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

### 1.1 Product identifier
deconex 22 LIQ-x

### 1.2 Relevant identified uses of the substance or mixture and uses advised against
Reserved for industrial and professional use.

**Relevant identified uses**
Detergent

### 1.3 Details of the supplier of the safety data sheet
Borer Chemie Deutschland GmbH

**Street :** Wallbrunnstrasse 24
**Postal code/city :** 79539 Lörrach
**Country :** Deutschland
**Telephone :** +49 7733 3603530
**Telefax :** +497733 3603539
**Information contact :**

**Manufacturer**
Borer Chemie AG

**Street :** Gewerbestrasse 13
**Postal code/city :** 4528 Zuchwil
**Country :** Schweiz
**Telephone :** +41 32 686 56 00
**Telefax :** +41 32 686 56 90
**Information contact :** product.safety@borer.ch

### 1.4 Emergency telephone number
Giftnotruf der Charité - Universitätsmedizin Berlin, 12203 Berlin, Notruf: +49 30 19 24 0

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture
**Classification according to Regulation (EC) No 1272/2008 [CLP]**
Eye Dam. 1 ; H318 - Serious eye damage/eye irritation : Category 1 ; Causes serious eye damage.
Skin Corr. 1A ; H314 - Skin corrosion/irritation : Category 1A ; Causes severe skin burns and eye damage.
Met. Corr. 1 ; H290 - Corrosive to metals : Category 1 ; May be corrosive to metals.

### 2.2 Label elements
**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

**Hazard pictograms**

Corrosion (GHS05)

**Signal word**
Danger

**Hazard components for labelling**
DIPOTASSIUM TRIOXOSILICATE ; CAS No. : 1312-76-1
POTASSIUM HYDROXIDE ; CAS No. : 1310-58-3

**Hazard statements**

| | |
|---|---|
| H290 | May be corrosive to metals. |
| H314 | Causes severe skin burns and eye damage. |

**Precautionary statements**

| | |
|---|---|
| P234 | Keep only in original container. |
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| P310 | Immediately call a POISON CENTER. |
| P405 | Store locked up. |
| P406 | Store in corrosive resistant container with a resistant inner liner. |

### 2.3 Other hazards

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

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

**Hazardous ingredients**

DIPOTASSIUM TRIOXOSILICATE ; REACH registration No. : 01-2119456888-17-XXXX ; EC No. : 215-199-1; CAS No. : 1312-76-1

Weight fraction : ≥ 5 - < 15 %

Classification 1272/2008 [CLP] : Skin Corr. 1B ; H314 Eye Dam. 1 ; H318

POTASSIUM HYDROXIDE ; REACH registration No. : 01-2119487136-33-XXXX ; EC No. : 215-181-3; CAS No. : 1310-58-3

Weight fraction : ≥ 1 - < 5 %

Classification 1272/2008 [CLP] : Met. Corr. 1 ; H290 Skin Corr. 1A ; H314 Acute Tox. 4 ; H302

**Additional information**

Full text of H- and EUH-phrases: see section 16.

**Regulation (EC) No. 648/2004: Labelling for contents**

polycarboxylates < 5 %

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General information

Remove contaminated, saturated clothing immediately.

#### Following inhalation

Provide fresh air. In case of respiratory tract irritation, consult a physician.

#### In case of skin contact

Flush away with water and rinse. In case of skin irritation, consult a physician.

#### After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

#### After ingestion

Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Call a physician immediately.

#### Self-protection of the first aider

No special measures are necessary.

### 4.2 Most important symptoms and effects, both acute and delayed

Irritating to eyes, respiratory system and skin.

### 4.3 Indication of any immediate medical attention and special treatment needed

None

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

The product itself does not burn.

#### Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings. Water spray jet, foam, extinguishing powder. Carbon dioxide (CO2)

#### Unsuitable extinguishing media

High power water jet

### 5.2 Special hazards arising from the substance or mixture

#### Hazardous combustion products

Fire generates toxic gases.

### 5.3 Advice for firefighters

#### Special protective equipment for firefighters

In case of fire: Wear self-contained breathing apparatus.

### 5.4 Additional information

None

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Take the precautions customary when handling chemicals.

### 6.2 Environmental precautions

Do not allow to enter into surface water or drains.

### 6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

### 6.4 Reference to other sections

See Chapter 7, 8 & 13

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. See section 8 of the safety data sheet (general health and safety measures)

#### Protective measures

**Measures to prevent fire**

No anti-explosion measures necessary.

