



# MATERIAL SAFETY DATA SHEET

## ECO RAT

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### 1. PRODUCT AND COMPANY IDENTIFICATION

**TRADE NAME:** ECO RAT

**SUPPLIER:** EFEKTO

PO BOX 652147

BENMORE

2010

**TEL No.** 011 392 5641 (office hours)

**EMERGENCY TELEPHONE NUMBERS:**

**SPILLAGES:** 086 199 9071

**POISONINGS:**

**Bateleur:** 086 199 9071 (all hours)

**Griffon Poison Centre:** 082 446 8946

**Poisons Information Helpline** 0861 555 777

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### 2. Hazards Identification

#### Classification of the substance or mixture

According to UN GHS criteria

No need for classification according to GHS criteria for this product.

#### Label elements

**Symbols:** N

**Risk-Phrase(s):** R51/53

**UN No.:** 3082

Globally Harmonized System (GHS)

Precautionary Statement:

P101

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

P102

Keep out of reach of children.

P103

Read label before use.

The product does not require a hazard warning label in accordance with GHS criteria

#### Other hazards

According to UN GHS criteria

See section 12 - Results of PBT and vPvB assessment.



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If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture. This product is hazardous to mammals, including domesticated animals, and birds. Exposure of non-target animals should be prevented.

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Substances

Not applicable

#### Mixtures

Chemical nature

Biocidal product, rodenticide, Bait

Hazardous ingredients (GHS)

According to UN GHS criteria

#### Colecalciferol

Content (W/W): 0,075 %

CAS Number: 67-97-0

EC-Number: 200-673-2

INDEX-Number: 603-180-00-4

Acute Tox. 2 (Inhalation - dust)

Acute Tox. 2 (oral)

Acute Tox. 3 (dermal)

STOT RE 1 (oral)

Aquatic Chronic 4

M-factor acute: 1

M-factor chronic: 1

H311, H330, H300, H372,  
H413

#### Oils, palm

Content (W/W): < 50 %

CAS Number: 8002-75-3

EC-Number: 232-316-1

#### Corn Oil

Content (W/W): < 30 %

CAS Number: 8001-30-7

EC-Number: 232-281-2

#### Sucrose

Content (W/W): < 15 %

CAS Number: 57-50-1

EC-Number: 200-334-9

#### Wheat Flour

Content (W/W): < 15 %

CAS Number: 130498-22-5

EC-Number: 310-127-6

For the classifications not written out in full in this section the full text can be found in section 16.

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### 4. FIRST-AID MEASURES

#### Description of first aid measures

Remove contaminated clothing.

If inhaled: Keep patient calm, remove to fresh air.

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On skin contact: Wash thoroughly with soap and water.

On contact with eyes: Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion: Rinse mouth and then drink plenty of water.

### **Most important symptoms and effects, both acute and delayed**

Symptoms: No significant reaction of the human body to the product known.

Hazards: Chronic overexposure has been reported to cause hypercalcemia.

### **Indication of any immediate medical attention and special treatment needed**

Treatment: Symptomatic treatment (decontamination, vital functions).

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## **5. FIRE-FIGHTING MEASURES**

### **Extinguishing media**

Suitable extinguishing media: water spray, foam, dry powder

Unsuitable extinguishing media for safety reasons: carbon dioxide

### **Special hazards arising from the substance or mixture**

carbon monoxide, Carbon dioxide, nitrogen oxides

The substances/groups of substances mentioned can be released in case of fire.

### **Advice for fire-fighters**

Special protective equipment: Wear self-contained breathing apparatus and chemical-protective clothing.

### **Further information:**

In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire.

Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

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## **6. ACCIDENTAL RELEASE MEASURES**

### **Personal precautions, protective equipment and emergency procedures**

Avoid inhalation. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

### **Environmental precautions**

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

### **Methods and material for containment and cleaning up**

For small amounts: Contain with dust binding material and dispose of.

For large amounts: Sweep/shovel up.

Avoid raising dust. Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors thoroughly with water and detergents, observing environmental regulations.

### **Reference to other sections**

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

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### 7. HANDLING AND STORAGE

#### Precautions for safe handling

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

Protection against fire and explosion:

No special precautions necessary. The substance/product is non-combustible. Product is not explosive.

#### Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds. Odour-sensitive: Segregate from products releasing odours. Further information on storage conditions: Keep only in the original container in a cool, well-ventilated place. Keep container dry. Keep away from heat. Protect from direct sunlight. Protect against moisture

#### Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

Components with occupational exposure limits

57-50-1: Sucrose

8001-30-7: Corn oil

130498-22-5: Wheat flour

8002-75-3: Oils, palm

#### Exposure controls

Personal protective equipment

Respiratory protection:

Respiratory protection not required.

