

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.04.2023

Version number 2.0 (replaces version 1.0)

Revision: 05.01.2023

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: deconex 22 HPF-x**UFI:** ACH6-40N4-900Q-Y95H

1.2 Relevant identified uses of the substance or mixture and uses advised against

For industrial and commercial use only.

Application of the substance / the mixture Cleaning material/ Detergent

1.3 Details of the supplier of the safety data sheet

Manufacturer:

Borer Chemie AG

Gewerbestr. 13

CH-4528 Zuchwil

Schweiz

office@borer.ch

Telefon: +41 32 686 56 00

Telefax: +41 32 686 56 90

Supplier:

Borer Chemie Deutschland GmbH

Lützeltaler Str. 3

63868 Grosswallstadt

Germany

office@eu.borer.ch

Tel: +49 6022 26557-0

Fax: +49 6022 26557-21

Lieferant / Supplier:
Carl Roth GmbH + Co KG
Schoemperlenstr. 3-5
76185 Karlsruhe, Germany
+49 721 5606 0
sicherheit@carlroth.de

Further information obtainable from: product.safety@borer.ch

1.4 Emergency telephone number:

Giftnotruf der Charité, Berlin: 030/19240

Giftinformationszentrum-Nord der Länder Bremen, Hamburg, Niedersachsen und Schleswig-Holstein (GIZ-Nord) :0551/19 240

Informationszentrale gegen Vergiftungen Zentrum für Kinderheilkunde Universitätsklinikum Bonn: 0228/19240

Giftnotruf Erfurt Gemeinsames Giftinformationszentrum der Länder Mecklenburg-Vorpommern, Sachsen, Sachsen-Anhalt und Thüringen: 0361/730 730

Informations- und Beratungszentrum für Vergiftungsfälle Klinik für Kinder- und Jugendmedizin Universitätsklinikum des Saarlandes: 06841/19240

Giftinformationszentrum der Länder Rheinland-Pfalz und Hessen - Klinische Toxikologie - Universitätsmedizin der Johannes Gutenberg-Universität Mainz: 06131/19240

Vergiftungs-Informations-Zentrale Zentrum für Kinder- und Jugendmedizin Universitätsklinikum: 0761/19240

Giftnotruf München Toxikologische Abteilung der II. Med. Klinik und Poliklinik: 089/19240

DE_EN

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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Met. Corr. 1 H290 May be corrosive to metals.

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS05 GHS07

Signal word Danger

Hazard-determining components of labelling:

potassium hydroxide

dipotassium trioxosilicate

Hazard statements

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

Precautionary statements

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see on this label).

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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2.3 Other hazards

The substances in the mixture do not meet PBT/vPvB criteria according to REACH Annex XIII.

Results of PBT and vPvB assessment**PBT:** Not applicable.**vPvB:** Not applicable.**Determination of endocrine-disrupting properties**

CAS: 95-14-7 benzotriazole

List II

SECTION 3: Composition/information on ingredients**3.2 Mixtures****Description:** Mixture of substances listed below with nonhazardous additions.**Dangerous components:**

CAS: 1310-58-3 EINECS: 215-181-3 Reg.nr.: 01-2119487136-33	potassium hydroxide ☞ Skin Corr. 1A, H314; ☠ Acute Tox. 4, H302 Specific concentration limits: Skin Corr. 1A; H314: C ≥ 5% Skin Corr. 1B; H314: 2 % ≤ C < 5 % Skin Irrit. 2; H315: 0,5 % ≤ C < 2 % Eye Irrit. 2; H319: 0,5 % ≤ C < 2 %	≥15–<30%
CAS: 1312-76-1 EINECS: 215-199-1 Reg.nr.: 01-2119456888-17	dipotassium trioxosilicate ☞ Met. Corr.1, H290; Skin Corr. 1B, H314; Eye Dam. 1, H318	≥1–<5%
CAS: 95-14-7 EINECS: 202-394-1 Reg.nr.: 01-2119979079-20	benzotriazole ☠ Acute Tox. 4, H302; Acute Tox. 4, H332; Eye Irrit. 2, H319; Aquatic Chronic 3, H412	<1%

Regulation (EC) No 648/2004 on detergents / Labelling for contents

polycarboxylates

<5%

Additional information: For the wording of the listed hazard phrases refer to section 16.**SECTION 4: First aid measures****4.1 Description of first aid measures****General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation:

In case of unconsciousness place patient stably in side position for transportation.

