

MATERIAL SAFETY DATA SHEETaccording to Regulation (EC) no. 1907/2006
(amended by EC Reg. No. 830/2015)Issued:27.06.2017Valid from:27.06.2017Revised:04/2019Version:04/2019Replaces version:10/2018Page 1 of 7

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 productiv	veness (a.i. Iron(III)-orthophosphate).
1.2	Producer / Supplier:	
	frunol delicia [®] GmbH	
1.2.1	Address:	
	<u>Main office:</u>	<u>Branch office:</u>
	Duebener Strasse 145	Hansastrasse 74 b
	04509 Delitzsch	59425 Unna
	Germany	Germany
	Tel.: +49 (0)34202 / 65300	Tel.: +49 (0)2303 / 253600
	Fax: +49 (0)34202 / 65309	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	
	WODEC: 145 (0/1717 125 07 42	
2.	HAZARDS IDENTIFICATION	
2.1	Classification of the substance or mixture:	
	Classification acc. to the regulation (EC) no. 12	72/2008 (CLP):
	Danger categories: Eye Irrit. 2	
2.2	Hazard statements*: H319	
2.2	Labeling elements: Signal word: Warning	
	0 0	
	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 OI	N 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 thresh	olds (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	5		
9.1	General statements			
9.1.1	Form:	Granule (lentil)		
<i>9.1.2</i>	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 coefficiency (log Po/w):			
9.2.16	Viscosity (20°C):		mm²/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:
	LD_{50} (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.



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13.	DISPOSAL CONSIDERATIONS
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).				



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WORDING DANGER REFERENCES AND SAFETY ADVICES:					
2. AND 15.1 LABELIN	IG BY 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 / N	ARKS ABOUT THE INGREDIENTS				
Dangerous ingred.:	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 advi	<u>ces:</u>				
Generic Exposure Sce	enarios (GES)				
End uses					
Profession	nal usage (SU 22)				
Product category: PC	27 (plant protective)				
Environmental Relea	se Categories (EBC):				
	or use of long-life articles and materials with low release (ERC 10a).				
Sources for preparati	ion of this Material Safety Data Sheet:				
-	f Hazardous Substances (Germany), regulation (EC) no. 1907/2006 (REACH) article 31, regulation (EC) no. 1272/200) no. 830/2015, MSDS of the components.				
* These statements h	nave been changed compared to prior versions of the data sheet.				
These information of					
These information ar	e based on actual state of our knowledge, they are not a guarantee of our product qualities and involve no hip.				
contractual relations					