that may alter their resistance nor app paint, solvents or adhesives. Note: Gloves must be of the correct size, and adapt to the worker's hands. They must not be too loose o tight. Always use with clean, dry hands. Materials: PVC (polyvinyl chloride) Penetration time (min): Material thickness (mm): 0.35 Eye protection: Glasses that provide protection agains the impact of particles. «CE» Marking, Category III. Eye protection against dust and fumes. CEN Standards: EN 165, EN 166, EN 167, EN 168 If he visibility through the lenses should be optimal; consequently, these devices must be cleaned of The protectors must be disinfected regularly according to the manufacturer's instructions. | | | | | |
| rote: regarding the appropriate use of the device. Type of filter P2 Hand protection: P2 PPE: Gloves that provide protection against chemicals Specifications: «CE» Marking, Category III. CEN Standards: EN 374-1, En 374-2, EN 374-3, EN 420 Maintenance: possible. Do not modify the gloves modifications in any way that may alter their resistance nor apprint, solvents or adhesives. Note: Gloves must be of the correct size, and adapt to the worker's hands. They must not be too loose of tight. Always use with clean, dry hands. Materials: PVC (polyvinyl chloride) Penetration time (min): > 480 Material thickness (mm): 0.35 Eye protection: PPE: Glasses that provide protection agains the impact of particles. 0.35 Eye Instandards: EN 165, EN 166, EN 167, EN 168 Image: Correct of the explanation of the protectors must be disinfected regularly according to the manufacturer's instructions. | uctions | | | | |
| required: P2 Hand protection: Gloves that provide protection against chemicals PPE: Gloves that provide protection against chemicals Specifications: «CE» Marking, Category III. CEN Standards: EN 374-1, En 374-2, EN 374-3, EN 420 Maintenance: possible. Do not modify the gloves modifications in any way that may alter their resistance nor app paint, solvents or adhesives. Note: Gloves must be of the correct size, and adapt to the worker's hands. They must not be too loose or tight. Always use with clean, dry hands. Materials: PVC (polyvinyl chloride) Penetration time (min): > 480 Material thickness (mm): 0.35 Eye protection: PPE: Glasses that provide protection agains the impact of particles. Output Outpu | | | | | |
| PPE: Gloves that provide protection against chemicals Specifications: «CE» Marking, Category III. CEN Standards: EN 374-1, En 374-2, EN 374-3, EN 420 Maintenance: Store in a dry place, away from possible sources of heat; avoid exposure to the sun's rays to the e Maintenance: Store in a dry place, away from possible sources of heat; avoid exposure to the sun's rays to the e Maintenance: Gloves must be of the correct size, and adapt to the worker's hands. They must not be too loose o Note: Gloves must be of the correct size, and adapt to the worker's hands. They must not be too loose o Materials: PVC (polyvinyl chloride) Penetration time (min): > 480 Material thickness (mm): 0.35 Eye protection: Glasses that provide protection agains the impact of particles. Specifications: «CE» Marking, Category II. Eye protection against dust and fumes. CEN Standards: EN 165, EN 166, EN 167, EN 168 Maintenance: The visibility through the lenses should be optimal; consequently, these devices must be cleaned of The protectors must be disinfected regularly according to the manufacturer's instructions. | | | | | |
| PPE: Gloves that provide protection against chemicals Specifications: «CE» Marking, Category III. CEN Standards: EN 374-1, En 374-2, EN 374-3, EN 420 Maintenance: Store in a dry place, away from possible sources of heat; avoid exposure to the sun's rays to the epossible. Do not modify the gloves modifications in any way that may alter their resistance nor appripaint, solvents or adhesives. Note: Gloves must be of the correct size, and adapt to the worker's hands. They must not be too loose or tight. Always use with clean, dry hands. Materials: PVC (polyvinyl chloride) Penetration time (min): > 480 Material thickness (mm): 0.35 PPE: Glasses that provide protection agains the impact of particles. «CE» Marking, Category II. Eye protection against dust and fumes. 0.35 CEN Standards: EN 165, EN 166, EN 167, EN 168 Image: The visibility through the lenses should be optimal; consequently, these devices must be cleaned of the protectors must be disinfected regularly according to the manufacturer's instructions. | | | | | |
| Maintenance: Store in a dry place, away from possible sources of heat; avoid exposure to the sun's rays to the epossible. Do not modify the gloves modifications in any way that may alter their resistance nor appripaint, solvents or adhesives. Note: Gloves must be of the correct size, and adapt to the worker's hands. They must not be too loose or tight. Always use with clean, dry hands. Materials: PVC (polyvinyl chloride) Penetration time (min): Atterial thickness (mm): PPE: Glasses that provide protection agains the impact of particles. 0.35 Specifications: CE» Marking, Category II. Eye protection against dust and fumes. Image: The visibility through the lenses should be optimal; consequently, these devices must be cleaned of the protectors must be disinfected regularly according to the manufacturer's instructions. | | | | | |
