DE SANGOSSE

MATERIAL SAFETY DATA SHEET

METAREX INOV

This material safety data sheet complies with Regulation No.1272/2008/EC and 453/2010/EU modifying Regulation 1907/2006/EC (R.E.A.C.H.)

1- IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

1.1- Product identifier:

METAREX INOV

1.2- Relevant identified uses of the substance/mixture and uses advised against:

Bait used for the control of snails and slugs.

For professional use only as an agricultural/horticultural molluscicide.

1.3- Details of the supplier of the safety data sheet:

DE SANGOSSE S.A.S

Bonnel - BP5 - 47480 PONT DU CASSE (France) = : +33 5 53 69 36 30 - Fax : + 33 5 53 66 30 65

Department in charge of information: Regulatory Department

2: +33 5 53 69 81 89 - Fax: + 33 5 53 47 95 01

Mail: fds@desangosse.com

1.4- Emergency telephone number:

Call the nearest POISON CENTER.

2 -HAZARDS IDENTIFICATION

2.1 - Classification of the mixture:

According to Directive 1999/45/EC and its amendments:

<u>Symbol</u>: Does not meet the criteria for classification - No symbol <u>Risk phrases</u>: Does not meet the criteria for classification - No risk phrases

> According to Regulation 1272/2008/EC (C.L.P.) and its amendments

<u>Pictogram:</u> Does not meet the criteria for classification - No pictogram <u>Hazard statements:</u> Does not meet the criteria for classification - No hazard statements

2.2 - Label elements:

According to Regulation 1272/2008/EC (C.L.P.) and its amendments

Pictogram: -

Hazard statements: -

Precautionary statements:

P101: If medical advice is needed, have product container or label at hand.

P102: Keep out of reach of children

P262: Do not get in eyes, on skin, or on clothing.

P270: Do not eat, drink or smoke when using this product

P280: Wear protective gloves.

P501: Dispose of contents/containers to a licensed waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

EUH401: To avoid risks to human health and the environment, comply with the instructions for use.

> Other label elements

SP1: Do not contaminate water with the product or its container. Do not clean application equipment near surface water. Avoid contamination via drains from farmyards and roads.

SPe4: To protect aquatic organisms and non-target plants do not apply on impermeable surfaces such as asphalt, concrete, cobblestones, railway tracks and other situations with a high risk of run off.

SPe6: To protect birds and wild mammals remove spillages.

2.3 - Other hazards:

To date no other danger is known.

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3 - COMPOSITION / INFORMATION ON INGREDIENTS

3.1 - Mixtures:

This mixture contains 4% of Metaldehyde (CAS number: 108-62-3; EC number: 203-600-2)

> Classification and labelling of the substance according to Directive. 67/548/EEC and its amendments:

Chemical name	Symbol(s)	Risk phrases *
Metaldehyde	F Highly flammable Xn Harmful	R11; R22

> Classification and labelling of the substance according to Regulation 1272/2008/EC (C.L.P.)and its amendments:

Chemical name	Pictogram(s)	Hazard statements *
Metaldehyde	Flammable solids, category 2 Acute toxicity categroy 3	H228, H301

^{*} Full text of risk phrases and hazard statements: see section 16.

4 - FIRST AID MEASURES

4.1- Description of first aid measures

GENERAL INFORMATION:

- Remove the affected person from the work area. Take him to a well-ventilated place and protect him from hypothermia.
- Do not administer anything orally and never make a drowsy, comatose or convulsive person vomit. Contact the anti-poisons centre or a physician. Consult a physician and show him the packing or label.

EYE CONTACT:

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Monitor for symptoms described above.

INHALATION:

• The mixture is a non-dusty pellet. Inhalation is not applicable as a route of exposure in normal condition of use.

SKIN CONTACT:

- Remove contaminated clothing. Launder before re-use.
- Rinse skin immediately with soap and water.
- Monitor for symptoms described above.

INGESTION:

- Wash out mouth with plenty of water.
- · If swallowed, seek medical advice immediately and show the container/label/safety data sheet.
- 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

Clinical symptoms: Nervous and digestive disorder.

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

No known antidote, apply a symptomatic treatment (pumping out of the stomach, administration of active charcoal and laxative).

5 - FIREFIGHTING MEASURES

5.1- Extinguishing media

Use foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material. Foam or dry chemical fire extinguishing system is preferred to prevent excessive water run off.

