

METAREX

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: METAREX
Other identifier: Metaldehyde
Recommended use: Molluscicide
Restrictions on use: Agricultural
Supplier: Villa Crop Protection (Pty) Ltd
PO Box 10413
Aston Manor, 1630, South Africa
Telephone: (011) 396 2233
Fax: (011) 396 4666
Website: www.villacrop.co.za

Emergency telephone numbers:
24 Hr Transport / Spill emergency no:

Bateleur: +27 86 199 9071

(Client: Villa Crop Protection)

Poisoning:

Griffon Poison Information Centre +27 82 446 8946

Western Cape Poisons +27 861 555 777

Tygerberg Hospital +27 21 931 6129

2. HAZARDS IDENTIFICATION

UN GHS, Regulation EC 1272/2008 [EU-GHS/CLP] EU & SANS 10234:2008		
Hazard classes	Hazard categories	H-statements
Health		
Oral	Acute Tox. 5	H303
Eye	Eye Irrit. 2A	H319
Inhalation	Acute Tox. 4	H332

The most important adverse effects:

Physiochemical effects: None known

Human health effects:

Harmful if inhaled

May be harmful if swallowed.

Causes serious eye irritation.

Label elements:



Signal word: Warning

Hazard statements:

H303: May be harmful if swallowed.

H319: Causes serious eye irritation

H332: Harmful if inhaled.

Precautionary statements:

P264: Wash hands and face thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.

P305/351/338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337/313: If eye irritation persists: Get medical advice.

Special labelling of certain mixtures:

None known.

Other hazards:

None known.

Toxicity:

Classification according to GHS: Category 4

Classification according to WHO: Class III

Classification according to GPIC (Active): II

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/Mixture:

Mixture

Composition:

Chemical Name	CAS	Conc. (m/v)	Classification EC 1272/2008
Metaldehyde	108-62-3	5%	Flam. Sol. 2 (H228) Acute Tox. 4 (H302)
Calcium propionate	4075-81-4	< 5%	Eye Dam.1 (H318)
Denatonium benzoate	3734-33-6	< 5%	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye dam. 1 (H318)

4. FIRST AID MEASURES

Remove the victim from the area of exposure. Wash off remaining material with plenty of water. In the event of any complaints or symptoms, avoid further exposure. Immediately consult a doctor.

Inhalation: Immediately remove source of contamination or move victim to fresh air. If breathing has stopped, perform artificial respiration and administer oxygen. Avoid mouth-to-mouth resuscitation. Keep person warm and at rest. Treat symptomatically and supportively as and when required.

Skin contact: Remove contaminated clothing and shoes immediately. Gently wipe off excess chemical. Wash skin

METAREX

SAFETY DATA SHEET

gently and thoroughly with non-abrasive soap or mild detergent and large amounts of water until no evidence of chemical remains. Obtain medical attention if irritation persists.

Eye contact: Flush eyes immediately with large amounts of gently flowing cold water or normal saline solution, occasionally lifting upper and lower lids, until no evidence of chemical remains (approximately 15 to 20 minutes). If irritation persists, get medical attention.

Ingestion: Seek medical attention or call a poison control centre for treatment advice. **Do not induce vomiting unless instructed to do so by a poison control centre or doctor.** Do not give anything by mouth to an unconscious person. If the person is alert, rinse mouth thoroughly with water.

Anticipated acute effects:

None known

Anticipated delayed effects: None known.

Most important symptoms/effects: None known.

Advice to physician: Treat symptomatically and supportively. No specific antidote known.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Extinguish fires with carbon dioxide, dry powder, or alcohol-resistant foam.

Unsuitable Extinguishing Media: Water spray can be used for cooling of unaffected stock, but avoid water coming in contact with the product. Use as little water as possible. Use spray or fog. Solid stream may cause spreading. Contain water used for firefighting for later disposal. Avoid the accumulation of polluted run-off from the site.

Specific hazards: Like most organic powders or crystals, under severe dusting conditions, this material may form explosive mixtures in air.

