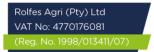
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SAFETY DATA SHEET

ACCORDING TO THE SOUTH AFRICAN REGULATIONS FOR HAZARDOUS CHEMICAL **AGENTS - 2021**

ESCARGO 15 RB

Revised on / Version: 01/09/2022 / 0004 Replaces Revision of / Version: 18/07/2017 / 0003 PAGE 1 OF 11

SECTION 1: Product and Company Identification

Identification of the product/preparation

Product Name:	ESCARGO 15 RB
Trade Name/Synonyms:	ESCARGO 15 RB
Registration Number:	L9057
Product Description and Type:	A granular bait for the control of snails and slugs.

Active Ingredient

Formula:	Metaldehyde
CAS Number:	108-62-3

Supplier

Company Name:	Rolfes Agri (Pty) Ltd
Address:	288 Mundt Street
	Waltloo
	Pretoria
	South Africa
Phone Number:	+27(0)12 803 0145
E-mail Address:	info@rolfesagri.co.za

Emergency Phone Numbers

Nature of Emergency	Emergency Operator	Telephone Number
Office Hour Emergency	Rolfes Agri (Pty) Ltd.	+27(0)12 803 0145
Helpline		
Spill Response and	Spill Tech, Oil and chemical	086 100 0366
Transport Incidents	pollution control	083 253 6618
		www.spilltech.co.za



Relevant identified uses of the product and uses advised against

For use in Agriculture and use as per the product label.

SECTION 2: Hazards Identification

Classification of the substance or mixture

This product is classified as hazardous according to the criteria in South Africa - GHS classification and labelling of chemicals and the Regulations for Hazardous Chemical Agents - 2021.

Classification:

Hazard class	Category	Hazard Statement Number
Reproductive Toxicity	2	H361

Label Elements

South Africa. GHS classification and labelling of chemicals and the Regulations for Hazardous Chemical Agents - 2021.

Pictogram:



Signal Word: Warning

Hazard Statements:

Statement Number	Hazard Statement
H361	Suspected of damaging to fertility or the unborn child

Precautionary Statements:

General –

Statement Number	Hazard statement
P101	If medical advice is needed, have container or label at hand.
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.

Prevention -

Statement Number	Precautionary Statement
P203	Obtain, read, and follow all safety instructions before use.
P280	Wear protective gloves, clothing, eye and face protection.

Response -

Statement Number Precautionary Statement

P318	IF exposed or concerned, get medical advice.
1 310	I exposed of concerned, get medical advice.

Storago -

Otorage -	
Statement Number	Precautionary Statement
P405	Store locked up.

Disposal -

Statement Number	Precautionary Statement
P501	Empty all pesticides from the container by placing it upside down over the spray tank and holding it there for at least 30 seconds. Puncture the rinsed container to render it useless and send to a recycler.
Other Hazards	

None known.

SECTION 3: Composition/Information on Ingredients

Mixture

Common Name:	Metaldehyde
IUPAC/Chemical Name:	2,4,6,8-tetramethyl-1,3,5,7-tetraoxocane.
Chemical Family:	
Formulation:	Metaldehyde 15g/kg

Ingredients with Hazard Concerns (GHS)

According to UN GHS criteria.

Hazardous Component	CAS Number	Weight	GHS Classification
Metaldehyde	108-62-3	15 g/kg	Reproductive 2

NOTE: There are no other ingredients present according to the current knowledge of the supplier (condisering their concentrations present in the product) that are classified as hazardous to health or the environment and that cause/contribute to the correct GHS classification of this product. These ingredients are therefore, in terms of the South African Hazardous Chemical Agent Regulations 2021; Regulation 14(b), not listed.

SECTION 4: First-Aid Measures

Description of First-aid Measures

General Advice	The symptoms resulting from direct exposure to the product could appear a while after exposure. If there is persistent discomfort, seek medical attention. Provide this SDS to medical personnel for treatment. Immediately remove contaminated clothing and remove the affected person from the contamination area. Keep the person warm, calm and covered up. First Aid personnel should pay attention to their own safety.
Eye Contact	Flush eyes with water as a precaution.
Skin Contact	Remove all contaminated clothing and shoes. Wash contaminated clothing before re-use. Rinse the skin immediately with plenty of water.
Inhalation	Remove the affected victim from exposure to an area with fresh air as a precaution. If not breathing, administer artificial respiration with the aid of a pocket mask equipped with a one-way valve or other

	proper respiratory medical device. Obtain immediate medical attention.
Ingestion	If exposed or concerned, get medical advice.

