CONVEYOR BELT CLEANER BIO CLEAN 2000
Art.-no. A-ZUB-000002

01 Identification of substance/mixture and of the company undertaking

1.1. Product identifier
Conveyor Belt Cleaner Bio Clean 2000

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

Substance/mixture use
Commercial cleaner for industrial use

1.3. Details of the supplier of the safety data sheet
Company name: boeck GmbH
Street: Ludwigstraße 8
Location: 89340 Leipheim
Phone number: +49 (0) 8221 96 43 700
E-mail: info@boeck-technology.de
Website: www.boeck-technology.de
Contact person: Marc Böck
E-mail: m.boeck@boeck-technology.de

1.4. Emergency phone number:
+49/(0)2324/ 979817

02 Hazards identification

2.1. Classification of the substance or mixture
Regulation (EG) no. 1272/2008
Hazard classification:
Caustic/irritant effect on the skin: Skin irritation Category 2
Severe eye damage/irritation: Eye irritation Category 1
Hazard warnings:
Causes skin irritation
Causes severe eye damage

2.2. Label elements
Regulation (EG) no. 1272/2008

Hazard-determining components of labeling
Sodium metasilicate pentahydrate

Signal word: Warning
Pictogram:

**Hazard warnings**
H315  Causes skin irritation.
H318  Causes severe eye damage.

**Safety warnings**
P280   Wear protective gloves/clothing, eye protection, face protection.
P302+P315  IN CASE OF SKIN CONTACT: rinse off with plenty of water.
P332+P313  In case of skin irritation: seek medical advice/assistance.
P362+P364  Take off contaminated clothes and wash before reuse.
P305+P351+P338  IN CASE OF CONTACT WITH EYES: Rinse gently with water for a few minutes.
            Remove any contact lenses, if applicable and possible.
            Continue rinsing.
P310   Immediately contact POISON CENTRE / physician.

2.3. **Other hazards**
No information available.

## 03 Composition / information on ingredients

### 3.1. Mixtures

**General chemical description**
Detergent composed of (compliant with EC 648/2004 regulation on Detergents): < 5 % non-ionic surfactants, < 5% anionic surfactants, silicates, glyconates, alcohols

**Dangerous components**

<table>
<thead>
<tr>
<th>CAS no.</th>
<th>Chemical characterization</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EC no.</td>
<td>Index no.</td>
</tr>
<tr>
<td></td>
<td>GHS classification</td>
<td></td>
</tr>
<tr>
<td>68154-97-2</td>
<td>Alcohols, C10-12, ethoxylated, propoxylated</td>
<td>1 - &lt; 5 %</td>
</tr>
<tr>
<td></td>
<td>935-890-8</td>
<td></td>
</tr>
<tr>
<td>112-34-5</td>
<td>Eye irrit. 2; H319</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2-(2-Butoxyethoxy)ethanol; Diethylene glycol monobutyl ether; Butyl diglycol</td>
<td>1-&lt; 5 %</td>
</tr>
<tr>
<td></td>
<td>203-961-6</td>
<td>603-096-00-8</td>
</tr>
<tr>
<td></td>
<td>Eye irrit. 2; H319</td>
<td></td>
</tr>
<tr>
<td>10213-79-3</td>
<td>Sodium Metasilicate Pentahydrate</td>
<td>1 - &lt; 5 %</td>
</tr>
<tr>
<td></td>
<td>229-912-9</td>
<td>01-2119449811-37</td>
</tr>
<tr>
<td></td>
<td>Met. Corr. 1, Skin Corr. 1B, STOT SE 3; H290 H314 H335</td>
<td></td>
</tr>
</tbody>
</table>

Wording of H- and EUH-phrases: see section 16.
04 First aid measures

4.1. Description of first aid measures

After inhalation
Provide fresh air.

After contact with skin
Rinse off with plenty of water. Remove contaminated clothing and wash before reuse. After contact with skin, wash immediately with plenty of soap and water.

After contact with eyes
In case of eye contact, rinse the eyes with water for a sufficiently long time with open eyelids, then consult an ophthalmologist immediately.

After ingestion
Immediately rinse mouth and drink plenty of water. In case of vomiting, be aware of aspiration hazard. Always seek medical advice!

4.2. Most important symptoms and effects, both acute and delayed
No information available.

4.3. Indication of any immediate medical attention and special treatment needed
Symptomatic treatment.

05 Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

5.2. Special hazards arising from the substance or mixture
Non-flammable. None.

5.3. Advice for firefighters
In case of fire: wear self-contained breathing apparatus. No special measures required.

Additional instructions:
Suppress gases/vapors/mist with water spray. Collect contaminated extinguishing water separately. Do not allow to enter drains or waterways.
06 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation. Do not inhale gas/fumes/vapor/aerosol. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Special slip hazard due to leaking/spilled product.