Special Fire Fighting Procedures: Remove spectators from surrounding area. Isolate the fire area and evacuate all personnel downwind of the fire. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Keep upwind. Avoid inhaling hazardous vapours and fumes from burning materials. Remove container from fire area if possible and without risk. Do not use high volume water jet, due to contamination risk. Do not scatter the burning material. Water can be used to cool unaffected containers but must be contained for later disposal. Avoid pollution of waterways by run-off from the site.

Personal protective equipment: Wear NIOSH/MSHA approved self-contained breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES (SPILLAGE)

Personal precautions: Avoid contact with skin and eyes. Do not breathe in dust or mist.

Protective equipment: Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product.

Emergency procedures: Alert firefighting personnel, evacuate unprotected personnel and animals.

Environmental Precautions: Prevent spilled product from entering sewers, waterways or ground water.

Methods and Materials for Containment: Contain spilled product.

Methods and Materials for Clean-up: Contain spilled product by picking up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal. Do not create a powder cloud by using a brush or compressed air. Label containers with the contents and dispose of according to local regulations. Do not place spilled material back in original container. Do not re-use spilled material. To decontaminate the spill area, tools and equipment, wash with water and suitable detergent. Collect washings and add to the drums already collected. Do not flush spilled material or washings into drains or waterways. See section 13 for disposal considerations.

7. HANDLING AND STORAGE REQUIREMENTS

Handling: May be harmful if swallowed. Avoid inhalation and contact with eyes and skin. Ensure adequate ventilation during handling and use. Do not handle broken packages without protective equipment. Immediately clean up spills that occur during handling. Keep containers closed when not in use. In the case of contact with the product refer to **First Aid Measures – Section 4.**

General occupational hygiene: Practice good hygiene when using this material. Wash hands before eating, drinking, chewing gum, smoking, using the toilet or applying cosmetics. Worker should shower at the end of each workday. Launder all clothing before it is re-used.

Storage:

Conditions for safe storage: Keep out of reach of unauthorised persons, children and animals. Store in its original, labelled container, tightly closed, in an isolated, dry, cool and well-ventilated area. Do not store near heat, open flame, sources of ignition or hot surfaces. Not to be stored next to foodstuffs, feed and water supplies. Avoid cross contamination with other pesticides and fertilisers.

Incompatible substances and mixtures: Refer to product label.

Packaging material: Multi-layered paper bags

METAREX

SAFETY DATA SHEET

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Permissible concentration

Components	Exposure limits	Type of exposure limit	Source
Grain dust (oat, wheat, barley)	10 mg/m ³	8-hour TWA	OSHA

Engineering Controls:

It is essential to provide adequate ventilation. The measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure. Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne concentrations below specified exposure limits. Local exhaust ventilation is preferred. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.

PERSONAL PROTECTIVE EQUIPMENT:

Respiratory protection: For most well-ventilated conditions, no respiratory protection should be needed. If used in a poorly ventilated area (airborne concentrations exceed exposure limits), use a NIOSH approved air-purifying respirator.

Hand Protection: The use of chemically protective gloves is recommended to prevent against skin contact.

Eye Protection: The use of chemical safety goggles is recommended to prevent against eye contact. Contact lenses are not protective eye devices.

Skin and Body Protection: Employee must wear appropriate protective clothing; boots, hat and equipment to prevent repeated or prolonged skin contact with this substance.

Emergency eyewash: Where there is any possibility that an employee's eyes may be exposed to this substance; the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Blue coloured bait pellets with no odour.

Odour: Characteristic.

pH (1% aqueous dilution): 5.86

Melting point: Not available.

Freezing Point: Not available.

Boiling Point: Not available.

Flash Point: 70 °C at 713 mmHg

Flammability: Not available.

Upper/lower explosion limits: Not explosive.

Vapour Pressure (mm Hg): Not available.

Relative Vapour Density: Not available.

Density: 0.8336 g/cm³ (20°C).

Solubility: Not miscible

n-octanol/water partition coefficient: Not available.

Auto-ignition temperature: Not available.

Decomposition temperature: Not available.

Viscosity: Not applicable.

10. STABILITY AND REACTIVITY

Chemical Stability: Product is stable at ambient temperature and pressure, under normal storage and handling conditions. **Reactivity:** None known.

Possibility of Hazardous Reactions: None known.

Conditions to Avoid: Excessive temperature, contact with any type of reactive chemical.