5.2- Special hazards arising from the mixture

The mixture does not readily propagate combustion. Normal products of organic combustion will be released under conditions of pyrolysis or combustion.

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5.3- Advice for fire-fighters

Protective equipment for fire fighting: Normal fire fighting protective equipment.

6 - ACCIDENTAL REALEASE MEASURES

6.1- Personal precautions, protective equipment and emergency procedures

Operators must observe precautions in handling, storage and exposure controls sections of this safety data sheet.

6.2- Environmental precautions

Recover the product as much as possible, place it in a receptacle (drum), label and have it destroyed by an approved destroyer.

6.3- Methods and material for containment and cleaning up

Gather the bait with tools (shovel, broom for example) while respecting the above-mentioned instructions for use. Retrieve the product by sweeping or suction. Place in a labelled receptacle (drum) and incinerate according to legislation or recycle. After removal, clean contaminated area with water and detergent. Avoid the entry of washings into drains or waterways.

6.4- Reference to other sections

7 - HANDLING AND STORAGE

7.1- Precautions for safe handling

No special control systems are required. See section 8 for protective equipment.

7.2- Conditions for safe storage, including any incompatibilities

Store securely. Keep away from food and out of reach of children. Store in original packaging.

7.3 - Specific end use

This product is molluscicide bait (control of snails and slugs).

8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 - Control parameters

Although this product is not classified as dangerous, operators should be aware that the active ingredient is harmful by ingestion.

8.2- Exposure controls

- RESPIRATORY PROTECTION: The mixture is a pellet so there is no risk of inhalation.
- **HAND PROTECTION**: It is recommended that operators wear disposable latex or similar flexible gloves suitable for biological hazards. Care should be taken when removing and disposing of gloves. Users should wash hands immediately after handling.
- **EYE PROTECTION**: Eye protection is not necessary if using according to recommendations.
- **SKIN PROTECTION**: Specific protective clothing or other Personal Protective Equipment is not required if using according to recommendations.

9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1- Information on basic physical and chemical properties

APPEARANCE: Pellets COLOUR: Blue ODOUR: Flour

MELTING POINT: No data available.

DECOMPOSITION TEMPERATURE: No data available **FLAMMABILITY:** The preparation is not flammable

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SELF IGNITION TEMPERATURE: The preparation is not flammable.

OXIDISING PROPERTIES: Not oxidising

EXPLOSIVITY: Does not have explosive potential

VAPOUR PRESSURE: No data available HENRY'S LAW CONSTANT: No data available

pH: 5.8

WATER SOLUBILITY: Not miscible

OCTANOL/WATER PARTITION COEFFICIENT (log Pow): No data available

9.2- Other information

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10 - STABILITY AND REACTIVITY

10.1- Reactivity

The mixture is not known to undergo hazardous reactions under normal handling conditions.

10.2- Chemical stability

The mixture is stable under normal ambient conditions.

10.3- Possibility of hazardous reactions

The mixture is not known to undergo hazardous reactions under normal handling conditions.

10.4- Conditions to avoid

The mixture is not known to undergo hazardous reactions in contact with other substances.

10.5- Incompatible materials

The mixture is not known to undergo hazardous reactions under normal handling conditions.

10.6- Hazardous decomposition products

The mixture is not known to produce hazardous decomposition products under normal storage conditions. Normal products of organic combustion will be released under conditions of pyrolysis or combustion.

11 - TOXICOLOGICAL INFORMATION

11.1- Information on toxicological effects

ACUTE TOXICITY

Toxicological information for a mixture containing 4% of Metaldehyde

 LD_{50} oral : Rat: > 2000 mg/kg - Based on available data, the classification criteria are not met. LD_{50} -dermal: Rat: > 2000 mg/kg - Based on available data, the classification criteria are not met.

LC₅₀ inhalation: Not applicable

Eye irritation: Rabbit: Based on available data, the classification criteria are not met.

Skin irritation: Rabbit: Based on available data, the classification criteria are not met.

Sensitization (LLNA): Mousey: Based on available data, the classification criteria are not met.

Sensitization (LLNA): Mouse: - Based on available data, the classification criteria are not met.

REPEATED DOSE TOXICITY: No data available for the mixture.

<u>Information on Metaldehyde active substance</u>:

NOEL (21 days) – Rabbit : 1000 mg/kg NOEL (90 days) – Rat : 21 mg/kg NOEL (104 weeks) – Rat : 2 mg/kg

CARCINOGEN DATA: No data available for the mixture. <u>Information on Metaldehyde active substance</u>: Not carcinogenic.