Most important symptoms/effects, acute and delayed

Symptoms of exposure to the product include salivation, lethargy, abdominal pain, nausea, vomiting, and diarrhea, progressing to seizures, hyperthermia, comas, and death. inhalation produces mucous membrane irritation, and inhaling pyrolized metaldehyde has caused noncardiogenic pulmonary edema

Indication of any immediate medical attention and special treatment needed Notes to physician: None

Specific treatments: Treat symptomatically and supportively.

SECTION 5: Firefighting Measures

Suitable (and unsuitable)	Use carbon dioxide, dry chemical, alcohol resistant foam, or
extinguishing media	water spray. Do not use water jets.
Specific hazards arising	Fires involving the product may produce irritating or poisonous
from the chemical	vapours, mists, or other products of combustion. Closed
including thermal	containers may explode form vapour expansion in high heat.
decomposition products	
Special protective	Firefighters must wear emergency equipment including positive
equipment and precautions	pressure self-contained breathing apparatus with a full-face
for fire-fighters	mask. Remove unaffected containers from fire area if possible.
	Act in accordance with the site's Internal Emergency Plan and
Additional provisions	the Workplace Specific Procedures for actions to be taken after
	an accident or other emergencies.

SECTION 6: Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures

Ventilate the area of the spill or leak, especially when in confined areas. Do not touch or walk-through spilled material as slippery when spilt. Contain spills if it can be done without risk and clean-up immediately. Wear appropriate protective clothing recommended in Section 8 of the SDS.

Environmental Precautions

Prevent spillage or further leakage if safe to do so.

Do not allow the spilt product to enter water courses and drains and avoid contact with soil. Do not allow the spilt product to spread to other areas - keep the spilt material contained and isolated.

Report spills and releases as required to appropriate authorities if the spilt product has caused environmental pollution (sewers, water ways, soil, or air).

Methods for cleaning up

For small spills, Sweep up with damp absorbent material. Place into a labelled waste container subsequent reclamation or disposal. Keep the wash water out of drains, sewers and waterways.

For large spills, Sweep up with absorbent material. Avoid creating dusty conditions and prevent wind dispersal and place the residues into a suitable container for proper disposal. Keep the wash water out of drains, sewers and waterways.

Reference to other sections

See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and Storage

Precautions for safe handling

Always provide good ventilation in the work area. Prevent contact with eyes, skin and clothing. Do not breathe in dust/vapours/spray mists. Wear protective clothing and equipment during handling as described in Section 8 of the SDS.

Do not eat or drink during use. Wash the hands and face thoroughly with soap after handling. Keep containers closed when not in use. Do not permit smoking in use or storage areas. Locate emergency showers and eye-rinsing facility near the work/handling area. Maintain good normal industrial hygiene and housekeeping practices in areas where the product is used/handled.

Conditions for safe storage, including any incompatibilities

Always store locked up and keep containers tightly closed when not in use. Store in a cool, dry and well-ventilated place, out of direct sunlight. Check storage containers regularly for leaks and protect containers from physical damage. Store in the original container, avoid cross contamination with other agricultural products. Keep out of reach of children, uninformed persons, and animals. Do not contaminate water, food, or feed by storage or disposal.

It is recommended to have appropriate spill control kits equipped with absorbent material in close proximity to storage areas (see Section 6).

Specific end use(s)

Use as directed. Use original container.

SECTION 8: Exposure Controls and Personal Protection

National occupational exposure limits- Restricted limits for hazardous chemical agents.

Туре	Control Parameter	Update	Basis
OEL-eight	N/A	2021	South African RELs*
hour TWA			
OEL-STEL/C	N/A	2021	South African RELs*
Recon	nmended Exposure Lin	nit.	
Occup	ational Exposure Limi	t- Time W	eighted Average.
	5	ır working	day, for a five-day
Occupational Exposure Limit – short Term Exposure Limit			
/Ceiling Limit. Peak airborne concentration determined over the shortest analytically practicable period of time, which does not exceed 15 minutes.			
	OEL-eight hour TWA OEL-STEL/C Recon Occup Calcul workin Occup /Ceilin over th	OEL-eight hour TWA N/A OEL-STEL/C N/A Recommended Exposure Limit Occupational Exposure Limit Calculated over an eight-hout working week. Occupational Exposure Limit /Ceiling Limit. Peak airborn over the shortest analytically	OEL-eight hour TWA N/A 2021 OEL-STEL/C N/A 2021 Recommended Exposure Limit. 0ccupational Exposure Limit- Time W OEL-ulated over an eight-hour working working week. 0ccupational Exposure Limit – short Te Occupational Exposure Limit. 0ccupational Exposure Limit- time W N/A 2021 Recommended Exposure Limit. 0ccupational Exposure Limit – time W Occupational Exposure Limit – short Te N/A VCeiling Limit. Peak airborne concent over the shortest analytically practicab