| Maintenance: possible. Do not modify the gloves modifications in any way that may alter their resistance nor appriant, solvents or adhesives. Note: Gloves must be of the correct size, and adapt to the worker's hands. They must not be too loose or tight. Always use with clean, dry hands. Materials: PVC (polyvinyl chloride) Penetration time (min): > 480 Material thickness (mm): 0.35 Eye protection: Glasses that provide protection agains the impact of particles. 0.35 0.35 PPE: Glasses that provide protection agains the impact of particles. 0.35 CEN Standards: EN 165, EN 166, EN 167, EN 168 The visibility through the lenses should be optimal; consequently, these devices must be cleaned of the protectors must be disinfected regularly according to the manufacturer's instructions. | | | | | |
| Note: tight. Always use with clean, dry hands. Materials: PVC (polyvinyl chloride) Penetration time (min): > 480 Material thickness (mm): 0.35 Eye protection: PPE: Glasses that provide protection agains the impact of particles. Material thickness 0.35 Specifications: «CE» Marking, Category II. Eye protection against dust and fumes. Image: CEN Standards: EN 165, EN 166, EN 167, EN 168 Image: The visibility through the lenses should be optimal; consequently, these devices must be cleaned of the protectors must be disinfected regularly according to the manufacturer's instructions. | oly | | | | |
| Materials: PVC (polyvinyl chloride) (min): > 480 (mm): 0.35 Eye protection: PPE: Glasses that provide protection agains the impact of particles. (mm): 0.35 Specifications: «CE» Marking, Category II. Eye protection against dust and fumes. (mm): (mm): 0.35 CEN Standards: EN 165, EN 166, EN 167, EN 168 (mm): (mm): (mm): (mm): Maintenance: The visibility through the lenses should be optimal; consequently, these devices must be cleaned of the protectors must be disinfected regularly according to the manufacturer's instructions. (mm): | | | | | |
| PPE: Glasses that provide protection agains the impact of particles. Specifications: «CE» Marking, Category II. Eye protection against dust and fumes. CEN Standards: EN 165, EN 166, EN 167, EN 168 Maintenance: The visibility through the lenses should be optimal; consequently, these devices must be cleaned of the protectors must be disinfected regularly according to the manufacturer's instructions. | | | | | |
| Specifications: «CE» Marking, Category II. Eye protection against dust and fumes. CEN Standards: EN 165, EN 166, EN 167, EN 168 Maintenance: The visibility through the lenses should be optimal; consequently, these devices must be cleaned of The protectors must be disinfected regularly according to the manufacturer's instructions. | | | | | |
| Maintenance: The visibility through the lenses should be optimal; consequently, these devices must be cleaned of the protectors must be disinfected regularly according to the manufacturer's instructions. | | | | | |
| Maintenance: The protectors must be disinfected regularly according to the manufacturer's instructions. | | | | | |
| Note: Indicators of deterioration can be vellowing of the lenses superficial scratches on the lenses tear | | | | | |
| | s, etc. | | | | |
| Skin protection: | | | | | |
| PPE: Protective clothing CE» Marking, Category II. Protective clothing should not be tight or too loose so | | | | | |
| Specifications: that it does not interfere in a person's movements. | | | | | |
| CEN Standards: EN 340 | | | | | |
| Maintenance: Follow the washing and storage instructions provided by the manufacturer to ensure the level of protection is unchanged. | | | | | |
| Note: Protective clothing should provide a level of comfort that is consistent with the level of protection t Note: provided against the hazard against which it protects, in the expected environmental conditions, le activity of the user, and for the time of intended use. Protective clothing should provide a level of comfort that is consistent with the level of protection t | | | | | |
| PPE: Working footwear | | | | | |
| Specifications:«CE» Marking, Category II.CEN Standards:EN ISO 13287, EN 20347 | | | | | |
| Maintenance: These items adapt to the shape of the foot of the first user. For this reason, and for matters of hyperbolic they should not be used by another person. | evel of | | | | |
| Comments: Working footwear for professional use features protective elements designed to protect the user frinjuries caused by possible accidents. Review for which workers this type of footwear is suitable. | evel of giene, | | | | |

