CONVEYOR BELT CLEANER BIO CLEAN 2000

Art.-no. A-ZUB-000002

Revised on: 29.03.2022

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+P352	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

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

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:
Adapt extinguishing measures to the surroundings. Foam. Extinguishing powder. Carbon dioxide (CO_2). Water spray.

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)

CAS no.	Chemical characterization	ppm	mg/m³	F/m³	Peak limit	Type
112-34-5	2-(2-Butoxyethoxy)ethanol	10	67	67	1,5(I)	

DNEL/DMEL values

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

DNEL/DMEL values

CAS no.	Characterization	
Environmental compartment		Value
10213-79-3	Sodium Metasilicate Pentahydrate	
Fresh water		7,5 mg/l
Seawater		1 mg/l
Microorganisms in sewage treatment plants		1000 mg/l

8.2. Exposure controls

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

State of matter:	liquid
Colour:	yellow
Scent:	neutral
pH value (at 20 °C):	10,9 @ 10 g/L

Phase transitions

Melting point:	Not specified
Boiling point and range:	Not specified
Flashpoint:	Non-flammable

Inflammability

Solid:	Not applicable
Gas:	Not applicable

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.

Lower explosion limit:	Not specified
Upper explosion limit:	Not specified

Auto-ignition temperature

Solid:	Not applicable
Gas:	Not applicable
Decomposition temperature:	Not specified

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
CO_2

11 Toxicological information

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

Acute toxicity

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

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:

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

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

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

CAS no.	Characterization			
	Method	Value	d	Source
	Evaluation			
68154-97-2	Alcohols, C10-12, ethoxylated, propxylated			
		> 70%	28	OECD TG 301 A
	Easily biodegradable			
		> 60%	28	OECD TG 301 B
	Easily biodegradable			

12.3. Bioaccumulative potential

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

Partition coefficient n-octanol/water

CAS no.	Characterization	Log Pow
112-34-5	2-(2-Butoxyethoxy)ethanol; Diethyleneglycolmonobutylether; Butyldiglycol	0,56 (25°C)

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 2004/42/EG:	4,5 % (48,78 g/l)

Other instructions
Note: 850/2004/EC, 79/117/EEC, 689/2008/EC
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
EINECS: European Inventory of Existing Commercial Chemical Substances
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.)