6.2. Environmental precautions
Do not empty into drains or bodies of water.

6.3. Methods and material for containment and cleaning up
Absorb with liquid-binding material (sand, diatomaceous earth, acid binders, universal binders). Treat the material in accordance with the section on disposal. Prevent area expansion (e.g. by diking or oil booms). Retain contaminated wash water and dispose of it.

6.4. Reference to other sections
Safe handling: see section 8 Personal protective equipment; see section 9 Disposal; see Section 13

07 Handling and storage

7.1. Precautions for safe handling
Contain leaks and spills in cabinets with mobile drip pans.

Notes on fire and explosion protection
Not applicable

Further handling information
Do not allow product to dry out.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and containers
Keep container tightly closed. Take care when re-opening opened containers.

Combined storage instructions
Not applicable

Further information on storage conditions
Not applicable
7.3. Specific end use(s)
Commercial cleaner for industrial use

08 Exposure controls / personal protection

8.1. Control parameters

Occupational exposure limits (TRGS 900)

<table>
<thead>
<tr>
<th>CAS no.</th>
<th>Chemical characterization</th>
<th>ppm</th>
<th>mg/m³</th>
<th>F/m³</th>
<th>Peak limit</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>112-34-5</td>
<td>2-(2-Butoxyethoxy)ethanol</td>
<td>10</td>
<td>67</td>
<td>67</td>
<td>1,5(I)</td>
<td></td>
</tr>
</tbody>
</table>

DNEL/DMEL values

<table>
<thead>
<tr>
<th>CAS no.</th>
<th>Characterization</th>
<th>Exposure route</th>
<th>Effect</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>10213-79-3</td>
<td>Sodium Metasilicate Pentahydrate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumers DNEL, long-term</td>
<td>oral</td>
<td>systemic</td>
<td>0,74 mg/kg KG/d</td>
<td></td>
</tr>
<tr>
<td>Workers DNEL, long-term</td>
<td>inhalation</td>
<td>systemic</td>
<td>6,22 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Consumers DNEL, long-term</td>
<td>inhalation</td>
<td>systemic</td>
<td>1,55 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Workers DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
<td>1,49 mg/kg KG/d</td>
<td></td>
</tr>
<tr>
<td>Consumers DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
<td>0,74 mg/kg KG/d</td>
<td></td>
</tr>
</tbody>
</table>

DNEL/DMEL values

<table>
<thead>
<tr>
<th>CAS no.</th>
<th>Characterization</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental compartment</td>
<td></td>
<td>Value</td>
</tr>
<tr>
<td>10213-79-3</td>
<td>Sodium Metasilicate Pentahydrate</td>
<td>7,5 mg/l</td>
</tr>
<tr>
<td>Fresh water</td>
<td></td>
<td>1,000 mg/l</td>
</tr>
<tr>
<td>Seawater</td>
<td></td>
<td>1 mg/l</td>
</tr>
<tr>
<td>Microorganisms in sewage treatment plants</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8.2. Protective and hygienic measures

Immediately remove contaminated, soaked clothing. Prepare and observe skin protection plan! Before wash hands and face thoroughly before breaks and at the end of work, shower if necessary. Do not eat or drink while working.

Eye/face protection
Suitable eye protection: safety goggles.
Hand protection
When handling chemical agents, only chemical protective gloves with a CE mark including a four-digit test number may be worn. Chemical protective gloves are selected according to the concentration and quantity of the hazardous substance specific to the workplace. It is recommended to check the chemical resistance of the above mentioned protective gloves for special applications with the glove manufacturer.

Body protection
Wear suitable protective clothing when working.

Respiratory protection
Wear respiratory protection in case of insufficient ventilation.

