


Country: RSA, NAM, BOT, ZAM, MOZ
Language: English
Version: 1

SDS Number: 000013
Issue Date: 2022-08-01
Print Date: 2024-11-21

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

1.1 Product identifier				
Product form	Mixtures			
Trade name	Snailban M			
Product code	1kg 10504 (6001379105086)			
Registration Number	L9124; N-AR1265			
SDS Number	000013			
1.2. Relevant identified uses of the substance or mixture and uses advised against				
1.2.1 Relevant identified uses				
Main use category	Molluscicide.			
Industrial/Professional use spec	Home and Garden.			
Use of the substance/mixture	Insecticide.			
1.2.2. Uses advised against				
See product label for restrictions.				
1.3. Details of the supplier of the safety data sheet				
Agro-Serve (Pty) Ltd 15 Diesel Road, Isando, 1600, South Africa PO Box 1189, Isando, 1600, South Africa				
Telephone	+27 861 333 586 08h00 – 17h00 Monday to Friday			
Email	info@efekto.co.za			
Website	www.efekto.co.za			
1.4. Emergency telephone number				
Country	Organisation/Company	Address	Emergency number	Comment
Poisons Centre				
South Africa	Griffon Poisons Centre		082 446 8946	Dr Gerhard H Verdoorn
Spillage				
South Africa	Spill Tech		086 100 0366	

SECTION 2: Hazards identification




2.1. Classification of the substance or mixture	
Classification according to Regulation (EC) No. 1272/2008 [CLP] Mixtures	
	Acute toxicity, oral: Category 5: H303 May be harmful if swallowed.
	Reproductive: Category 2: H361f Suspected of damaging fertility.
See Section 16 for the full text of the H statements declared above.	
See Section 11 for more detailed information on health effects and symptoms.	
2.2. Label elements	
Labelling according to Regulation (EC) No. 1272/2008 [CLP]	
Hazard pictograms	 GHS08
Hazardous components which must be listed on the label	• Metaldehyde
CLP Signal word	Warning
Hazard statements	H303: May be harmful if swallowed.
Precautionary statements	
General Statement	P101: If medical advice is needed, have product container or label at hand. P102: Keep out of reach of children. P103: Read carefully and follow all instructions.
Prevention Statement	P203: Obtain, read and follow all safety instructions before use. P280: Wear protective gloves/protective clothing/eye protection/face protection.
Response Statements	P318: If exposed or concerned, get medical advice. P301+P317: IF SWALLOWED: Get medical help. P391: Collect spillage.
Storage Statements	P403+P233: Store in a well-ventilated place. Keep container tightly closed.
Disposal Statements	P501: Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.
2.3. Other hazards	

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This pesticide is toxic to mollusks (e.g., clams, oysters, scallops, mussels). This pesticide is toxic to mammals.

SECTION 3: Composition/information on ingredients

3.1. Substances					
Bait (ready for use) (B)					
Biocidal product					
3.2. Mixtures				According to (EC) 1907/2006 (REACH) amendment Reg. (EU) 2020/878	
Chemical Name	CAS-No.	EC – Number	Conc. % by weight	Classification	Warning Symbols
Metaldehyde 2,4,6,8-tetramethyl- 1,3,5,7-tetraoxacyclooctane <small>(Hazard classification of this material is based on the worst possible case)</small>	108-62-3	203-600-2	3.0 %	Flam. Sol. 2: H226. Acute Tox. 3: H301. Repr. 2: H361f H412: Harmful to aquatic life with long lasting effects.	  
Other ingredients (non-hazardous) to 100%		Balance		100 %	
Further information					
For the full text of the Hazard statements mentioned in this Section, see Section 16.					