	National Biological Ex	xposure Indices for (BEIs) for hazardous o	chemical agents.
ſ	Component	Somple Metrix	Sample Time	Value

Component	Sample Matrix	Sample Time	Value
N/A	N/A	N/A	N/A

Appropriate engineering controls

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal Protective Equipment

Respiratory Protection:Respiratory protection selection must be based on kr anticipated exposure levels, the hazards of the product safe working limits of the selected respirator. Use a properly fitted and well-maintained particula respirator, complying with an approved standard. Re selection and use should be based on contaminant type, for concentration. For emergency conditions, use an approved positive-press contained breathing apparatus.	
Skin and HandSelect skin and hand protection based on the task being protection:Skin and Handand the risks involved with the task. The gloves should be immediately in case of damage or signs of wear. The protective clothing must be properly fitted and well maintain	
Eye/Face Protection:	Select safety eye/face protection based on the task being performed and the risks involved with the task. Wear tightly fitted and well-maintained safety eyewear compliant with an approved standard.
General Safety and Hygiene Measures:	Wash the hands and/or face before breaks, eating, smoking, or using the lavatory and at the end of the shift/working period. Eye wash fountains and safety showers should be available and easily accessible. Wash contaminated clothing before reuse.

Environmental exposure controls

In accordance with the local legislation for the protection of the environment it is recommended to avoid environmental spillage or releases of both the product and its container.

SECTION 9: Physical and Chemical Properties

Data applicable to mixture.

	Appearance/physical state	Solid, granules
Appearance	Odour characteristics	None
	Colour	Blue or red
	Boiling point (°C)	Not applicable
Volatility	Vapour pressure (Pa)	Not applicable
	Evapouration Rate at 20 °C	Not applicable
	Relative density (kg/m ³ , relative density of	Not applicable
	water =1)	
	Solubility in water (g/100mL)	Swellable/ insoluble
Broduct Decorintion	Decomposition temperature (°C)	Not applicable
Product Description	Melting point/freezing point (°C)	Not applicable
	рН	Not applicable
	Density/relative density (g/cm ³⁾	Not applicable
	Particle characteristics	Not applicable
Flammability	Flammable (Y/N)	Not applicable

Flash point (°C)	Not applicable
Flammable limits-LEL	Not applicable
Auto-ignition Temperature (°C)	Not applicable

*Not relevant due to the nature of the product, not providing information property of its hazards.

Other Hazard Information

None.

SECTION 10: STABILITY AND REACTIVITY

Reactivity

The product is stable under normal conditions of temperature and pressure.

Chemical Stability

Stable under normal ambient conditions of use, storage, and transport.

Possibility of Hazardous Reactions

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

Conditions to Avoid

Avoid prolonged periods in direct sunlight

Incompatible Materials

Incompatable with: Not Applicable.

Hazardous Decomposition Products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological Information

Information on likely routes of exposure Toxicokinetics, metabolism and distribution:

Non-human toxicological data: No Information available. Method: No Information available. Dosage: No Information available. Routes of administration: No Information available. Results: No Information available. Absorption: No Information available. Distribution: No Information available. Metabolism: No Information available. Excretion: No Information available.

Information on toxicological effects

<u>Acute oral toxicity:</u> No Information available <u>Acute dermal toxicity:</u> No Information available. <u>Acute inhalation toxicity:</u> No Information available. <u>Skin corrosion/irritation</u>: No information available. <u>Serious eye damage/irritation</u>: No Information available. <u>Respiratory or skin sensitization</u>: No Information available. <u>Germ cell mutagenicity:</u> No Information available. <u>Carcinogenicity:</u> No Information available. <u>Reproductive toxicity:</u> Methaldehyde (99%) Reproductivity Category 2. <u>STOT-single exposure:</u> No Information available. <u>STOT-repeated exposure:</u> No Information available. <u>Aspiration hazard:</u> No Information available.

Symptoms related to the physical, chemical, and toxicological characteristics

Symptoms of exposure to the product include salivation, lethargy, abdominal pain, nausea, vomiting, and diarrhea, progressing to seizures, hyperthermia, comas, and death. inhalation produces mucous membrane irritation, and inhaling pyrolized metaldehyde has caused noncardiogenic pulmonary edema

SECTION 12: Ecological Information

Ecotoxicity

<u>Short-term (Acute) hazard Aquatic</u>: No information available. <u>Long-term (Chronic) hazard Aquatic</u>: No information available <u>Biodegradability in the aquatic environment</u>: Not readily biodegradable.