09 Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>State of matter</td>
<td>liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>yellow</td>
</tr>
<tr>
<td>Scent</td>
<td>neutral</td>
</tr>
<tr>
<td>pH value (at 20 °C)</td>
<td>10.9 @ 10 g/L</td>
</tr>
<tr>
<td>Phase transitions</td>
<td></td>
</tr>
<tr>
<td>Melting point</td>
<td>Not specified</td>
</tr>
<tr>
<td>Boiling point and range</td>
<td>Not specified</td>
</tr>
<tr>
<td>Flashpoint</td>
<td>Non-flammable</td>
</tr>
<tr>
<td>Inflammability</td>
<td></td>
</tr>
<tr>
<td>Solid</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Gas</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

Explosion risk
No test required, since the concentration of the flammable gas in a mixture with inert gas is so low that it always remains below the limit value when mixed with air.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower explosion limit</td>
<td>Not specified</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>Not specified</td>
</tr>
</tbody>
</table>

Auto-ignition temperature

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Gas</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

Decomposition temperature

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decomposition temperature</td>
<td>Not specified</td>
</tr>
</tbody>
</table>

Fire-promoting properties
Not fire-promoting.
Vapor pressure: Not specified
Density (at 20 °C): 1,084 g/cm³
Water solubility: Easily soluble

Solubility in other dissolvents
Not specified

Partition coefficient: Not specified
Dyn. viscosity (at 20 °C): 12.4 mPa·s
Vapor density: Not specified
Evaporation rate: Not specified

9.2. Other information
Solids content: Not specified

10 Stability and reactivity

10.1. Reactivity
None known

10.2. Chemical stability
The product is stable when stored at normal ambient temperatures.

10.3. Possibility of hazardous reactions
No hazardous reactions will occur if handled and stored as directed.

10.4. Conditions to avoid
None known

10.5. Incompatible materials
None known

10.6. Hazardous decomposition products
CO₂
11  Toxicological information

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

Acute toxicity

<table>
<thead>
<tr>
<th>CAS no.</th>
<th>Chemical characterization</th>
<th>Exposure route</th>
<th>Dosage</th>
<th>Species</th>
<th>Source</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>68154-97-2</td>
<td>Alcohols, C10-12, ethoxylated, propoxylated</td>
<td>oral</td>
<td>LD50 &gt; 2000 mg/kg</td>
<td>Rats</td>
<td>OECD 401</td>
<td></td>
</tr>
<tr>
<td>112-34-5</td>
<td>2-(2-Butoxyethoxy)ethanol; Diethylene glycol monobutyl ether; Butyl diglycol</td>
<td>oral</td>
<td>LD50 5660 mg/kg</td>
<td>Rats</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50 4120 mg/kg</td>
<td>Rabbits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10213-79-3</td>
<td>Sodium Metasilicate Pentahydrate</td>
<td>oral</td>
<td>LD50 1400 mg/kg</td>
<td>Rats</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other information about tests
The mixture is classified as hazardous according to Directive 1999/45/EC.

12  Ecological information

12.1. Toxicity
The product can be converted in low concentrations by various microorganisms to:

<table>
<thead>
<tr>
<th>CAS no.</th>
<th>Chemical characterization</th>
<th>Aquatic toxicity</th>
<th>Dosage</th>
<th>[h]</th>
<th>[d]</th>
<th>Species</th>
<th>Source</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>68154-97-2</td>
<td>Alcohols, C10-12, ethoxylated, propoxylated</td>
<td>Acute algae toxicity</td>
<td>ErC50 &gt;1-10 mg/l</td>
<td>72 h</td>
<td></td>
<td>Desmodesmus subspicatus (green algae)</td>
<td>OECD 401</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute crustacean toxicity</td>
<td>EC50 &gt;1-10 mg/l</td>
<td>48 h</td>
<td></td>
<td>Daphnia magna (water flea)</td>
<td>OECD 202</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute bacteria toxicity</td>
<td>(&gt;10000 mg/l)</td>
<td>0h</td>
<td></td>
<td>Pseudomonas subspicatus (green algae)</td>
<td>ISO 10712</td>
<td></td>
</tr>
</tbody>
</table>
### Characterization

<table>
<thead>
<tr>
<th>CAS no.</th>
<th>Characterization</th>
<th>Dosage</th>
<th>[h]</th>
<th>[d]</th>
<th>Species</th>
<th>Source</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>112-34-5</td>
<td>2-(2-Butoxyethoxy)ethanol; Diethylene glycol monobutyl ether; Butyl diglycol</td>
<td>ErC50</td>
<td>&gt;100</td>
<td></td>
<td>Scenedesmus sp.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute algae toxicity</td>
<td>EC50</td>
<td>&gt;100</td>
<td>48</td>
<td>Daphnia magna</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10213-79-3</td>
<td>Sodium Metasilicate Pentahydrate</td>
<td>LC50</td>
<td>3185</td>
<td>96</td>
<td>Zebrafish (Danio rerio)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute fish toxicity</td>
<td>EC50</td>
<td>4857</td>
<td>48</td>
<td>Daphnia magna (water flea)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 12.2. Persistence and degradability