(In accordance with the Regulation (EU) No 2015/830)

MURIBROM BLOCK (Bromadiolone 0.005% p/p bait block)



Version: 2 Date of review: 26/01/2018

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties. Appearance: Bait Block Colour: Red Odour: Odourless Odour threshold: N.App./N.Av. pH: N.App./N.Av. Melting point: N.App./N.Av. Boiling point/range: N.App./N.Av. Flash point: > 60 °C Evaporation rate: N.App./N.Av. Flammability (solid, gas): N.App./N.Av. Lower explosive limit: N.App./N.Av. Upper explosive limit: N.App./N.Av. Vapour pressure: N.App./N.Av. Vapor Density: N.App/N.Av. Relative density: 1.10 - 1.20 g/cm³ Solubility: N.App./N.Av. Lipid solubility: N.App./N.Av. Water solubility: N.App./N.Av. Partition coefficient (n-octanol/water): N.App./N.Av. Auto-ignition temperature: N.App./N.Av. Decomposition temperature: CHEMBLOCK (Bromadiolone 0.005% p/p bait block)eeeºC Viscosity: N.App./N.Av. Explosive properties: Non-explosive Oxidizing properties: Non-oxidizing

N.App./N.Av. = Not applicable / Not available due to the nature of the product.

9.2 Other Data.

Dropping Point: N.App./N.Av. Scintillation: N.App./N.Av. Kinematic viscosity: N.App./N.Av. N.App./N.Av. = Not applicable / Not available due to the nature of the product.

SECTION 10: STABILITY AND REACTIVITY.

10.1 Reactivity.

The product does not present any hazard due to its reactivity.

10.2 Chemical stability.

Stable under recommended handling and storage conditions (see section 7).

10.3 Possibility of hazardous reactions.

The product presents no possibility of a dangerous reaction.

10.4 Conditions to avoid.

Avoid any type of incorrect handling.

10.5 Incompatible materials.

Keep away from oxidizing agents and strong alkaline or acid materials, in order to avoid exothermic reactions.

10.6 Hazardous decomposition products.

The product does not decompose if used as intended.

(In accordance with the Regulation (EU) No 2015/830)

MURIBROM BLOCK (Bromadiolone 0.005% p/p bait block)



Version: 2 Date of review: 26/01/2018

SECTION 11: TOXICOLOGICAL INFORMATION.

11.1 Information on toxicological effects.

Repeated or prolonged contact with the product can cause the removal of fat from the skin resulting in non-allergic contact dermatitis and the product being absorbed through the skin. Splashes in the eyes may cause irritation and reversible damage.

Toxicological information of the substances present in the composition.

| News | | | Toxicity a | icute |
|---------------------------------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-------------------------------------------------------------|
| Name | Туре | Tests | Species | Value |
| | | LD50 LD50 | Rat Rat | 5530 mg/kg bw [1] 6400 mg/kg bw [2] |
| 2,2',2"-nitrilotriethanol | Oral | | al Technical Info report, 1966. | ormation Service. Vol. OTS0516797 |
| | Skin | LD50 | Rabbit | > 22500 mg/kg bw [1] |
| | - | [1] Union (| Carbide Data Sh | neet. Vol. 3/18/1965 |
| CAS No.: 102-71-6 EC No.: 203-049-8 | Inhalation | | | |
| | Oral | LD50 LD50 LD50 | Rat Rats Mice | 0.56 mg/kw bw [1] 1.31 mh/kg bw [2] 1.75 mg/kg bw [3] |
| | Ula | [1] Bromadiolone Assessment Report[2] The Pesticide Manual, 15th Edition[3] The Pesticide Manual, 15th Edition | | |
| Bromadiolone | | LD50 LD50 LD50 | Rabbit Rabbit Rats | 1.71 mg/kq bw [1] 2.1 mg/kg bw [2] 23.31 mg/kg bw [3] |
| | Skin | [1] Bromadiolone Assessment Report[2] Reference: Unknown[3] The Pesticide Manual, 15th Edition | | |
| | Inhalation | LC50 LC50 | Rat Rats | 0.43 ug/L [1] <0.02 mg/l [2] |
| CAS No.: 28772-56-7 EC No.: 249-205-9 | Indicion | | diolone Assessm sticide Manual, | |