Hand protection:

Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc.

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-



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protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended.

Store work clothing separately. Keep away from food, drink and animal feeding stuffs

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

Form: semi-solid, paste

Colour: grey to green

Odour: sweetish, faint odour

Odour threshold: Not determined due to potential health hazard by inhalation.

pH value: approx. 5 - 7 (1 % (m), 20 °C) (as suspension)

Melting temperature: The product has not been tested.

Boiling point: The product has not been tested.

Flash point: not applicable

Evaporation rate: not applicable

Flammability: not highly flammable

Lower explosion limit:

As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.

Upper explosion limit:

As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.

Vapour pressure: not applicable

Density: approx. 1,32 g/cm<sup>3</sup> (20 °C)

Relative vapour density (air): not applicable

Solubility in water: insoluble

Partitioning coefficient n-octanol/water (log Kow): not applicable

Self ignition: Temperature: 318,0 °C (Method: Regulation 440/2008/EC, A.16)

Thermal decomposition:

180 °C, 270 kJ/kg (DSC (OECD 113)) (onset temperature)

280 °C, 30 kJ/kg (DSC (OECD 113)) (onset temperature)

Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.

Viscosity, dynamic: not applicable, the product is a solid

Explosion hazard: not explosive

Fire promoting properties: not fire-propagating (Regulation 440/2008/EC, A.17)

#### Other information

Self heating ability: It is not a substance capable of spontaneous heating according to UN transport regulations class 4.2.

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### 10. STABILITY AND REACTIVITY

#### **Reactivity**

No hazardous reactions if stored and handled as prescribed/indicated.

#### **Chemical stability**

The product is stable if stored and handled as prescribed/indicated.

#### **Possibility of hazardous reactions**

No hazardous reactions if stored and handled as prescribed/indicated.

#### **Conditions to avoid**

See MSDS section 7 - Handling and storage.

#### **Incompatible materials**

Substances to avoid:

strong oxidizing agents, strong bases, strong acids

#### **Hazardous decomposition products** Hazardous decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

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### 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation. Virtually nontoxic after a single ingestion.

Experimental/calculated data:

LD50 rat (oral): > 5.000 mg/kg (OECD Guideline 425)

No mortality was observed.

LC50 rat (by inhalation):

Not inhalable due to the physico-chemical properties of the product.

LD50 rat (dermal): > 5.000 mg/kg

No mortality was observed.

#### Irritation

Assessment of irritating effects:

Not irritating to the eyes. Not irritating to the skin.

Experimental/calculated data:

Skin corrosion/irritation rabbit: non-irritant

Serious eye damage/irritation rabbit: non-irritant

#### Respiratory/Skin sensitization

Assessment of sensitization:

There is no evidence of a skin-sensitizing potential.

Experimental/calculated data:

Buehler test guinea pig: Non-sensitizing.



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### Germ cell mutagenicity

Assessment of mutagenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

### Carcinogenicity

Assessment of carcinogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: Corn oil*

*Assessment of carcinogenicity:*

*A carcinogenic potential cannot be excluded after prolonged exposure to concentrations which can cause organic toxicity.*

*The substance showed tumor-promoting activity in rodents when given at high doses in the diet after pretreatment with a carcinogenic substance.*

### Reproductive toxicity

Assessment of reproduction toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

### Developmental toxicity

Assessment of teratogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

### Specific target organ toxicity (single exposure)

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Remarks: The product has not been tested. The statement has been derived from the properties of the individual components

### Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components

*Information on: colecalciferol; Vitamin D3*

*Assessment of repeated dose toxicity:*

*Repeated oral exposure to small quantities may affect certain organs. The substance may cause damage to the kidney even after repeated ingestion of low doses, as shown in animal studies. The substance may cause damage to blood vessels even after repeated ingestion of low doses, as shown in animal studies.*



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*Information on: Corn oil*

*Assessment of repeated dose toxicity:*

*Repeated exposure to large quantities may affect certain organs.*

*No adverse effects were observed after repeated inhalative exposure in animal studies.*

### Aspiration hazard

No aspiration hazard expected.

The product has not been tested. The statement has been derived from the properties of the individual components.

### Other relevant toxicity information

Misuse can be harmful to health.

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## 12. ECOLOGICAL INFORMATION

### **Toxicity**

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms.

