

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 12.04.2023

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 21 SOLID**UFI:** TD06-0089-A00N-XSSH

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

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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

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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

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

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

STOT SE 3 H335 May cause respiratory irritation.

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:

disodium silicate pentahydrate

phosphoric acid, trisodium salt, dodecahydrate

Hazard statements

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

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.

2.3 Other hazards

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

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Results of PBT and vPvB assessment**PBT:** Not applicable.**vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****3.2 Mixtures****Description:** Mixture of substances listed below with nonhazardous additions.**Dangerous components:**

CAS: 10101-89-0 EINECS: 231-509-8 Reg.nr.: 01-2119489800-32	phosphoric acid, trisodium salt, dodecahydrate ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	≥15–<30%
CAS: 497-19-8 EINECS: 207-838-8 Reg.nr.: 01-2119485498-19	sodium carbonate ⚠ Eye Irrit. 2, H319	≥15–<30%
CAS: 10213-79-3 EC number: 600-279-4 Reg.nr.: 01-2119449811-37-0003	disodium silicate pentahydrate ⚠ Met. Corr.1, H290; Skin Corr. 1B, H314; ⚠ STOT SE 3, H335	≥15–<30%

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

phosphates	≥30%
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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.**After inhalation:**

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

Supply fresh air.

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: 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.

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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: Do not allow to enter sewers/ surface or ground water.**6.3 Methods and material for containment and cleaning up:**

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.

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Thorough dedusting.

Ensure good ventilation/exhaustion at the workplace.

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

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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:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

DNELs

CAS: 10101-89-0 phosphoric acid, trisodium salt, dodecahydrate

DNEL (Inhalation)	4,07 mg/m ³ (Employee)
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CAS: 10213-79-3 disodium silicate pentahydrate

DNEL (Inhalation)	6,22 mg/m ³ (Employee)
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DNEL (Dermal contact)	1,49 mg/kg (Employee)
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PNECs

CAS: 10101-89-0 phosphoric acid, trisodium salt, dodecahydrate

PNEC	0,05 mg/l (Freshwater)
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	0,005 mg/l (Sea water)
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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 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.

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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 glovesRecommended 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	Solid
Colour:	White
Odour:	Odourless
Odour threshold:	Not determined.
Melting point/freezing point:	Not relevant
Boiling point or initial boiling point and boiling range	Undetermined.
Flammability	Not determined.
Lower and upper explosion limit	
Lower:	Not applicable.
Upper:	Not applicable.
Flash point:	Not relevant
Decomposition temperature:	>230 °C
pH at 20 °C	12
Viscosity:	
Kinematic viscosity	Not applicable.
Dynamic:	Not applicable.
Solubility	
water:	Soluble.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure:	Not applicable.

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Density and/or relative density

Density at 20 °C:	1,2–1,3 g/cm ³
Bulk density:	703–853 kg/m ³
Vapour density	Not applicable.
Particle characteristics	See item 3.

9.2 Other information

Appearance:

Form: Powder

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 applicable.

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
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	Void
Desensitised explosives	Void

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.

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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** Based on available data, the classification criteria are not met.**LD/LC50 values relevant for classification:****CAS: 10101-89-0 phosphoric acid, trisodium salt, dodecahydrate**

Inhalative	LC50/4h	>0,83 mg/l (Rat)
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CAS: 497-19-8 sodium carbonate

Oral	LD50	2800 mg/kg (Rat)
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CAS: 10213-79-3 disodium silicate pentahydrate

Oral	LD50	1152–1349 mg/kg (Rat)
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Dermal	LD50	>5000 mg/kg (Rat)
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Inhalative	LC50/4h	>2,06 mg/l (Rat)
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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.**STOT-single exposure** May cause respiratory irritation.**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**

None of the ingredients is listed.

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SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

CAS: 10101-89-0 phosphoric acid, trisodium salt, dodecahydrate

LC50/96h	>100 mg/l (Fish)
EC50/48h	>100 mg/l (Daphnia)
EC50/72h	>100 mg/l (Algae)
NOEC/48h	>100 mg/l (Daphnia)
NOEC/72h	>100 mg/l (Algae)

CAS: 497-19-8 sodium carbonate

LC50/96h	300 mg/l (Fish)
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CAS: 10213-79-3 disodium silicate pentahydrate

LC50/96h	210 mg/l (Fish)
EC50/48h	1700 mg/l (Daphnia)

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

The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects

Additional ecological information:

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

HP5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP8	Corrosive

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

UN3253

14.2 UN proper shipping name

ADR

3253 DISODIUM TRIOXOSILICATE

IMDG

DISODIUM TRIOXOSILICATE

IATA

Disodium trioxosilicate

14.3 Transport hazard class(es)

ADR, IMDG, IATA



Class

8 Corrosive substances.

Label

8

14.4 Packing group

ADR, IMDG, IATA

III

14.5 Environmental hazards:

Not applicable.

14.6 Special precautions for user

Warning: Corrosive substances.

Hazard identification number (Kemler code): 80

EMS Number:

F-A,S-B

Segregation groups

(SGG18) Alkalis

Stowage Category

A

Segregation Code

SG35 Stow "separated from" SGG1-acids

14.7 Maritime transport in bulk according to

IMO instruments

Not applicable.

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Transport/Additional information:**ADR****Limited quantities (LQ)**

5 kg

Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

Transport category

3

Tunnel restriction code

E

IMDG**Limited quantities (LQ)**

5 kg

Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

UN "Model Regulation":

UN 3253 DISODIUM TRIOXOSILICATE, 8, III

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 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.**Detergents Regulation (EC) no. 648/2004**

The surfactants in this formula meet the conditions of biodegradability as established in the Detergents Regulation (EC) no. 648/2004. Documents confirming this are kept available for responsible authorities of member states and are only provided at their direct request.

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.

Relevant phrases

H290 May be corrosive to metals.

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H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Department issuing SDS: product.safety@borer.ch**Contact:** product.safety@borer.ch**Date of previous version:** 09.06.2022**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

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

Skin Irrit. 2: Skin corrosion/irritation – Category 2

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

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

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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