SECTION 4: First aid measures

4.1. Description of first aid measures	
General Advice	Have the product container, label or Safety Data Sheet with you when calling a poison control centre or physician or going for treatment. This product can be harmful to children and domestic animals. Avoid contact with eyes, as product is a mild irritant and may cause redness and burning. If inhaled, dust may cause mild irritation of nasal mucus membranes. May cause dry coughing or wheezing. Toxic if swallowed. If ingested, this product may cause excessive salivation, vomiting, nausea, acetonuria (odour of acetone on breath), convulsions, increased body temperature, depression of medullary respiratory and vasomotor control centres.
First-aid measures after inhalation	Move person to fresh air and keep person comfortable. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control centre or doctor for further treatment advice.
First-aid measures after skin contact	Immediately wash with plenty of soap and water for at least 15 minutes. Warm water may increase the subjective severity of the irritation/paresthesia. This is not a sign of systemic poisoning. In case of skin irritation, application of oils or lotions containing vitamin E may be considered. If symptoms persist, call a physician.
First-aid measures after eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Warm water may increase the subjective severity of the irritation/paresthesia. This is not a sign of systemic poisoning. Apply soothing eye drops, if needed anaesthetic eye drops. Get medical attention if irritation develops and persists.
First-aid measures after ingestion	Call a poison control centre or doctor immediately for treatment advice. Have the person sip a glass of water if able to swallow. Rinse mouth. DO NOT induce vomiting unless told to do so by the poison control centre or doctor. Do not give anything by mouth to an unconscious person.
4.2. Most important symptoms and effects, both acute and delayed	
	Temporary blurred vision due to contraction of the pupils (miosis) following contact with the eyes.
4.3. Indication of any immediate medical attention and special treatment needed	
	This product is a cholinesterase inhibitor carbamate.
	The product inhibits cholinesterase resulting in stimulation of the central nervous system, the parasympathetic nervous system, and the somatic motor nerves.
	Do not use oximes such as 2-PAM unless organophosphate intoxication is suspected. Watch for pulmonary edema, which may develop in serious cases of poisoning even after 24-48 hours. At first sign of pulmonary edema, the patient should be placed in an oxygen tent and treated symptomatically. Contraindications: derivatives of morphine.
	The following antidote is generally accepted: atropine sulphate.

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SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable	Water jet.
5.2. Special hazards arising from the substance or mixture	
	Do not introduce heat to Efekto Snailban. Decomposition products of metaldehyde are paraldehyde and acetaldehyde, of which the toxicity is unknown. Acetaldehyde may be oxidized to acetic acid, which may catalyze the decomposition of metaldehyde.
5.3. Advice for firefighters	Special protective equipment for fire-fighters
	Dangerous when exposed to heat or flame. Chemical Hazards: Carbon Dioxide, carbon monoxide, paraldehyde and acetaldehyde are all known hazardous products of combustion. In the event of fire and/or explosion do not breathe fumes. Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.
5.3. Further information	
	Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from firefighting to enter drains or water courses.


SECTION 6: Accidental release measures	
6.1. Personal precautions, protective equipment and emergency procedures	
6.1.1. For non-emergency personnel	
Emergency procedures	Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces. Ventilate spillage area. Avoid contact with skin and eyes.
6.1.2. For emergency responders	
Protective equipment	Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions	
	Do not allow to enter soil, waterways or wastewater canal.
6.3. Methods and material for containment and cleaning up	
For containment	Collect spillage.
Methods for cleaning up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.
Other information	Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	
	Information regarding safe handling, see section 7. Information regarding personal protective equipment, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.
Hygiene measures	Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics. Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.
7.2. Conditions for safe storage, including any incompatibilities	
Technical measures	Ground/bond container and receiving equipment.
Storage conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Store in a place accessible by authorized persons only. Store in original container. Keep away from direct sunlight. Protect from freezing.
Storage temperature	>0°C <40°C
7.3. Specific end use(s)	
	Refer to the label and/or leaflet.

SECTION 8: Exposure controls/personal protection

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Control parameters				
Components	CAS-No.	Exposure limit(s)	Type of exposure limit	Source
Metaldehyde	108-62-3	0.5 mg/m3	TWA	OEL
RECOMMENDATIONS IN THIS SECTION ARE FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD SEE THE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING.				
Appropriate engineering controls:	In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.			
Hand protection:	Chemical resistant nitrile rubber gloves.			
Eye protection:	Tightly fitting safety goggles.			
Skin and body protection:	Wear long-sleeved shirt and long pants and shoes plus socks.			
Respiratory protection:	When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.			
				
General protective measures:	Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.			
Environmental exposure controls:	Avoid release to the environment.			

SECTION 9: Physical and chemical properties	
9.1. Information on basic physical and chemical properties	
1. Physical state	Solid
2. Colour	Blue
3. Odour	Slight odour
4. Odour threshold	No data available
5. Melting point / Freezing point	No data available
6. Boiling point or initial boiling point and boiling range	> 97.8°C
7. Flammability	Product is not flammable
8. Lower and upper explosion limit	Product does not present an explosion hazard
9. Flash point	> 100 °C
10. Auto ignition temperature	No data available
11. Decomposition temperature	No data available
12. pH	5.5 – 7 % (23 °C)
13. Kinematic viscosity	No data available
14. Solubility in water	Insoluble
15. Partition coefficient octanol / water (log value)	No data available
16. Vapour pressure	No data available
17. Density Solubility	No data available
18. Relative density	No data available
19. Particle characteristics	No data available
9.2. Other information	
	No additional information available.