Biodegradable according to the criteria of the German Detergents and Cleaning Agents Act (WRMG).
> 90 % Biodegradable according to RVO

Screening test/ Confirmatory test

<table>
<thead>
<tr>
<th>CAS no.</th>
<th>Characterization</th>
<th>Method</th>
<th>Value</th>
<th>d</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>68154-97-2</td>
<td>Alcohols, C10-12, ethoxylated, propxylated</td>
<td></td>
<td>&gt;70%</td>
<td>28</td>
<td>OECD TG 301 A</td>
</tr>
<tr>
<td></td>
<td>Easily biodegradable</td>
<td></td>
<td>&gt;60%</td>
<td>28</td>
<td>OECD TG 301 B</td>
</tr>
</tbody>
</table>

### 12.3. Bioaccumulative potential

Does not cause disturbance of the biological clarification stage after neutralization.

**Partition coefficient n-octanol/water**

<table>
<thead>
<tr>
<th>CAS no.</th>
<th>Characterization</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>112-34-5</td>
<td>2-(2-Butoxyethoxy)ethanol; Diethylene glycolmonobutylether; Butyl diglycol</td>
<td>0,56 (25°C)</td>
</tr>
</tbody>
</table>

### 12.4. Mobility in soil

The product was not tested.

### 12.5. Results of PBT and vPvB assessment

The product was not tested.

### 12.6. Other adverse effects

No information available.
Other instructions
Do not allow to enter drains or bodies of water. Do not allow to enter subsoil/soil.

13 Disposal considerations

13.1. Waste treatment methods

Recommendation
Do not allow to enter drains or bodies of water. Do not allow to enter subsoil/soil. Dispose of in accordance with official local regulations.

Waste code product
070501 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of pharmaceuticals; aqueous washing liquids and mother liquors; hazardous waste

Disposal of uncleaned packaging and recommended cleaning agents
Non-contaminated and empty packaging can be recycled. Contaminated packaging must be treated in the same way as the substance. Rinse containers with water and return to the recycling loop.

14 Transport information

14.1. Land transport (ADR/RID)

Other relevant information on land transport
Not a hazardous product in the context of these transport regulations.

14.2. Inland waterway transport (ADN)

Other relevant information on inland waterway transport
Not a hazardous product in the context of these transport regulations.

14.3. Maritime transport (IMDG)

Other relevant information on maritime transport
Not a hazardous product in the context of these transport regulations.

14.4. Aerial transport (ICAO-TI/IATA-DGR)

Other relevant information on aerial transport
Not a hazardous product in the context of these transport regulations.
14.5. **Environmental hazards**  
ENVIRONMENTALLY HAZARDOUS: no

14.6. **Special precautions for user**  
No information available

14.7. **Carriage in bulk in accordance with Annex II of the MARPOL Convention and the IBC Code**  
Not applicable

**Other relevant information**  
Not a hazardous product in the context of these transport regulations.

---

### 15 Regulatory information

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

**EU regulations**
Restrictions on use (REACH, Annex XVII):
Article 55: 2-(2-Butoxyethoxy)ethanol; Diethylene glycol monobutyl ether; Butyldiglycol

Information on the IE Directive 2010/75/EU (VOC):  4,5 % (48,78 g/l)  
Information on the VOC Directive  4,5 % (48,78 g/l)
2004/42/EG:

**Other instructions**
Regulation (EG) no. 648/2004 about detergents

**National regulations Germany**
Employment restriction: Follow employment restrictions for young people (§ 22 JArbSchG).
Water hazard class: 2 - clearly water polluting
Status: Mixture rule according to VwVwS annex 4, No. 3

#### 15.2. Chemical safety assessment
Chemical safety assessments for substances in this mixture have not been carried out.
16 Other information

Abbreviations and acronyms
ADR: Accord européen sur le transport 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 Harmonized System of Classification and Labelling of Chemicals
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Wording of H and EUH phrases (number and full text)
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes severe eye damage.
H319 Causes severe eye irritation.
H335 May irritate the respiratory tract.

Other information
The information provided in this safety data sheet is correct to the best of our knowledge at the time of printing. The information is intended to provide guidance on the safe handling of the product specified in this safety data sheet during storage, processing, transport and disposal. The information is not transferable to other products. Insofar as the product is mixed, blended or processed with other materials or undergoes treatment, the information in this safety data sheet cannot be transferred to the new material thus produced, unless explicitly stated otherwise.

(The data of the hazardous ingredients were taken from the most recent safety data sheet of the supplier.)