

Safety data sheet

According to EG Directive Nr.1907/2006 (REACH)

GreinoxFix

1. Identification of the substance/preparation and of the company/undertaking

Product name:

GreinoxFix

only for industrial use

REACH Registration Number

A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

Company/undertaking identification:

Emergency telephone No.:

**Kai Greising e. K. Clean Marker
Industriestraße 29/2**

D-73340 Amstetten

Phone: 0049-(0)7331-3058-0

Fax: 0049-(0)7331-981722

Poison Emergency Freiburg

Phone: 0049-(0)761-19240

2. Hazards Identification

Harmful if swallowed. Causes severe burns

3. Composition/information on ingredients

Aqueous solution with organic compounds

Hazardous ingredients:

Name according to EC Directives:

CAS-No.	EC No.	EC-Index-No.	Classification	Content:
Phosphorous acid				
13598-36-2	237-066-7	015-157-00-0	Xn; R22 C; R35	40 - 85 %

(Full text of R-Phrases in heading 16)

4. First aid measures

After inhalation: fresh air. Call in physician.

After skin contact: wash off with plenty of water. Dab with polyethylene glycol 400. Immediately remove contaminated clothing.

After eye contact: rinse out with plenty of water for at least 10 minutes with the eyelid held wide open. Immediately call in ophthalmologist.

After swallowing: make victim drink plenty of water (if necessary several litres), avoid vomiting (risk of perforation!). Immediately call in physician. Do not attempt to neutralize.

Safety data sheet

According to EG Directive Nr.1907/2006 (REACH)

GreinoxFix

5. Fire-fighting measures

Suitable extinguishing media:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards during fire fighting

Not combustible.

Ambient fire may liberate hazardous vapours.

Fire may cause evolution of:

Oxides of phosphorus

Special protective equipment for fire-fighters

Do not stay in dangerous zone without self-contained breathing apparatus. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

Further information

Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Special protective equipment for fire fighting:

Do not stay in dangerous zone without self-contained breathing apparatus. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

Other information:

Prevent fire-fighting water from entering surface water or groundwater.

6. Accidental release measures

Person-related precautionary measures:

Avoid substance contact. Do not inhale vapours/aerosols. Ensure supply of fresh air in enclosed rooms.

Environmental-protection measures:

Do not allow to enter sewerage system.

Methods for cleaning up / absorption:

Take up with liquid-absorbent and neutralizing material (e.g. Chemizorb H+, Art. No. 101595). Forward for disposal. Clean up affected area.

7. Handling and storage

Handling

Advice on safe handling

No further requirements. Observe label precautions.

Storage

Further information on storage conditions

Tightly closed.

Store above +15°C.

Safety data sheet

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GreinoxFix

8. Exposure controls/personal protection

Components with workplace control parameters

Components

Basis	Value	Control parameters	Ceiling Limit Value, Remarks
Phosphoric acid (7664-38-2)			
ECTLV	STEL	2 mg/m ³	
	TWA	1 mg/m ³	
EH40 WEL	STEL	2 mg/m ³	
	TWA	1 mg/m ³	

Personal protective equipment

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Respiratory protection

required when vapours/aerosols are generated.

Recommended Filter type: Filter P 2 (acc. to DIN 3181) for solid and liquid particles of harmful substances

Hand protection

full contact:

Glove material: Nitrile rubber
Glove thickness: 0,11 mm
Break through time: > 480 min

splash contact:

Glove material: Nitrile rubber
Glove thickness: 0,11 mm
Break through time: > 480 min

The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN374, for example. KCL 741 Dermatril® L (full contact), KCL 741 Dermatril® L (splash contact).

Eye protection

Tightly fitting safety goggles

Protective measures

Acid-resistant protective clothing.

Hygiene measures

Immediately change contaminated clothing. Apply skin- protective barrier cream. Wash hands and face after working with substance.