Incompatible Materials: Avoid contact with strong acids, strong alkalis, oxidizers or any other type of reactive material.

Hazardous Decomposition Products: Toxic gases may be released when the product decomposes on heating.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Calculated according to GHS.

Oral LD₅₀ (24 h) rats: > 4480 mg/kg.

Inhalation LC₅₀ (4 h), rats: > 4.06 mg/l.

Skin Irritation/Corrosion: Non-irritant

Eye Damage/Irritation: Causes serious eye irritation.

Skin Sensitization: Non-sensitising to skin.

Respiratory Sensitization: Not available.

Reproductive cell mutagenicity: Not available.

Carcinogenicity: Not available.

Reproductive toxicity: Not available.

Specific target organ toxicity – single exposure: Not available.

Specific target organ toxicity – repeated exposure: Not available.

Aspiration hazard: Not available.

Chronic Effects (other targets e.g. developmental): Not available.

POTENTIAL ADVERSE EFFECTS:

Inhalation: May be harmful if inhaled.

Skin contact: Not available.

Eye contact: Due to inerts, this mixture can cause serious eye irritation.

Ingestion: Not available. **Other information:** None known.

METAREX

SAFETY DATA SHEET

12. ECOLOGICAL INFORMATION

This product is not expected to be harmful to aquatic organisms.

ECOTOXICITY DATA: Active ingredient.

Birds:

Oral LD50:	quail	170 mg/kg
Dietary LD50	quail	3460 ppm

Fish:

LC50 (96 hours):	rainbow trout	75 mg/l
------------------	---------------	---------

Daphnia:

EC50 (48 hours):		> 90 mg/l
------------------	--	-----------

Bees:

LD50 (oral):		> 87 µg/bee
LD50 (contact):		> 113 µg/bee

Worms:

LC50:		> 1000 ppm
-------	--	------------

Algae

EC50 (96h):		73.5 mg/l
-------------	--	-----------

Other beneficial spp.

No effects on aphids

ENVIRONMENTAL EFFECTS:

Soil/Environment: Microbiological decomposition of metaldehyde to CO₂ and water.

Persistence and degradability: Not determined.

Bio-accumulative Potential: Not determined.

Mobility in soil: Not determined.

Other adverse effects: Not determined.

13. DISPOSAL CONSIDERATION

Pesticide disposal: Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product cannot be reused or reprocessed. Never pour untreated waste or surplus products into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers. Comply with local legislation applying to waste disposal. The product bags may be taken to a registered waste disposal site or incineration plant.

Container disposal: Empty bags of excess product into the application equipment. Destroy the emptied bags by perforation and shredding. Dispose through an approved

waste dump site, incineration plant or recycling company. Do not re-use the empty bag for any other purpose. Comply with any local legislation applying to disposal. Observe all labelled safeguards until container is destroyed.

14. TRANSPORT INFORMATION

UN NUMBER:	Not Regulated
Road Transport ADR/RID:	Not Regulated
Maritime Transport IMDG/IMO:	Not Regulated
Air Transport IATA/ICAO:	Not Regulated

Not considered a marine pollutant.

Special/Environmental Precautions: Not available
Transport in bulk (according to MARPOL 73/78, Annex II and the IBC code): Not available.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture:
 OHS 1993 Regulations for Hazardous Chemical Substances.

Relevant information regarding restrictions: None.

EU regulation: Regulation EC1272/2008 (EU-GHS/CLP)

Other national regulations: None.

Chemical Safety Assessment carried out? No

16. OTHER INFORMATION

Packaging: Packed in 500 g, 750 g, 1, 2, 5, 10, 20, 25 and 400 kg bags and labelled according to South African regulations and guidelines.

Additional H statements (formulants):

- H228:** Flammable solid.
- H315:** Causes skin irritation.
- H318:** Causes serious eye damage
- H330:** Fatal if inhaled.

Disclaimer: The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product nor where instructions or recommendations are not

METAREX

SAFETY DATA SHEET

followed. All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.

END OF DOCUMENT

Compiled: May 2018
Revised: August 2018
Revision no.: (2)
Next revision: August 2021

For detailed information on revisions, contact the Registration holder.