MATERIAL SAFETY DATA SHEET

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PULSE WAX BLOCKS

Manufactured & Distributed by:
Synvita CC

Registration Holder:
Lifeguard Sciences (Pty) Ltd
Reg. No. 2014/079879/07
Monaghan Farm
Private Bag X 3
Lanseria
1748
SOUTH AFRICA

Tel: 033 3461920
Fax: 033 3460512

Emergency Telephone No or An Authorised Advisory Centre:
Griffon Poison Centre: (082) 4468946

1) IDENTIFICATION OF THE SUBSTANCE/PREPARATION

Commercial Name: PULSE Wax Blocks
Registration Number: L 6189
Chemical Class: 3-[3-(4'-bromo[1,1'-biphenyl]-4-yl)-1,2,3,4-tetrahydro-1-naphthalenyl
Appearance: Product is chemically a coumarin- type anticoagulant rodenticide, based on 0.05 g/kg (0.005%) active brodifacoum in the form of cereal-based wax block, blue in colour with white and brown specks, round in shaped with a central hole.
Use: Anticoagulant bait used in the control of the Roof rat, Norway rat, House mouse and Gerbil.

SA Registration Number: L6189 of Act 36 of 1947
Namibia Registration Number: N-AR1213
Zimbabwe Registration Number: 15-F-7-19

Tel: 033 346 1920/2 • Fax: 033 346 0512 • Email: info@synvita.co.za • Website: www.synvita.co.za
3 Pensrich Road, Pietermaritzburg, 3201 • P.O. Box 13221, Cascades, 3202, Republic of South Africa

VAT Reg No. 4916252552 • SYNVITA CC • Reg No. CK 2008/250743/21
2) COMPOSITION / INFORMATION ON INGREDIENTS

Brodifacoum Technical Material 0.005%
CAS Number 56073-10-0

Ingredients not precisely identified are proprietary or none hazardous.

3) HAZARDS IDENTIFICATION

UN No: 3027
IMCO: 6.1

HAZARDS: Coumarin derivative pesticides, solid, toxic. Contains brodifacoum 0.050g/kg Non-flammable, non-corrosive, non-explosive.

Nature Of Hazard: Harmful if swallowed or on prolonged skin contact and if inhaled. Significant skin absorption may occur over an extended period. Symptoms of poisoning develop after several hours or days due to the anti-coagulant properties.

Acute Symptoms of Human Exposure: Poison readily absorbed on prolonged skin contact and ingestion. Anti vitamin K_1 properties cause blood coagulation inducing haemorrhagic syndrome. Symptoms may develop over several hours or days. Poisoning may cause an abrupt and unusual abdominal pain, increasing the tendency to bleed under the skin as well as nose, gum bleeding and haemorrhaging around the elbow and knee joints. Pallor and blood in urine and faeces.

4) FIRST AID MEASURES

Eye: Immediately wash eyes with copious amounts of clean water for at least 15 minutes.

Skin: Immediately remove contaminated clothing, rinse affected skin area with plenty of soap and cool water or shower. Do not rub skin hard.
Inhalation: In the unlikely event of exposure by inhalation remove patient from source of poisoning to a well-ventilated area and loosen constricting clothes. Do not apply mouth-to-mouth respiration without the use of a disposable protective mouthpiece.

Ingestion: Keep patient calm and reassured, rinse mouth with water and ensure airway is clear. In case of suspected poisoning, immediately transport patient to doctor or hospital and contact a poison centre. Never give anything by mouth to an unconscious person. Do not apply direct mouth-to-mouth respiration without the use of a disposable protective mouthpiece.

SEEK MEDICAL ADVICE PROMPTLY AND SHOW THIS MSDS TO THE MEDICAL PRACTITIONER

Note To Physician

The efficacy of treatment must by measuring by monitoring the Quick time and treatment must only be stopped when the Quick time has returned and remained at normal values. Administer 5mg/kg Vitamin K$_1$, intravenously on the first day followed by another administration of the same dose if the Quick time does not normalise within a few hours of the first injection. Follow up with 5mg/kg per day orally on the second and following days. The duration of treatment is generally between 10 and 15 days. In severe cases, small transfusions of matched fresh blood may improve prothrombin levels.

5) FIRE FIGHTING MEASURES

Specific Hazard

Product is classified as a Group II Hazardous Substance under the Hazardous Substance Act, Act 15 of 1973, as amended.

Decomposition of Product in Fire

Under thermal decomposition Brodifacoum may emit Irritating and toxic fumes.

Fire Extinguisher Agents

Foam, chemical dry powders, carbon dioxide.

Protection For Fire-fighters

Chemical impermeable gloves, safety goggles or face shield, effective protection or self-contained breathing apparatus as dictated by circumstances, full-length protective clothing and boots.