The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: colexcalciferol; Vitamin D3*

*Toxicity to fish:*

*LC50 (96 h) > 10.000 mg/l, Leuciscus idus (DIN 38412 Part 15, static)*

*The product has low solubility in the test medium. An aqueous dispersion has been tested. Tested above maximum solubility. The details of the toxic effect relate to the nominal concentration.*

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*Information on: colexcalciferol; Vitamin D3*

*Aquatic invertebrates:*

*EC50 (48 h) > 100 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)*

*The product has low solubility in the test medium. An eluate has been tested. The details of the toxic effect relate to the nominal concentration. No toxic effects occur within the range of solubility.*

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*Information on: colexcalciferol; Vitamin D3*

*Aquatic plants:*

*EC50 (96 h) > 0,17 mg/l (growth rate), Selenastrum capricornutum (OECD Guideline 201, static)*

*The product has low solubility in the test medium. An eluate has been tested. No toxic effects occur within the range of solubility. The statement of the toxic effect relates to the analytically determined concentration.*

*No observed effect concentration (96 h) 0,17 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static)*

*The statement of the toxic effect relates to the analytically determined concentration. The product has low solubility in the test medium. An eluate has been tested. No toxic effects occur within the range of solubility.*

### **Persistence and degradability**

Assessment biodegradation and elimination (H<sub>2</sub>O):

The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: colexcalciferol; Vitamin D3*

*Assessment biodegradation and elimination (H<sub>2</sub>O):*

*Not readily biodegradable (by OECD criteria). Poorly biodegradable.*

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### Bioaccumulative potential

Assessment bioaccumulation potential:

The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: colecalciferol; Vitamin D3*

*Bioaccumulation potential:*

*Bioconcentration factor: 30 - 48, Fish (calculated)*

### Mobility in soil

Assessment transport between environmental compartments:

Adsorption in soil: The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: colecalciferol; Vitamin D3*

*Assessment transport between environmental compartments:*

*Volatility: The substance will not evaporate into the atmosphere from the water surface.*

*Adsorption in soil: Adsorption to solid soil phase is expected.*

### Results of PBT and vPvB assessment

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

### Other adverse effects

The product does not contain substances that are listed in the Montreal Protocol on substances that deplete the ozone layer.

### Additional information

Other ecotoxicological advice:

Must not be discharged into the environment.

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## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

Must be disposed of or incinerated in accordance with local regulations.

Contaminated packaging:

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

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## 14. TRANSPORT INFORMATION

### Land transport

ADR

Not classified as a dangerous good under transport regulations

UN Number : Not applicable

UN proper shipping name : Not applicable

Transport hazard class(es) : Not applicable

Packing group : Not applicable

Environmental hazards : Not applicable

Special precautions for user : None Known

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Not classified as a dangerous good under transport regulations

UN Number : Not applicable

UN proper shipping name : Not applicable

Transport hazard class(es) : Not applicable

Packing group : Not applicable

Environmental hazards : Not applicable

Special precautions for user : None Known

### Inland waterway transport

ADN

Not classified as a dangerous good under transport regulations

UN Number : Not applicable

UN proper shipping name : Not applicable

Transport hazard class(es) : Not applicable

Packing group : Not applicable

Environmental hazards : Not applicable

Special precautions for user : None Known

### Transport in inland waterway vessel

Not evaluated

### Sea Transport

IMDG Not classified as a dangerous good under transport regulations

UN number: Not applicable

UN proper shipping name: Not applicable

Transport hazard class(es): Not applicable

Packing group: Not applicable

Environmental hazards: Not applicable

Special precautions for user: None known

### **Air transport**

IATA/ICAO Not classified as a dangerous good

UN number:

UN proper shipping name:

Transport hazard class(es):

Packing group:

Environmental hazards:

Special precautions for user

### **UN Number**

See corresponding entries for "UN number" for the respective regulations in the tables above.

### **UN proper shipping name**

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.



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### **Transport hazard class(es)**

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

### **Packing group**

See corresponding entries for "Packing group" for the respective regulations in the tables above.

### **Environmental hazards**

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

### **Special precautions for user**

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

### **Transport in bulk according to Annex II of MARPOL and the IBC Code**

Regulation:	Not evaluated
Shipment approved:	Not evaluated
Pollution name:	Not evaluated
Pollution category:	Not evaluated
Ship Type:	Not evaluated

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## 15. REGULATORY INFORMATION

### **Safety, health and environmental regulations/legislation specific for the substance or mixture**

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.



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### 16. OTHER INFORMATION

Full text of classifications, hazard symbols and hazard statements, if mentioned in section 2 or 3:

Acute Tox.  
STOT RE

Acute toxicity  
Specific target organ toxicity — repeated exposure

Aquatic Chronic

Hazardous to the aquatic environment - chronic

H311

Toxic in contact with skin.

H330

Fatal if inhaled.

H300

Fatal if swallowed.

H372

Causes damage to organs through prolonged or repeated oral exposure.

H413

May cause long lasting harmful effects to aquatic life.

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**END OF MSDS.**