

MATERIAL SAFETY DATA SHEET

 according to Regulation (EC) no. 1907/2006
 (amended by EC Reg. No. 830/2015)

Issued:	27.06.2017	Valid from:	27.06.2017	Revised:	04/2019
Version:	04/2019	Replaces version:	10/2018		Page 1 of 7

FERREX®
1. PRODUCT NAME AND COMPANY
1.1 Product identifier:
1.1.1 Trade name:

FERREX®

1.1.2 Article number:

-

1.1.3 Use:

Bait for the control of slugs with high productiveness (a.i. Iron(III)-orthophosphate).

1.2 Producer / Supplier:
frunol delicia® GmbH
1.2.1 Address:
Main office:

 Duebener Strasse 145
 04509 Delitzsch
 Germany
 Tel.: +49 (0)34202 / 65300
 Fax: +49 (0)34202 / 65309

Branch office:

 Hansastrasse 74 b
 59425 Unna
 Germany
 Tel.: +49 (0)2303 / 253600
 Fax: +49 (0)2303 / 2536050

1.2.2 E-mail:
info@frunol-delicia.de
1.2.3 Informing department:

Lab department, Tel.: +49 (0)34202 / 65341

1.3 Emergency contact:

 Dr. H. Knipp
 Tel.: +49 (0)3 42 02 / 6 53 00
 Fax: +49 (0)3 42 02 / 6 53 09
 Mobile: +49 (0)1 71 / 1 23 87 42

2. HAZARDS IDENTIFICATION
2.1 Classification of the substance or mixture:

 Classification acc. to the regulation (EC) no. 1272/2008 (CLP):
 Danger categories: Eye Irrit. 2
 Hazard statements*: H319

2.2 Labeling elements:

Signal word: Warning

Hazard pictograms: GHS07



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2. HAZARDS IDENTIFICATION (continuation)

2.2 Labeling elements (continuation):

Components to be labelled:

- Iron (III) phosphate 25 g/kg, CAS-No. 13463-10-0

Danger statements*: H319

Precautionary statements*: P101, P102, P280, P305/338/351, P337/313, P501

Other statements*: EUH401

Further labelling elements (national) see section 15.

2.3 Additional information:

-

* Wording see section 16.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances:

This product is a mixture.

3.2 Ingredients:

3.2.1	Substance denomination:	Ethylenediaminetetraacetic acid, tetra sodium salt
3.2.1.1	EC-Nr.:	200-573-9
3.2.1.2	CAS-Nr.:	64-02-8
3.2.1.3	Proportion:	< 3% w/w
3.2.1.4	Class. acc. to reg. (EC) no. 1272/2008:	H315, H318, H332, H373
3.2.1.5	Signal word:	Danger
3.2.1.6	Danger categories:	Acute Tox. 4, Skin Dam. 2, Eye Dam. 1, STOT RE 2

3.2.2 Substances with mandatory EC thresholds (WEL):

(The wording of the mentioned danger advices is to be read in section 16)

4. FIRST AID MEASURES

4.1 General advices:

At arising of disorders or in case of doubt seek medical advice. Show container or label.

4.2 After inhalation:

Interrupt work. Leave treated area.

4.3 After skin contact:

After contact with skin, wash immediately with plenty of water and soap.

4.4 After eye contact:

In case of contact with the eyes, rinse immediately with plenty of water for at least 10 minutes and seek medical advice. Remove contact lenses, if easily possible. Do not reuse contact lenses, but dispose off.

4.5 After swallowing:

If swallowed, do not induce vomiting. Rinse mouth with water, possibly let drink a glass of water (250 ml).

4.6 Antidote:

No specific antidote.

4.7 Advices for the physician:

Treatment symptomatically. Show label or container.

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5. FIRE FIGHTING MEASURES

5.1 Extinguishing media:

5.1.1 Suited:

Water spray beam, powder, foam

5.1.2 Not suited:

Full water beam

5.2 Special dangers by the agent, its combustion residues or formed gases:

At fire hazardous vapours/gases may be formed: carbon monoxide, carbon dioxide, NOx. Formation of explosive vapour/air-mixtures possible.