Toxicity to other species. Birds: No information availble. Bees: No information availble.

Other Environmental and Adverse Effects:

Persistence and Degradability: Not readily biodegradable

Bioaccumulative Potential:

No information available.

Mobility in Soil:

No information availble.

Other Adverse Effects: None Known

SECTION 13: Disposal Considerations

Waste handling and disposal

Dispose product related waste in accordance with all local regulations and prevent the contamination of water, food, or feed by storage or disposal of the waste.

General container handling

Empty all pesticides from the container by placing it upside down over the spray tank and holding it there for at least 30 seconds. Puncture the rinsed container to render it useless and send to a recycler. Do not use empty containers for any other purpose.

SECTION 14: Transport Information				
Land Transport	Inland	See Transport	Air Transport	

	(ADR/RID)	Waterways (AND/ADNR)	(IMDG)	(ICAO-TI/IATA- DGR)
UN Number	Not regulated	Not regulated	Not regulated	Not regulated
UN Proper Shipping Name	-	-	-	-
Transport Hazard Class	-	-	-	-
Transport Hazard Class Pictogram	-	-	-	-
Transport Subsidary Class	-	-	-	-
Packaging Group	-	-	-	-
Environmental Hazard	-	-	-	-

SECTION 15: Regulatory Information

Safety, health, and environmental regulations/legislation for the mixture.

South Africa

Regulations for Hazardous Chemical Agents – 2021 – SA Occupational Health and Safety Act. - Handling, labelling and Safety Data Sheets for hazardous and GHS classified substances and mixtures. Occupational Exposure Limits.

Hazardous Substances Act, 1973 (Act No.15 of 1973) - Requirements on the prohibition and control of the importation, manufacture, sale, use, operation, application, modification, disposal or dumping of hazardous substances.

Occupational Health and Safety Act No. 85 of 1993.- Occupational Health and Safety Standards for employers and users working with and around hazardous chemical substances.

National Road Traffic Act, 1996 (ACT NO. 93 of 1996). - The identification and classification of dangerous goods for transport by road and rail modes.

Botswana

Pesticides and Toxic Substances Regulations. 1994 (2006) - Control and management of pesticides and other toxic substances.

Environmental and Pollution Control Act. 1990 - Hazardous waste disposal, hazardous substances, pesticides and effluent wastewater/discharge.

Namibia

Labour Act 11 of 2007 - Hazardous substances classification, labelling, Chemical Safety Data Sheets and Occupational Exposure Limits. Notification of the use of carcinogens and other controlled substances.

Regulations relating to the Health and Safety of Employees at Work Government Notice 156 of 1997. Labour Act 11 of 2007 schedule, item 2(2). - Occupational Health and Safety Standards for employers and users working with and around hazardous chemical substances.

Indication of changes

SECTION 16: Other Information

REVISED ON / VERSION: 01/09/2022 / 0004

Alignment to the GHS.

Relevant classification and H-Statements (Number and full text):

Reproductive Toxicity- Category 2 H361: Suspected of damaging to fertility or the unborn child

Key to Abbreviations

- AND European Provisions concerning the International Carraige od Dangerous Goods by inland Waterways ADR The European Agreement concerning the International Carraige of Dangerous Goods by Road ATE Acute Toxicity Estimate COD **Chemical Oxygen Demand** GHS Globally Harmonised System of Classification and Labelling of Chemicals International Air Transport Association IATA **ICAO** International Civil Aviation Organisation IMDG International Maritime Dangerous Goods Logarithm of the octanol/water partition coefficient Log_{Pow} Lethal Dose 50 LD50 LC50 Lethal Concentration 50 RID The Regulations concerning the International Carraige of Dangerous Goods by Rail SDS Safety Data Sheet
- UN United Nations

Notice to Reader

The information contained in this Safety Data Sheet relate only to the specific product and do not relate to the use of the product in combination with any other product or process. Information in the SDS is supplied to the best of ROLFES AGRI (PTY) LTD's knowledge and are believed to be current and correct as of the date on this SDS. All reasonable efforts were exercised to compile this SDS in accordance with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

The SDS only provides information applicable to the health, safety and environmental hazards of this product at the date of issue in order to facilitate the safe use, handling, storage and transport of this product and does not replace any product information or product specifications.

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