SAFETY DATA SHEET

according to Commission Regulation (EU) 2020/878 as amended

BRUDEX

Creation date	10th August 2000		
Revision date	24th March 2023	Version	5.0

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

1.1. Product identifier BRUDEX

Substance / mixture: mixture

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

Mixture's intended use

Universal cleaning product, designed for removing contamination of organic origin. Cleans, launder, scours and degreases kitchen accessories, industrial floors, engines and protective clothes.

Mixture uses advised against

not available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Name or trade name	TENZI Sp. z o.o.
Address	Skarbimierzyce 20, Dołuje, 72-002 Poland
VAT Reg No	PL8512583405
Phone	+48 91 3119777
E-mail	info@tenzi.pl
Web address	www.tenzi.pl

Competent person responsible for the safety data sheet

Name	technolog@tenzi.pl
E-mail	technolog@tenzi.pl

1.4. Emergency telephone number

European emergency number: 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification of the mixture in accordance with Regulation (EC) No 1272/2008

The mixture is classified as dangerous.

Skin Corr. 1A, H314
Eye Dam. 1, H318

Full text of all classifications and hazard statements is given in the section 16.

Most serious adverse effects on human health and the environment

Causes serious eye damage. Causes severe skin burns and eye damage.

2.2. Label elements

Hazard pictogram

Signal word

Danger

Hazardous substances

sodium metasilicate
2-hydroxy-ethylamine
sodium hydroxide

Hazard statements

H314	Causes severe skin burns and eye damage.

Precautionary statements

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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.
P405	Store locked up.

Supplemental information

<5 % phosphates, <5 % phosphonates, <5 % anionic surfactants, <5 % non-ionic surfactants, perfumes, Citral, Hexyl cinnamal, Limonene

Requirements for child-resistant fastenings and tactile warning of danger

Container must carry a tactile warning of danger. Container must be fitted with child-resistant fastening.

2.3. Other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture of substances and additives specified below.

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
CAS: 68439-54-3 Registration number: polimer	Alcohols, C11-13-branched, ethoxylated	<5	Acute Tox. 4, H302 Eye Dam. 1, H318	
Index: 014-010-00-8 CAS: 10213-79-3 EC: 229-912-9 Registration number: 01-2119449811-37-XXXX	sodium metasilicate	<5	Met. Corr. 1, H290 Skin Corr. 1B, H314 STOT SE 3, H335	
Index: 603-030-00-8 CAS: 141-43-5 EC: 205-483-3 Registration number: 01-2119486455-28-XXXX	2-hydroxy-ethylamine	<2	Acute Tox. 4, H302+H312+H332 Skin Corr. 1B, H314 Specific concentration limit: STOT SE 3, H335: C ≥ 5 %	1
CAS: 6419-19-8 EC: 229-146-5 Registration number: 01-2119487988-08-xxxx	Aminotrimethylene phosphonic acid	<2	Met. Corr. 1, H290 Eye Irrit. 2, H319	
Index: 603-096-00-8 CAS: 112-34-5 EC: 203-961-6 Registration number: 01-2119475104-44-XXXX	2-(2-butoxyethoxy)ethanol	<1	Eye Irrit. 2, H319	1, 2

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
Index: 011-002-00-6 CAS: 1310-73-2 EC: 215-185-5 Registration number: 01-2119457892-27-XXXX	sodium hydroxide	<0,5	Met. Corr. 1, H290 Skin Corr. 1A, H314 Specific concentration limit: Skin Corr. 1B, H314: 2 % ≤ C < 5 % Skin Corr. 1A, H314: C ≥ 5 % Eye Irrit. 2, H319: 0.5 % ≤ C < 2 % Skin Irrit. 2, H315: 0.5 % ≤ C < 2 %	

Notes

1 A substance for which exposure limits are set.

2 The use of the substance is restricted by Annex XVII of REACH Regulation

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet.

If inhaled

Take care of your own safety, do not let the affected person walk! Terminate the exposure immediately; move the affected person to fresh air. Beware of the contaminated clothes. Depending on the situation, call the medical rescue service and ensure medical treatment considering the frequent need of further observation for at least 24 hours.

If on skin

Remove contaminated clothes. Take off any rings, watches, bracelets before or during washing if worn in the contaminated areas of the skin. Depending on the situation, call the medical rescue service and always ensure medical treatment. Rinse contaminated areas with a flow of water, lukewarm at best, for 10-30 minutes; do not use any brush, soap or neutralizers. Rinse skin with water or shower. Rinse cautiously with water for several minutes.

If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. No neutralization should be performed in any case! Rinsing should be continued for 10-30 minutes from the inner to the outer eye corner to make sure that the other eye is not involved. Depending on the situation, call medical rescue service or ensure medical treatment as promptly as possible. Everyone must be referred for treatment even if affected only a little.

If swallowed

DO NOT INDUCE VOMITING! Even the inducted vomiting can cause complications as in case of detergents and other foaming substances.

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

If inhaled

Inhaling vapours can cause corrosion of the breathing system.

If on skin

Causes severe skin burns.

If in eyes

Causes serious eye damage.

If swallowed

Corrosion of the digestion system can occur.