Supply fresh air.

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After skin contact: Immediately wash with water and soap and rinse thoroughly.**After eye contact:**

Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing:

Call for a doctor immediately.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media The product does not burn**Suitable extinguishing agents:**

Use fire extinguishing methods suitable to surrounding conditions.

Water spray

Foam

Fire-extinguishing powder

For safety reasons unsuitable extinguishing agents: Full water jet**5.2 Special hazards arising from the substance or mixture**

During heating or in case of fire poisonous gases are produced.

5.3 Advice for firefighters**Protective equipment:** Mouth respiratory protective device.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralising agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Information about fire - and explosion protection: Keep respiratory protective device available.

7.2 Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Do not store together with acids.

Further information about storage conditions:

Optimum storage temperature 20°C. For details, see the product label.

Storage class (TRGS 510): 8 B

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

CAS: 95-14-7 benzotriazole

MAK (Germany) | vgl. Abschn. Xc, Dampf und Aerosol

DNELs

CAS: 95-14-7 benzotriazole

DNEL (Inhalation) | 9,55 mg/m³ (Employee)

DNEL (Dermal contact) | 1,08 mg/kg (Employee)

PNECs

CAS: 95-14-7 benzotriazole

PNEC | 39,4 mg/kg (Wastewater treatment plant)

0,00375 mg/kg (Sea water sediment)

0,00375 mg/kg (Freshwater sediment)

0,003 mg/kg (soil)

PNEC | 0,0194 mg/l (Freshwater)

0,0194 mg/l (Sea water)

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Control potential exposure through measures such as encapsulated or self-contained systems, properly designed and maintained installations and sufficient ventilation standards. Shut down

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systems and empty pipelines before opening the plant. Wherever possible, shut down and flush the plant before maintenance work. If there is potential for exposure: Ensure that key personnel have been informed regarding the nature of the exposure and basic methods for minimising exposure. Ensure that suitable personal protective equipment is available. In agreement with legal requirements, absorb any spills and dispose of waste. Monitor the effectiveness of control measures; consider the need for health monitoring; identify and implement corrective measures.

Appropriate engineering controls No further data; see item 7.

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Hand protection

The protective gloves to be used must satisfy the specification of EC Directive 89/686/EEC and the resulting EN374 standard.



Protective gloves

Material of gloves

Recommended thickness of the material: ≥ 0.7 mm

Nitrile rubber, NBR

Penetration time of glove material Penetration time: > 480 min.

Eye/face protection



Tightly sealed goggles

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Physical state

Fluid

Colour:

Colourless to yellow

Odour:

Characteristic

Odour threshold:

Not determined.

Melting point/freezing point:

Not relevant

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Boiling point or initial boiling point and boiling range	100 °C
Flammability	Not applicable.
Lower and upper explosion limit	
Lower:	Not applicable.
Upper:	Not applicable.
Flash point:	Not relevant
Decomposition temperature:	>230 °C
pH at 20 °C	14
Viscosity:	
Kinematic viscosity	Not determined.
Dynamic:	Not determined.
Solubility	
water:	Fully miscible.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure at 20 °C:	23 hPa
Density and/or relative density	
Density at 20 °C:	1,3 g/cm ³
Vapour density	Not relevant

9.2 Other information

Appearance:	
Form:	Fluid
Important information on protection of health and environment, and on safety.	
Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Change in condition	
Softening point/range	
Oxidising properties	Not relevant
Evaporation rate	Not relevant

Information with regard to physical hazard classes

Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void

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Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	May be corrosive to metals.
Desensitised explosives	Void

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided: Thermal decomposition above 230 °C.

10.3 Possibility of hazardous reactions Exothermic reaction with: Acids

10.4 Conditions to avoid No further relevant information available.

10.5 Incompatible materials: Do not store together with acids.

10.6 Hazardous decomposition products:

Thermal decomposition can cause the release of irritant gases and vapours.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity Harmful if swallowed.