#### Advices on general occupational hygiene

When using do not eat, drink, smoke, sniff.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Hints on joint storage

**Storage class :** 8B

**Storage class (TRGS 510) :** 8B

#### Further information on storage conditions

Keep only in the original container in a cool, well-ventilated place. Do not store together with Acids, oxidizing agents,

**Storage temperature :** Optimal storage temperature 20 °C . For details, see product label.

### 7.3 Specific end use(s)

None

## SECTION 8: Exposure controls/personal protection

## 8.1 Control parameters

### DNEL/DMEL and PNEC values

#### DNEL/DMEL

| | |
|---|---|
| Limit value type : | DNEL worker (systemic) ( DIPOTASSIUM TRIOXOSILICATE ; CAS No. : 1312-76-1 ) |
| Exposure route : | Inhalation |
| Exposure frequency : | Long-term (repeated) |
| Limit value : | 5.61 mg/m$^3$ |
| Limit value type : | DNEL worker (systemic) ( DIPOTASSIUM TRIOXOSILICATE ; CAS No. : 1312-76-1 ) |
| Exposure route : | Dermal |
| Exposure frequency : | Long-term (repeated) |
| Limit value : | 1.49 mg/kg |
| Limit value type : | DNEL worker (local) ( POTASSIUM HYDROXIDE ; CAS No. : 1310-58-3 ) |
| Exposure route : | Inhalation |
| Exposure frequency : | Long-term |
| Limit value : | 1 mg/m$^3$ |

## 8.2 Exposure controls

Control any potential exposure using measures such as contained or enclosed systems, properly designed and maintained facilities and a good standard of general ventilation. Drain down systems and clear transfer lines prior to breaking containment. Drain down and flush equipment where possible prior to maintenance. Where there is potential for exposure: Ensure relevant staff are informed of the nature of exposure and aware of basic actions to minimise exposures; Ensure suitable personal protective equipment is available; Clear up spills and dispose of waste in accordance with regulatory requirements; monitor effectiveness of control measures; consider the need for health surveillance; identify and implement corrective actions.

### Personal protection equipment

### Eye/face protection

Eye glasses with side protection

### Skin protection

**Hand protection**

In full contact: Glove material: nitrile rubber Layer thickness: 0.4 mm Breakthrough time: > 480 Min. In splash contact: Glove material: nitrile rubber Layer thickness: 0.4 mm Breakthrough 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.

**Body protection**

Light protective clothing.

### Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

**Suitable respiratory protection apparatus**

Filtering device with filter or ventilator filtering device of type: A

## SECTION 9: Physical and chemical properties

## 9.1 Information on basic physical and chemical properties

**Appearance :** liquid

**Colour :** clear, colourless to yellow

**Odour :** characteristic

### Safety relevant basis data

| | | | | |
|---|---|---|---|---|
| **Melting point/melting range :** | | | not relevant | |
| **Initial boiling point and boiling range :** | ( 1013 hPa ) | | 100 | °C |
| **Decomposition temperature :** | | > | 230 | °C |
| **Flash point :** | | | not applicable | |
| **Ignition temperature :** | | | not applicable | |
| **Lower explosion limit :** | | | not applicable | |
| **Upper explosion limit :** | | | not applicable | |

| | | | | | |
|---|---|---|---|---|---|
| **Vapour pressure :** | ( 25 °C ) | approx. | 32 | hPa | |
| **Density :** | ( 20 °C ) | | 1.2 | g/cm³ | |
| **Solvent separation test :** | ( 20 °C ) | | not determined | | |
| **Water solubility :** | ( 20 °C ) | > | 100 | g/l | |
| **pH value (solvent = drinking water) :** | ( 20 °C / 10 g/l ) | approx. | 12 | | |
| **log P O/W :** | | | not determined | | |
| **Flow time :** | ( 20 °C ) | | not determined | | DIN-cup 4 mm |
| **Viscosity :** | ( 20 °C ) | | not determined | | |
| **Cinematic viscosity :** | ( 25 °C ) | | 2.5 | mm²/s | |
| **Evaporation rate :** | | | not relevant | | |
| **Vapourisation rate :** | | | not relevant | | |
| **Flammable solids :** | Not applicable. | | | | |
| **Flammable gases :** | Not applicable. | | | | |
| **Oxidising liquids :** | Not applicable. | | | | |
| **Explosive properties :** | Not applicable. | | | | |

### 9.2 Other information

None

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Stable under recommended storage and handling conditions(See section 7).

### 10.2 Chemical stability

Thermal decomposition above 230 °C.

### 10.3 Possibility of hazardous reactions

Exothermic reaction with: Acids, oxidizing agents,

### 10.4 Conditions to avoid

None, if handled according to order.