Specific Methods

No unprotected person should be allowed in the vicinity. Evacuation of area may be necessary in the event of a fire. Decontaminate area thoroughly by removing all spillage and contaminated waste.
6) ACCIDENTAL RELEASE MEASURES

PRECAUTIONS

Personal
Wear gloves and suitable protective clothing; avoid skin contact and / or inhalation of dust; wash exposed skin area with soap and water and change clothes after handling. Report incident to emergency personnel in the event of a large spill.

Environmental
Recover wax blocks and transfer to original or waste container. Prevent contamination of sewers, waterways, low areas, drinking water, crops and / or grazing. The material is toxic to fish, birds and wildlife.

Methods For Cleaning
Contain spillage with suitable inert material, carefully shovel up and transfer to original container or waste container, mark container “HAZARDOUS WASTE”. Dispose of as for hazardous waste in accordance with local / national regulations.

Prevention of Secondary Hazardous
Inspect for damaged containers and take the necessary precautions.

Protective Clothing
Chemical impermeable gloves, safety goggles or face shield, effective respiratory protection or self contained breathing apparatus as dictated by circumstances, full-length protective clothing, apron and boots.

7) HANDLING AND STORAGE

Handling
Store wax blocks in their original packaging away from any edible commodity, food utensils and drinking water. Avoid contact with the skin by wearing rubber gloves and wash exposed skin area after handling. Do not eat, drink or smoke while handling the bait or before washing hands and face.

Environmental Precautions
Prevent contamination of all sources of drinking water, rivers and dams as well as crops or grazing areas.

Storage
Store in original containers under lock and key, out of reach of children, animals and uninformed persons. Store in a cool dry place away from sources of heat and naked flames.

8) EXPOSURE CONTROL/PERSONEL PROTECTION

In the manufacturing process minimise exposure in accordance with good hygiene practice. Ensure area is well ventilated and protective clothing is used to protect eyes and body. Suitable dust mask or respirator for pesticides should be used for respiratory protection and eyewash and safety shower should be available in the work area.
9) PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Round wax block with central hole
Weight: 10 g each
Colour: Blue with specks
Odour: Vanillin
Boiling point: 228-230°C (Brodifacoum)
Melting Point: 60°C
Vapour Pressure: Negligible @20°C
Vapour Density: Not applicable
Specific Gravity: 1.15
Solubility: Insoluble

10) STABILITY AND REACTIVITY

Stability: Stable under normal conditions. Avoid direct sunlight.
Incompatibility/ materials to avoid: Unknown
Hazardous decomposition products: Combustion products – sulphur dioxide, carbon monoxide.

11) TOXICOCLOGICAL INFORMATION

Oral toxicity: LD50 acute oral rat = 0.27mg/kg (WHO)
Dermal toxicity: LD50 acute dermal = >2000 mg/kg

Acute Symptoms of Human Exposure
Dermal:
Irritation will probably not develop following contact with human skin.

Skin Absorption:
Systemically toxic concentrations of this product will probably not be absorbed through human skin.

Inhalation:
Because this product is a wax block, inhalation is not expected to be a normal route of exposure.

Eye:
No irritation is expected to develop following contact with the human eye.

Over exposure may cause an abrupt and unusual abdominal pain, increased tendency to bleed from nose and gum. Bleeding under the skin, pallor, blood in the urine and faeces, haemorrhage into and around elbow and knee joints and multiple spread of haematoma. Individuals with blood clotting disorders may be more susceptible to over exposure effects.
12) ECOLOGICAL INFORMATION

This material is toxic to fish, birds and wildlife.

13) DISPOSAL CONSIDERATION

Accidental Spillage
Collect wax blocks and transfer to the original container or to a suitable waste container and dispose of waste in accordance with local and/or national regulations.

Disposal of Used Packing Material
Destroy the empty container by perforating and flattening and unused product as for toxic waste in accordance with local and/or national regulations. Do not re-use for any other purpose.

14) TRANSPORT INFORMATION

International Regulations

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Road transport: Not dangerous goods
Rail transport: Not dangerous goods

15) REGULATORY INFORMATION

Risk phases: R 24, 25, 51, 55
Safety phases: S 1, 2, 13, 20, 21, 24, 35, 46, 49
WHO Classification: II (moderately hazardous)

16) OTHER INFORMATION

This product contains a human taste deterrent (denatonium benzoate) and blue warning dye for safety reasons. It is included at a concentration that is repulsive to human taste but is not detected by rats and mice.

The data contained herein is based on current knowledge and information on the date of publication and is given in good faith but without warranty. No responsibility is accepted for errors or omissions or the consequences thereof.