LD/LC50 values relevant for classification:

ATE (Acute Toxicity Estimates)

Oral	LD50	1468–1711 mg/kg (Rat)
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CAS: 1310-58-3 potassium hydroxide

Oral	LD50	333–388 mg/kg (Rat)
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CAS: 95-14-7 benzotriazole

Oral	LD50	500 mg/kg (Rat)
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Dermal	LD50	>2000 mg/kg (Rabbit)
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Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/irritation Causes serious eye damage.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

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STOT-single exposure Based on available data, the classification criteria are not met.

STOT-repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.

11.2 Information on other hazards

Endocrine disrupting properties

CAS: 95-14-7 | benzotriazole

List II

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

CAS: 1312-76-1 dipotassium trioxosilicate

LC50/96h >146 mg/l (Fish)

EC50/48h >146 mg/l (Daphnia)

CAS: 95-14-7 benzotriazole

LC50/96h 180 mg/l (Fish)

EC50/48h 15,8 mg/l (Daphnia)

NOEC/72h 10 mg/l (Algae)

12.2 Persistence and degradability

Biodegradability according to OECD >90 %

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

12.5 Results of PBT and vPvB assessment No further relevant information available.

PBT: Not applicable.

vPvB: Not applicable.

12.6 Endocrine disrupting properties

For information on endocrine disrupting properties see section 11.

12.7 Other adverse effects

Additional ecological information:

COD-value: 71,40 g/kg

General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue

HP8	Corrosive
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Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

14.1 UN number or ID number

ADR, IMDG, IATA

UN3266

14.2 UN proper shipping name

ADR

3266 CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (potassium hydroxide, dipotassium trioxosilicate)

IMDG

CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (potassium hydroxide, dipotassium trioxosilicate)

IATA

Corrosive liquid, basic, inorganic, n.o.s. (potassium hydroxide, dipotassium trioxosilicate)

14.3 Transport hazard class(es)

ADR, IMDG, IATA



Class

8 Corrosive substances.

Label

8

14.4 Packing group

ADR, IMDG, IATA

I

14.5 Environmental hazards:

Not applicable.

14.6 Special precautions for user

Warning: Corrosive substances.

Hazard identification number (Kemler code): 88

EMS Number:

F-A,S-B

Segregation groups

(SGG18) Alkalis

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Stowage Category	B
Stowage Code	SW2 Clear of living quarters.
Segregation Code	SG35 Stow "separated from" SGG1-acids
14.7 Maritime transport in bulk according to IMO instruments	Not applicable.

Transport/Additional information:

ADR

Limited quantities (LQ)	0
Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
Transport category	1
Tunnel restriction code	E

IMDG

Limited quantities (LQ)	0
Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
UN "Model Regulation":	UN 3266 CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (POTASSIUM HYDROXIDE, DIPOTASSIUM TRIOXOSILICATE), 8, I

SECTION 15: Regulatory information

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

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

REGULATION (EC) No 1005/2009 on substances that deplete the ozone layer – ANNEX I (Ozone- depleting potential)

Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

The information in this safety data sheet is correct to the best of our knowledge at the time of printing. The information is intended to provide you with reference points for the safe handling of the product specified in this safety data sheet when storing, processing, transporting and disposing of it. The information is not transferable to other products. Insofar as the product is mixed or processed with other materials, or is subject to processing, the information in this safety data sheet, unless expressly indicated otherwise, cannot be transferred to the resulting new material.

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Relevant phrases

H290 May be corrosive to metals.
 H302 Harmful if swallowed.
 H314 Causes severe skin burns and eye damage.
 H318 Causes serious eye damage.
 H319 Causes serious eye irritation.
 H332 Harmful if inhaled.
 H412 Harmful to aquatic life with long lasting effects.

Department issuing SDS: product.safety@borer.ch**Contact:** product.safety@borer.ch**Date of previous version:** 01.06.2022**Version number of previous version:** 1.0**Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Met. Corr. 1: Corrosive to metals – Category 1

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

*** Data compared to the previous version altered.**