### 10.5 Incompatible materials

Acids, oxidizing agents,

### 10.6 Hazardous decomposition products

Thermal decomposition can lead to the escape of irritating gases and vapours.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute effects

**Acute oral toxicity**

| | |
|---|---|
| Parameter : | ATEmix calculated |
| Exposure route : | Oral |
| Effective dose : | 10020 mg/kg |

#### Irritant and corrosive effects

Causes severe skin burns and eye damage.

**Primary irritation to the skin**

Parameter : Primary irritation to the skin ( DIPOTASSIUM TRIOXOSILICATE ; CAS No. : 1312-76-1 )

**Irritation to eyes**

Parameter : Irritation to eyes ( DIPOTASSIUM TRIOXOSILICATE ; CAS No. : 1312-76-1 )

#### Sensitisation

No information available.

#### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

No information available.

### STOT-single exposure
No information available.

### STOT-repeated exposure
No information available.

### Aspiration hazard
No information available.

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Aquatic toxicity

**Acute (short-term) algae toxicity**

| | |
|---|---|
| Parameter : | EC50 ( DIPOTASSIUM TRIOXOSILICATE ; CAS No. : 1312-76-1 ) |
| Species : | Daphnia |
| Effective dose : | > 2000 mg/l |
| Exposure time : | 48 h |

#### Effects in sewage plants

| | |
|---|---|
| Parameter : | Chemical oxygen demand (COD) |
| Effective dose : | 124.5 g/kg |

### 12.2 Persistence and degradability

#### Biodegradation

| | |
|---|---|
| Parameter : | Biodegradability according to OECD |
| Effective dose : | > 90 % |

### 12.3 Bioaccumulative potential
No information available.

### 12.4 Mobility in soil
No information available.

### 12.5 Results of PBT and vPvB assessment
No information available.

### 12.6 Other adverse effects
No information available.

### 12.7 Additional ecotoxicological information
None

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods
In accordance with local official regulations.

## SECTION 14: Transport information

### 14.1 UN number
UN 3266

### 14.2 UN proper shipping name

**Land transport (ADR/RID)**
CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. ( DIPOTASSIUM TRIOXOSILICATE · POTASSIUM HYDROXIDE )

**Sea transport (IMDG)**
CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. ( DIPOTASSIUM TRIOXOSILICATE · POTASSIUM HYDROXIDE )

**Air transport (ICAO-TI / IATA-DGR)**
CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. ( DIPOTASSIUM TRIOXOSILICATE · POTASSIUM HYDROXIDE )

## 14.3 Transport hazard class(es)

**Land transport (ADR/RID)**

| | |
|---|---|
| **Class(es) :** | 8 |
| **Classification code :** | C5 |
| **Hazard identification number (Kemler No.) :** | 80 |
| **Tunnel restriction code :** | E |
| **Special provisions :** | LQ 1 l · E 2 |
| **Hazard label(s) :** | 8 |

**Sea transport (IMDG)**

| | |
|---|---|
| **Class(es) :** | 8 |
| **EmS-No. :** | F-A / S-B |
| **Special provisions :** | LQ 1 l · E 2 · Segregation Group 18 - Alkalis |
| **Hazard label(s) :** | 8 |

**Air transport (ICAO-TI / IATA-DGR)**

| | |
|---|---|
| **Class(es) :** | 8 |
| **Special provisions :** | E 2 |
| **Hazard label(s) :** | 8 |

## 14.4 Packing group

II

## 14.5 Environmental hazards

**Land transport (ADR/RID) :** No
**Sea transport (IMDG) :** No
**Air transport (ICAO-TI / IATA-DGR) :** No

## 14.6 Special precautions for user

May be corrosive to metals (H290)

# SECTION 15: Regulatory information

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

**National regulations**

**Water hazard class (WGK)**

Class : 1 (Slightly hazardous to water) Classification according to VwVwS

## 15.2 Chemical safety assessment

No information available.

# SECTION 16: Other information

The user is responsible for the observance of all required statutory provisions.

## 16.1 Indication of changes

02. Labelling according to Regulation (EC) No. 1272/2008 [CLP]

## 16.2 Abbreviations and acronyms

None

## 16.3 Key literature references and sources for data

None

## 16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

No information available.

## 16.5 Relevant H- and EUH-phrases (Number and full text)

H290 May be corrosive to metals.

| | |
|---|---|
| H302 | Harmful if swallowed. |
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage. |

## 16.6 Training advice

None

## 16.7 Additional information

None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.