a) acute toxic;

Inconclusive data for the classification.

b) skin corrosion/irritation;

Inconclusive data for the classification.

c) serious eye injury or eye irritation;

In the light of available data, the criteria for classification have not been met.

d) skin or respiratory sensitization; Inconclusive data for the classification.

e) mutagenicity in germ cells; Inconclusive data for the classification.

f) carcinogenicity; Inconclusive data for the classification.

(In accordance with the Regulation (EU) No 2015/830)

MURIBROM BLOCK (Bromadiolone 0.005% p/p bait block)



Version: 2 Date of review: 26/01/2018

g) reproductive toxicity; Classified substance: Reproductive toxicant, Category 1B: May impair fertility or cause harm to the unborn child.

h) specific target organ toxicity (STOT) - single exposure; Inconclusive data for the classification.

i) specific target organ toxicity (STOT) - repeated exposure;
 Classified substance:
 Specific target organ toxicity after repeated exposure, Category 1: Causes damage to organs through prolonged or repeated exposure.

j) aspiration hazard; Inconclusive data for the classification.

SECTION 12: ECOLOGICAL INFORMATION.

12.1 Toxicity.

| Name | Ecotoxicity | | | | |
|-------------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|-----------------------------------------------------------|--|
| Name | Type Tests Species Value | | | | |
| | Fish | LC50 Carassius auratus >5000 mg/L (24 H LC50 Leuciscus idus >10000 mg/l (48 [1] Experimental result, Study meets generally accep scientific principles. however, exposure period only 2-instead of 96 h according to recent guidelines (e.g. C | | | |
| | | 203). [2] Study meets generally accepted scientific principles. however, exposure period only 48 h instead of 96 h according to recent guidelines (e.g. OECD 203) | | | |
| 2,2',2"-nitrilotriethanol | | EC50 EC50 | Artemia salina Dafnia magna | 5600 mg/L (24 h) [1] 2038 mg/l (24 h) [2] | |
| | Aquatic invertebrates | Brine shrimp bioassay and seawater BOD of petrochemicals. Price KS, Waggy GT and Conway RA, 1974. Results of the harmful effects of water pollutants to Daphnia magna in the 21 day reproduction test. Kuehn R, Pattard M, Pernak KD and Winter A. 1989. | | | |
| | | EC0 TTC EC50 | Colpoda Scenedesmus quadricauda Scenedesmus subspicatus | 160 mg/l [1] 715 mg/l (8 d) [2] 750 mg/l (48 h) [3] | |
| CAS No.: 102-71-6 EC No.: 203-049-8 | Aquatic plants | [1] Handbook of Environmental Data on Organic Chemical 2nd ed. Van Nostrand Reinhold Co., New York, USA: 518 519. [2] Testing of substances for their toxicity threshold: Mod organisms Microcystis (Diplocystis) aeruginosa and Scenedesmus quadricauda. [3] Results of the harmful effects of water pollutants to green algae (Scenedesmus subspicatus) in the cell multiplication inhibition test. | | | |
| Bromadiolone | Fish | LC50 LC50 | Rainbow trout (Onoryhnchus mykiss) Fish | 2.86 mg/L (96h) [1] 2.2 mg/l (96 h) [2] | |

(In accordance with the Regulation (EU) No 2015/830)

MURIBROM BLOCK (Bromadiolone 0.005% p/p bait block)