Safety data sheet

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GreinoxFix

9. Physical and chemical properties

Form	liquid
Colour	colourless
Odour	odourless
pH	< 0,5 at 100 g/l 20 °C
Viscosity, dynamic	no data available
Viscosity, kinematic	30,5 mm ² /s at 20 °C
Melting point	ca. - 5°C
Boiling point/ boiling range	ca. 138 °C
Ignition temperature	not combustible
Flash point does	not flash
Oxidizing properties	no data available
Flammability	no data available
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Vapour pressure	2 hPa at 20 °C
Relative vapour density	no data available
Density	1,71 g/cm ³ at 20 °C
Solubility/qualitative	no data available
Water solubility	at 20 °C soluble
Partition coefficient: n-octanol/water	no data available
Evaporation rate	no data available

10. Stability and reactivity

Conditions to avoid
Strong heating

Materials to avoid
Violent reactions possible with:
bases, metallic oxides

Risk of ignition or formation of inflammable gases or vapours with:
Metals, metal alloys, Formed could be:, Hydrogen

Hazardous decomposition products
in the event of fire: See chapter 5.

Safety data sheet

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GreinoxFix

Further information
hygroscopic

incompatible with:
iron/iron-containing compounds, Mild steel, Aluminium, and their compounds
Contact with metals liberates hydrogen gas.

11. Toxicological information

Acute oral toxicity

LD50 rat

Dose: 1.530 mg/kg

(calculated on the pure substance) (IUCLID)

Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach., Pain

Acute inhalation toxicity

LC50 rat

Dose: > 0,85 mg/l, 1 h

(calculated on the pure substance) (RTECS)

Symptoms: mucosal irritations

Acute dermal toxicity

LD50 rabbit

Dose: 2.740 mg/kg

(calculated on the pure substance) (IUCLID)

Skin irritation

rabbit

Result: Causes burns.

(IUCLID)

Eye irritation

rabbit

Result: Causes burns.

(IUCLID)

Causes serious eye damage. conjunctivitis Risk of blindness!

Sensitisation

Human experience

Result: negative

(IUCLID)

Genotoxicity in vitro

Ames test

Result: negative

(IUCLID)

Further information

Systemic effects:

shock, Convulsions

Further data:

Handle in accordance with good industrial hygiene and safety practice.

Safety data sheet

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GreinoxFix

12. Ecological information

Ecotoxicity

Toxicity to fish

LC50

Species: *Gambusia affinis* (Mosquito fish)

Dose: 138 mg/l

Exposure time: 96 h

(calculated on the pure substance) (External MSDS)

Toxicity to bacteria

EC50

Species: activated sludge

Dose: 270 mg/l

(calculated on the pure substance) (IUCLID)

Additional ecological information

Biological effects:

Harmful effect due to pH shift.

Caustic even in diluted form.

Further information on ecology

Do not allow to enter waters, waste water, or soil!

13. Disposal considerations

Product:

Disposal should be in accordance with local, state or national legislation.

Waste code no:

11 01 06, Acids not otherwise specified

14. Transport information

ADR/RID

UN 1805 PHOSPHORIC ACID, SOLUTION, 8, III

IATA

UN 1805 PHOSPHORIC ACID, SOLUTION, 8, III

IMDG

UN 1805 PHOSPHORIC ACID, SOLUTION, 8, III

EmS

F-A

S-B

The transport regulations re cited according to international regulations and in the form applicable in Germany. Possible national deviations in other countries are not considered.

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15. Regulatory Information

GHS-Labeling
Hazard pictograms



Signal word
Danger

Hazard statements
H314: Causes severe skin burns and eye damage.
H290: May be corrosive to metals.

Precautionary statements

P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P330 + P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P309: If exposed or if you feel unwell:
P310: Immediately call a POISON CENTER or doctor/physician.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

National legislation

Storage class VCI:	8 B Non combustible, corrosive substances
Major Accident Hazard	96/82/EC Update: 2003
Legislation:	Directive 96/82/EC does not apply
Water contaminating class (Germany):	WGK 1 slightly water endangering
Other regulations:	Take note of Dir 94/33/EC on the protection of young people at work.

Labelling according to EC Directives:

Symbol:	C	Corrosive
R-Phrases:	R 34	causes burns
S-Phrases:	S 26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S 36	Wear suitable protective clothing.
	S 45	In case of accident or if you feel unwell seek medical advice immediately (show the label where possible)

16. Other information

Reasons for alteration
General update.

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.