5.3 Advices for fire-fighting:

Stay in the danger zone with self-contained breathing apparatus only, in emergency cases wear respiratory mask with filter AB-P. Cool endangered containers from safe distance and condense exhausting vapours with water. Avoid intrusion of fire water into surface- and ground waters and soil.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal protective measures:

Take care for ventilation, wear protective gloves (chemical resistant, if possible).

6.2 Environmental protective measures:

Do not let get into waters or canalisation.

6.3 Methods of absorption:

Sweep up and collect in suited bins (special waste).

6.4 Additional advices:

Pay attention to the protective measures in sections 7 and 8.

7. HANDLING AND STORAGE

7.1 Handling:

7.1.1 Secure handling:

To avoid risks for human and environment follow the instructions for use. Use in living quarters only if domestic animals can be kept away. Do not apply in heaps. Avoid all unnecessary contact with the agent. Misuse may lead to damages to health.

7.1.2 Advices for fire and explosion safety:

Avoid formation of dust, see also 7.2.2

7.2 Storage:

7.2.1 Storage temperature:

+5°C - +30°C

7.2.2 Storage restrictions:

Store cool, dry and in the closed original containers. Protect from strong solar irradiation.

7.2.3 Storage advices with other products:

Keep away from food, drink and animal feeding stuffs.

7.2.4 Additional advices:

Keep out of reach of children. Storage class see section 15.

7.3 Specific end uses:

Control of slugs in cultivated areas.

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8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

- 8.1 Additional advices for technical plants:**
-
- 8.2 Limited value of plant:**
-
- 8.3 Personal protective equipment:**
- 8.3.1 General hygienic and protection measures:**
-
- 8.3.2 Breath:**
-
- 8.3.3 Hand:**
Protective gloves CE cat. II or III (nitrile, nitrile coating or vinyl)
- 8.3.4 Eye:**
At proper use no eye protection necessary, safety glasses recommended.
- 8.3.5 Body:**
Light protective clothes.
- 8.4 Limitation of environmental exposition:**
See sections 6 and 7.

9. PHYSICAL AND CHEMICAL PROPERTIES

- | | | | |
|--|-----------------------|--|-------------------------|
| 9.1 General statements | | | |
| 9.1.1 Form: | Granule (lentil) | | |
| 9.1.2 Dye: | Blue | | |
| 9.1.3 Odor: | Nearly odourless | | |
| 9.2 Safety related statements | | | Method / remarks |
| 9.2.1 Melting point / range: | | | °C |
| 9.2.2 Boiling point / range: | | | °C |
| 9.2.3 Flash point: | | | °C |
| 9.2.4 Ignition point: | | | °C |
| 9.2.5 Explosion limit, lower: | | | Vol.-% |
| 9.2.6 Explosion limit, upper: | | | Vol.-% |
| 9.2.7 Vapour pressure (20°C): | | | hPa |
| 9.2.8 Vapour pressure: (25°C): | | | hPa |
| 9.2.9 Density (20°C): | | | g/ml |
| 9.2.10 Bulk density (20°C): | 0.66 - 0.68 | | kg/l |
| 9.2.11 Solubility in water (20°C): | < 10 % | | |
| 9.2.12 Solubility in organic solvents (20°C): | | | g/l |
| 9.2.13 pH-value in original (°C): | | | |
| 9.2.14 pH-value in 10 g/l of water (20°C): | | | |
| 9.2.15 Partition coefficient (log Po/w): | | | |
| 9.2.16 Viscosity (20°C): | | | mm ² /sec |
| 9.2.17 Content of solvents: | | | % w/w |
| 9.2.18 Additional information: | Water content < 14 %. | | |

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10. STABILITY AND REACTIVITY:

- 10.1 Reactivity:**
The product is inert, avoid contact with strong oxidizers.
- 10.2 Chemical stability:**
Under normal conditions the product is chemically stable.
- 10.3 Possible dangerous reactions:**
At intended use no dangerous reactions are expected.
- 10.4 Conditions to avoid:**
-
- 10.5 Incompatible materials:**
-
- 10.6 Hazardous decomposition products:**
-