Page 10 of 13 Print date: 26/01/2018

Version: 2

Date of review: 26/01/2018

| | | [1] Bromadiolone Assessment Report [2] Office of Pesticide Programs 2000. Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)). Environmental Fate and Effects Division, U.S.EPA, Washington, D.C. |
|---------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Aquatic invertebrates | EC50Dafnia magna5.79 mg/L (48h) [1]EC50Crustaceans1.12 mg/l (48 h) [2][1] Bromadiolone Assessment Report[2] Office of Pesticide Programs 2000. Pesticide EcotoxicityDatabase (Formerly: Environmental Effects Database(EEDB)). Environmental Fate and Effects Division, U.S.EPA,Washington, D.C. |
| CAS No.: 28772-56-7 EC No.: 249-205-9 | Aquatic plants | Algae ErC50 (Pseudokirchneriel 1.14 mg/L (72h) [1] la subcapitata) [1] Bromadiolone Assessment Report |

12.2 Persistence and degradability.

There is no data regarding the biodegradability of these substances. There is no data regarding the degradability of these substances. There is no data available on the persistence and degradability of the substance.

12.3 Bioaccumulative potential.

Information on the bioaccumulation of the substances present.

| Name | | Bioaccumulation | | | | |
|---------------------------|-------------------|-----------------|-----|-------|----------|--|
| | | Log Pow | BCF | NOECs | Level | |
| sucrose | | 2.7 | | | Versleve | |
| CAS No.: 57-50-1 | EC No.: 200-334-9 | -2.7 | - | - | Very low | |
| 2,2',2"-nitrilotriethanol | | -1 | | | Vandow | |
| CAS No.: 102-71-6 | EC No.: 203-049-8 | -1 | - | - | Very low | |

12.4 Mobility in soil.

There is no data available on mobility in soil. The product must not be allowed to contaminate sewers or water courses. Avoid penetration in the ground.

12.5 Results of PBT and vPvB assessment.

There is no data available on the PBT and vPvB assessment of the substance.

12.6 Other adverse effects.

There is no data available on other adverse effects for the environment.

(In accordance with the Regulation (EU) No 2015/830)

MURIBROM BLOCK (Bromadiolone 0.005% p/p bait block)



Version: 2

Date of review: 26/01/2018

Page 11 of 13 Print date: 26/01/2018

SECTION 13: DISPOSAL CONSIDERATIONS.

13.1 Waste treatment methods.

Do not discharge into sewers or water courses. Waste and empty containers must be handled and disposed of in accordance with current local/national legislation.

Follow Directive 2008/98/EC provisions regarding waste management.

SECTION 14: TRANSPORT INFORMATION.

Non-hazardous in transport. In the event of an accident and spillage of the substance, proceed as indicated in section 6. **14.1 UN Number.**

Non-hazardous in transport.

14.2 UN proper shipping name.

Description: ADR: Non-hazardous in transport. IMDG: Non-hazardous in transport. ICAO/IATA: Non-hazardous in transport.

14.3 Transport hazard class(es).

Non-hazardous in transport.

14.4 Packing group. Non-hazardous in transport.

14.5 Environmental hazards.

Non-hazardous in transport.

14.6 Special precautions for user.

Non-hazardous in transport.

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

SECTION 15: REGULATORY INFORMATION.

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

The product does not come under Regulation (EC) No 1005/2009 of the European Parliament and of the Council, of 16th September 2009, concerning substances that deplete the ozone layer.

Substance classification in accordance with Annex I of Directive 2012/18/EU (Seveso III): H1

Information related to Regulation (EC) No. 528/2012 concerning the making available on the market and use of biocidal products.Numbers/approval status/national authorization:ES-AA-2018-14-00206Numbers/approval status/European authorization:N.A.

| Substance type | Group |
|---------------------|-----------------|
| Rodenticides | Pesticides |
| | |
| Active agents | Concentration % |
| Bromadiolone | |
| CAS No.: 28772-56-7 | 0.005 |
| FC No · 249-205-9 | |

The product does not come under the procedure set out in Regulation (EC) No. 649/2012, concerning the export and import of hazardous chemicals.