SECTION 10: Stability and reactivity	
10.1. Reactivity	
	Stable under normal conditions.
10.2. Chemical stability	
	Stable under recommended storage conditions.
10.3. Possibility of hazardous reactions	
	No hazardous reactions when stored and handled according to prescribed instructions.
10.4. Conditions to avoid	
	Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.
10.5. Incompatible materials	
	Store only in the original container.

SECTION 11: Toxicological information	
11.1. Information on toxicological effects	

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Acute toxicity	: Not classified
Final acute toxicity classification formulated Product	
LD50 oral rat	LD50 (rat) 3,333 mg/kg
LD50 dermal rat	LD50 (rat) N/A
LC50 inhalation rat (mg/l)	LC50 (Rat) N/A
Metaldehyde	
LD50 oral rat	LD50 (rat) 227 - 690 mg/kg
LD50 dermal rat	LD50 (rat) > 5,000 mg/kg
LC50 inhalation rat (mg/l)	LC50 (Rat) 206.1 mg/l
ATE CLP (vapours)	3.200 mg/l/4h
ATE CLP (dust, mist)	3.200 mg/l/4h
Skin corrosion/irritation	Not irritation (Rabbit)
Serious eye damage/irritation	Mild irritant (Rabbit).
Respiratory or skin sensitisation	Non-sensitizing. (guinea pig)
STOT-single exposure	Not classified.
STOT-repeated exposure	May cause organ damage from repeated oral exposure at high doses.
Aspiration hazard	Not classified.
Assessment mutagenicity	Not classified.
Assessment carcinogenicity	Not classified.
Assessment toxicity to reproduction	Not classified.
Assessment developmental toxicity	Not classified.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general:	Very toxic to aquatic life with long lasting effects.
Metaldehyde	
LC50 fish 1	LC50 (Rainbow trout (<i>Oncorhynchus mykiss</i>)) 75 mg/l: 96 h
EC50 Daphnia 1	EC50 (Daphnia magna (Water flea)) 90 mg/l: 48 h
ErC50 (algae)	Scenedesmus quadricauda (Green algae) > 200 mg/l; Exposure time: 72 h
Bees LD50 (oral)	> 87 µg/bee.
Bees LC50 (contact)	> 113 µg/bee
Earthworm LC50 (14 days)	> 1,000 ppm
Birds Oral LD50	Bobtail quail: 170 mg/kg
Birds LC50 (14-day diet)	Bobwhite quail (<i>Colinus virginianus</i>): 3460 ppm
Effects on other organisms	The 3% pelleted bait is reported to be toxic to wildlife. When used as directed, bait agents with 6% active ingredient are not toxic to bees. Bait pellets containing metaldehyde are attractive to dogs. Pets should be confined during application, and kept away from application and storage sites.

12.2. Persistence and degradability

Persistence and degradability	Readily biodegradable.
Koc	60.4

12.3. Bioaccumulative potential

Log Pow	Bioconcentration factor (BCF) 44
Bioaccumulative potential	Does not bioaccumulate.

12.4. Mobility in soil

Ecology - soil	No data available.
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12.5. Results of PBT and vPvB assessment

	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII.
	This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII.

SECTION 13: Disposal considerations











13.1. Waste treatment methods

Waste treatment methods	Dispose of contents/container in accordance with licensed collector's sorting instructions.
Additional information	Follow container label instructions for disposal of wastes generated during use in compliance with the product label. Never place unused product down any indoor or outdoor drain.

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Contaminated packaging	Do not re-use empty containers. Place empty container in trash. Follow advice on product label and/or leaflet.
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SECTION 14: Transport information				
In accordance with ADR / IMDG / IATA / AND / RID				
ADR	IMDG	IATA	ADN	RID
14.1. UN number				
2757	2757	2757	2757	2757
				