MUTAGENIC DATA: No evidence of mutagenic activity.

REPRODUCTIVE TOXICITY: No data available for the mixture.

<u>Information on Metaldehyde active substance:</u> No effect on reproduction.

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12 - ECOLOGICAL INFORMATION

12.1- Toxicity

AQUATIC ACUTE TOXICITY

Ecological information on the active substance Metaldehyde

LC₅₀ – Fish (96 h.): 75 mg/l (Oncorhynchus mykiss) ; > 100 mg/l (Cyprinus carpio).

EC₅₀ - Algae (72 h.): >200 mg/l (Desmodesmus subspicatus)

EC₅₀ - Daphnia (48 h.): > 90 mg/l (Daphnia magna)

TOXICITY FOR TERRESTRIAL SPECIES

Ecological information on the active substance Metaldehyde

Acute toxicity NOEC - Earthworms (14 days): > 1000 mg/kg (Eisenia foetida).

INSECTS TOXICITY

Acute oral LD_{50} : > 87.5 μg a.i./bee Acute contact LD_{50} : >113 μg a.i./bee

BIRD TOXICITY

Ecological information on the active substance Metaldehyde

Acute oral: LD₅₀- 170 mg/kg, bw - Japanese quail (*Coturnix Coturnix*) LD₅₀ - 196 mg/kg, bw - Mallard ducks (*Anas platyrhynchos*) LD₅₀ - 262 mg/kg, bw - Pheasants (*Phasanius colchicus*)

Ecological information on a mixture containing 5% metaldehyde.

Acute oral: LD₅₀ - 1,582.90 mg/kg (Coturnix Coturnix japonica).

12.2- Persistence and degradability

No data available for the mixture.

<u>Data on Metaldehyde active substance</u>: Not readily biodegradable.

12.3- Bioaccumulative potential

No data available for the mixture.

12.4- Mobility in soil

No data available for the mixture.

12.5- Results of PBT and vPvB assessment

No data available for the mixture.

12.6- Other adverse effects

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13 - DISPOSAL CONSIDERATIONS

13.1- Waste treatment methods

MIXTURE: It is necessary that disposal methods are taken not to expose the mixture to non-target wild or domestic animals or pets. Do not release into drains or waterways.

Dispose of contents/containers to a licensed waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

PACKAGING: The empty container should not be used for any other purpose and should be disposed of considering the comments above.

14 - TRANSPORT INFORMATION

UN Recommendations concerning the carriage of dangerous goods (ADR, IATA, IMDG Regulations).

14.1- UN Number :

This product is not classified as dangerous goods according to these regulations.

14.2- UN proper shipping name:

This product is not classified as dangerous goods according to these regulations.

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14.3- Transport hazard class:

This product is not classified as dangerous goods according to these regulations.

14.4- Packing group:

This product is not classified as dangerous goods according to these regulations.

14.5- Environmental hazards:

This product is not classified as dangerous goods according to these regulations.

14.6- Special precautions for user:

No special precautions

14.7- Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:

Not regulated.

15 - REGULATORY INFORMATION

15.1- Safety, health and environmental regulations/legislation specific for the substance

15.2- Chemical safety assessment

16 - OTHER INFORMATION

Full text of Hazard statements noted in section 3:

H228: Flammable solid; H301: Toxic if swallowed.

Full text of Risk phrases noted in section 3:

R11: Highly flammable; R22: Harmful if swallowed

Abbreviations:

CLP: Classification, Labelling and Packaging

LD₅₀: Lethal dose 50%

LC₅₀: Lethal concentration 50% LLNA: Local Lymph Node Assay NOEL: No observed effect level

NOEC: No observed effect concentration EC₅₀: Effective concentration 50% PBT: Persistent, bioaccumulative, toxic VPvB: Very Persistent, very Bioaccumulative

ADR: Agreement concerning the international carriage of Dangerous goods by Road

IATA: International Air Transport Association

IMDG: International Maritime Dangerous Goods Code

Details of changes since last issue:

Information noted in this material safety data sheet is based on our present technical and scientific knowledge of the product at this date.

This information should be used as a quide and does not imply any warranty concerning the specific properties of the product and the specific local needs.

Recipients of this MSDS must ensure that the information it contains has been properly read and understood by all who use, handle, dispose of or are in contact with the product.

Our local licensee, liable for the local distribution of the product, will adapt this safety data sheet to the local regulation.

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