(In accordance with the Regulation (EU) No 2015/830)

MURIBROM BLOCK (Bromadiolone 0.005% p/p bait block)



Version: 2

Date of review: 26/01/2018

Restrictions on the manufacture, marketing and use of certain hazardous substances and mixtures:

| Name of the substance, of the groups of | Restrictions |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Substances or of the mixtures 30. Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 classified as toxic to reproduction category 1A or 1B (Table 3.1) or toxic to reproduction category 1 or 2 (Table 3.2) and listed as follows: - Reproductive toxicant category 1A adverse effects on sexual function and fertility or on development (Table 3.1) or reproductive toxicant category 1 with R60 (May impair fertility) or R61 (May cause harm to the unborn child) (Table 3.2) listed in Appendix 5. - Reproductive toxicant category 1B adverse effects on sexual function and fertility or on development (Table 3.1) or reproductive toxicant category 2 with R60 (May impair fertility) or R61 (May cause harm to the unborn child) (Table 3.2) listed in Appendix 6. | Shall not be placed on the market or used: as substances, as constituents of other substances, or in mixtures, for supply to the general public when the individual concentration in the substance or mixture is equal to or greater than: either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No 1272/2008, or the relevant concentration set out in Directive 1999/45/EC, when no concentration limit is specified in Part 3 of Annex VI of Regulation (EC) No 1272/2008 |

15.2 Chemical safety assessment.

No chemical safety assessment has been performed regarding this product.

SECTION 16: OTHER INFORMATION.

Complete text of H Statements that appear in section 3:

| H300 | Fatal if swallowed. |
|-------|-----------------------------------------------------------------|
| H310 | Fatal in contact with skin. |
| H319 | Causes serious eye irritation. |
| H330 | Fatal if inhaled. |
| H360D | May cause harm to the unborn child. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| | |

Classification codes:

Acute Tox. 1 : Acute dermal toxicity, Category 1

Acute Tox. 1 : Acute inhalation toxicity, Category 1

Acute Tox. 1 : Acute oral toxicity, Category 1

Aquatic Acute 1 : Acute toxicity to the aquatic environment, Category 1

SAFETY DATA SHEET (In accordance with the Regulation (EU) No 2015/830)

MURIBROM BLOCK (Bromadiolone 0.005% p/p bait block)



Version: 2 Date of review: 26/01/2018

Aquatic Chronic 1 : Chronic toxicity to the aquatic environment, Category 1 Eye Irrit. 2 : Eye irritation, Category 2 Repr. 1B : Reproductive toxicant, Category 1B STOT RE 1 : Specific target organ toxicity after repeated exposure, Category 1

Sections changed from the previous version:

1,3,8,14,16

It is advisable to carry out basic training with regard to occupational health & safety for the correct handling of the substance.

Abbreviations and acronyms used:

- BCF: Bioconcentration Factor.
- CEN: European Committee for Standardisation.
- DMEL: Derived Minimal Effect Level, exposure level that corresponds risk of low concern that should
- be considered a minimal tolerable risk.
- DNEL: Derived No Effect Level, exposure level below which
- no adverse effects are anticipated.
- EC50: Half maximal effective concentration.
- PPE: Personal protective equipment.
- LC50: Lethal Concentration, 50%.
- LD50: Lethal Dose, 50%.
- Log Pow: Octanol-water partition coefficient.
- NOEC: No observed effect concentration.
- PNEC: Predicted No Effect Concentration, the concentration of the
 - substance below which no adverse effects in the environment are expected.

Key bibliographic references and data source: http://eur-lex.europa.eu/homepage.html http://echa.europa.eu/ Regulation (EU) No. 2015/830 Regulation (EC) No. 1907/2006 Regulation (EC) No. 1272/2008

The information provided in this Safety Data Sheet has been prepared in accordance with REGULATION (EU) 2015/830 OF THE COMMISSION, of 28 May 2015, amending Regulation (EC) No. 1907/2006 of the European Parliament and of the Council concerning the registration, evaluation, authorisation and restriction of chemicals (REACH) and establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Regulation (EC) No. 793/93 of the Council and Regulation (EC) No. 1488/94 of the Commission as well as the Council Directive 76/769/EEC and Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC of the Commission.

The information contained in this product Safety Data Sheet is based on current knowledge and on national laws and those in force in the EC, as the working conditions of the users are beyond our knowledge and control. The product should not be used for purposes other than those specified, without first preparing written instructions regarding its handling. It is always the responsibility of the user to take appropriate measures in order to comply with legal requirements.