14.2. UN proper shipping name				
Carbamate pesticide, solid, toxic.	Carbamate pesticide, solid, toxic.	Carbamate pesticide, solid, toxic.	Carbamate pesticide, solid, toxic.	Carbamate pesticide, solid, toxic.
Transport document description				
UN 2757 CARBAMATE PESTICIDES, SOLID, TOXIC. (Metaldehyde), 6.1, III, (D/E), ENVIRONMENTALLY HAZARDOUS	UN 2757 CARBAMATE PESTICIDES, SOLID, TOXIC. (Metaldehyde), 6.1, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 2757 CARBAMATE PESTICIDES, SOLID, TOXIC. (Metaldehyde), 6.1, III, ENVIRONMENTALLY HAZARDOUS	UN 2757 CARBAMATE PESTICIDES, SOLID, TOXIC. (Metaldehyde), 6.1, III, ENVIRONMENTALLY HAZARDOUS	UN 2757 CARBAMATE PESTICIDES, SOLID, TOXIC. (Metaldehyde), 6.1, III, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)				
6.1	6.1	6.1	6.1	6.1
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes

SECTION 15: Regulatory information	
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture	
Registration No.	L9124; N-AR1265
<p>This chemical is a registered pesticide product and is subject to certain labelling requirements under law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label.</p>	
Hazard statements:	<p>Warnings Important: This product may be harmful to children and fatal to domestic animals if ingested. Children and dogs may be attracted to Metaldehyde products and their packaging. Keep children and pets out of treated areas from the start of application until the applied product is no longer visible.</p> <p>Cease application 7 days prior to harvest on edible crops.</p> <p>Poisonous when swallowed.</p> <p>Store in a cool place away from food and feed.</p> <p>Keep out of reach of children, uninformed persons and animals.</p>
WHO-classification:	III (Slightly hazardous)
Classification according to GHS:	Category 5: unclassified
IRAC Insecticide Group Code:	1A
15.2. Chemical safety assessment	
	Young people under the age of 18 are not allowed to work with the substance.

SECTION 16: Other information			
Indication of changes:	Changed item	Change	Comments
Section			

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Full text of H- and EUH-statements:	
H228	Flammable solid.
H301	Toxic if swallowed.
H361f	Suspected of damaging fertility.
H412	Harmful to aquatic life with long lasting effects.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Acute. tox. 5	H303	Calculation method.
Repr. 2	H361f	Calculation method.

HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)			
Health - 1	Flammability - 1	Physical Hazard - 1	PPE - 1
0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard			

Abbreviations and acronyms	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE	Acute toxicity estimate.
CAS-Nr.	CAS-Nr. Chemical Abstracts Service number.
CEILING	Ceiling Limit Value .
Conc.	Concentration.
EC-No.	European community number.
ECx	Effective concentration to x %.
IATA	International Air Transport Association.
IBC	International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) .
ICx	Inhibition concentration to x %.
IMDG	International Maritime Dangerous Goods.
LCx	Lethal concentration to x %.
LDx	Lethal dose to x % .
LOEC/LOEL	Lowest observed effect concentration/level.
MARPOL	MARPOL: International Convention for the prevention of marine pollution from ships.
N.O.S.	Not otherwise specified.
NOEC/NOEL	No observed effect concentration/level .
OECD	Organization for Economic Co-operation and Development.
OES	Occupational Exposure Standard.
PEAK	PEAK: Exposure Standard - Peak means a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail.
SK-SEN	Skin sensitiser.
SKIN_DES	SKIN_DES: Skin notation: Absorption through the skin may be a significant source of exposure.
STEL	STEL: Exposure standard - short term exposure limit (STEL): A 15-minute TWA exposure which should not be exceeded at any time during a working day even if the eight-hour TWA average is within the TWA exposure standard. Exposures at the STEL should not be longer than 15 minutes and should not be repeated more than four times per day. There should be at least 60 minutes between successive exposures at the STEL.
TWA	TWA: Exposure standard - time-weighted average (TWA): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.
UN	United Nations.
WHO	World health organisation.

This safety data sheet provides health and safety information. This product is to be used in applications with best use practice. The product information in this data sheet is to the best of our knowledge correct as at the date of publication. Agro-Serve (Pty) Ltd does not accept responsibility for damage caused by incorrect use of this information.

Training and related advice: This document contains important information to ensure the safe storage, handling of this product. It is the responsibility of your organisation to ensure that the information contained in this document is communicated to staff and that all necessary training has been given.

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions.

Prepared BY: Nico Lionel van der Westhuis – Technical Support Marketing

SDS EU (REACH Annex II) Update 1 August 2022

End of Safety Data Sheet

Snailban M

Safety Data Sheet

According to (EC) 1907/2006 (REACH) amendment Reg. (EU) 2020/878



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