11. TOXICOLOGICAL INFORMATION

- 11.1 Acute toxicity:**
LD₅₀ (rat, oral) > 5,000 mg/kg body weight – calculated
- 11.2 Sub acute toxicity:**
-
- 11.3 Primary irritation:**
- 11.3.1 Skin:**
None
- 11.3.2 Eye:**
Irritation
- 11.4 Sensitization:**
Not known
- 11.5 Chronical effects:**
No evidences of carcinogenic, mutagenic, teratogenic or other harmful effects at long-term exposition.
- 11.6 Additional advices:**
-

12. ECOLOGICAL INFORMATION

- 12.1 Ecotox effects:**
- 12.1.1 Aquatic toxicity:**
Not toxic to fish and other aquatic organisms.
- 12.1.2 Toxicity to bees:**
Not harmful to bees (B4)
- 12.2 Elimination (persistence and degradation):**
The agent is well biologically degradable.
- 12.3 Hazard to waters:**
WHC 1 (own classification)
- 12.4 Additional advices:**
The agent is plant compliant. The agent is not toxic to useful organisms.

13. DISPOSAL CONSIDERATIONS

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13.1 Procedures of waste treatment:
13.1.1 Product:

Special waste, pay attention to the national and regional regulations.

13.1.2 Uncleaned packages:

Special waste, pay attention to the national and regional regulations.

14. TRANSPORT INFORMATION

This product is no dangerous good.

15. REGULATORY INFORMATION
15.1 EU regulation (EC) no. 1272/2008 (CLP):
15.1.1 Danger designation:

Eye Irrit. 2


15.1.2 H-statements:

H319 (wording see section 16)

15.1.3 P-statements:

P101, P102, P280, P305/338/351, P337/313, P501 (wording see section 16)

15.2 National regulations (Germany)
15.2.1 TRGS:

-

15.2.2 Water hazard class:

1 (own classification)

15.2.3 VCI-Storage class:

11

15.2.4 Health & Safety at Work regulations:

-

15.2.5 VOC-content:

-

15.2.6 Further advices:

-

15.3 Occupation restrictions:
15.3.1 Youth protection:

Pay attention to the occupation restrictions for youth (§ 22 JArbSchG).

15.3.2 Maternity protection:

Maternity protection law, consider occupation prohibitions (§§ 3,4 MuSchG).

16. OTHER INFORMATION
WORDING DANGER REFERENCES AND SAFETY ADVICES:

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2. HAZARD LABELING (CLP REGULATION (H- AND P-STATEMENTS))

H319 Causes serious eye irritation
 EUH401 To avoid risks to human health and the environment, comply with the instructions for use
 P101 If medical advice is needed, have product container or label at hand
 P102 Keep out of reach of children
 P280 Wear protective gloves/protective clothing/eye protection/face protection
 P305/338/351 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/attention
 P501 Dispose of contents/container to special waste collecting point

3. COMPOSITION / MARKED OUT THE INGREDIENTS

1 DANGEROUS INGREDIENT: ETHYLENEDIAMINETETRAACETIC ACID, TETRA SODIUM SALT

H315 Causes skin irritation
 H318 Causes serious eye damage
 H332 Harmful if inhaled
 H373 May cause damage to organs through prolonged or repeated exposure

Specific product advices:

Handling / Application of the product in accordance with the instructions for use of the manufacturer only. Misuse may lead to damages to health. The product does not contain any SVHC substances of the REACH regulation (EC) no. 1907/2006.

Generic Exposure Scenarios (GES)

End uses
 Professional usage (SU 22)

Product category: PC27 (plant protective)

Environmental Release Categories (ERC):
 Wide disperse outdoor use of long-life articles and materials with low release (ERC 10a).

Sources for preparation of this Material Safety Data Sheet:

Current regulation of Hazardous Substances (Germany), regulation (EC) no. 1907/2006 (REACH) article 31, regulation (EC) no. 1272/2008 (CLP), regulation (EC) no. 830/2015, MSDS of the components.

* These statements have been changed compared to prior versions of the data sheet.

These information are based on actual state of our knowledge, they are not a guarantee of our product qualities and involve no contractual relationship.