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

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

5.3. Advice for firefighters

Use a self-contained breathing apparatus and full-body protective clothing. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Do not inhale aerosols. Prevent contact with skin and eyes.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water.

6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Prevent formation of gases and vapours in concentrations exceeding the occupational exposure limits. Do not inhale aerosols. Prevent contact with skin and eyes. Wash hands and exposed parts of the body thoroughly after handling. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection.

7.2. Conditions for safe storage, including any incompatibilities

Store in a tightly closed, original plastic container (high density polyethylene HDPE). Store this product in a dry environment that will be maintained at 5°C - 35°C temperature with a good ventilation system and an easy washable, nonabsorbable alkaline resistant floor. DO NOT expose the product to sunlight and keep away from heat, frost, sparks, flame and source of ignition.

Storage temperature min 5 °C, max 35 °C

7.3. Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

European Union **Commission Directive 2006/15/EC**

Substance name (component)	Type	Value	Note
2-hydroxy-ethylamine (CAS: 141-43-5)	OEL 8 hours	2,5 mg/m³	Skin
	OEL 8 hours	1 ppm	
	OEL 15 minutes	7,6 mg/m³	
	OEL 15 minutes	3 ppm	
2-(2-butoxyethoxy)ethanol (CAS: 112-34-5)	OEL 8 hours	67,5 mg/m³	

European Union **Commission Directive 2006/15/EC**

Substance name (component)	Type	Value	Note
2-(2-butoxyethoxy)ethanol (CAS: 112-34-5)	OEL 8 hours	10 ppm	
	OEL 15 minutes	101,2 mg/m³	
	OEL 15 minutes	15 ppm	

DNEL

2-(2-butoxyethoxy)ethanol

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Dermal	20 mg/kg	Chronic effects systemic		SDS
Workers	Inhalation	67.5 mg/l	Chronic effects systemic		SDS
Workers	Inhalation	67.5 mg/l	Chronic effects local		SDS
Consumers	Inhalation	50.6 mg/l	Acute effects local		SDS
Consumers	Dermal	10 mg/kg	Chronic effects systemic		SDS
Consumers	Inhalation	3 mg/l	Chronic effects systemic		SDS
Consumers	Oral	1.25 mg/kg	Chronic effects systemic		SDS
Consumers	Inhalation	34 mg/l	Chronic effects local		SDS

2-hydroxy-ethylamine

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Dermal	1 mg/kg bw/day	Chronic effects local		SDS
Workers	Inhalation	3.3 mg/m³	Chronic effects local		SDS
Consumers	Dermal	0.24 mg/kg bw/day	Chronic effects local		SDS
Consumers	Inhalation	2 mg/m³	Chronic effects local		SDS
Consumers	Oral	3.75 mg/kg/24h	Chronic effects local		SDS

Aminotrimethylene phosphonic acid

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	19.4 mg/m³	Chronic effects local		karta charakterystyki
Workers	Inhalation	19.4 mg/m³			karta charakterystyki
Workers	Dermal	4.8 mg/kg bw/day	Chronic effects local		karta charakterystyki
Workers	Dermal	4.8 mg/kg bw/day			karta charakterystyki

sodium hydroxide

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	1.0 mg/m³	Chronic effects local		SDS
Consumers	Inhalation	1.0 mg/m³	Chronic effects local		SDS

sodium metasilicate

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	6.22 mg/m³	Chronic effects systemic		
Consumers	Inhalation	1.55 mg/m³	Chronic effects systemic		
Consumers	Oral	0.74 mg/kg/24h	Chronic effects systemic		
Workers	Dermal	1.49 mg/kg/24h	Chronic effects systemic		
Consumers	Dermal	0.74 mg/kg/24h	Chronic effects systemic		

PNEC

2-(2-butoxyethoxy)ethanol

Route of exposure	Value	Value determination	Source
Drinking water	1 mg/l		SDS
Marine water	0.1 mg/l		SDS
Freshwater sediment	4 mg/kg		SDS
Sea sediments	0.4 mg/kg		SDS
Soil (agricultural)	0.4 mg/kg		SDS
Microorganisms in sewage treatment	200 mg/l		SDS
Oral	56 mg/kg		SDS

2-hydroxy-ethylamine

Route of exposure	Value	Value determination	Source
Drinking water	0.085 mg/l		SDS
Marine water	0.0085 mg/l		SDS
Water (intermittent release)	0.025 mg/l		SDS
Microorganisms in sewage treatment	100 mg/l		SDS
Freshwater sediment	0.425 mg/kg		SDS
Sea sediments	0.0425 mg/kg		SDS
Soil (agricultural)	0.035 mg/kg		SDS

Aminotrimethylene phosphonic acid

Route of exposure	Value	Value determination	Source
Drinking water	0.46 mg/l		karta charakterystyki
Marine water	0.046 mg/l		karta charakterystyki
Freshwater sediment	150 mg/kg of dry substance		karta charakterystyki
Sea sediments	15 mg/kg of dry substance		karta charakterystyki
Soil (agricultural)	244 mg/kg of dry substance		karta charakterystyki
Microorganisms in sewage treatment	20 mg/l		karta charakterystyki

sodium metasilicate

Route of exposure	Value	Value determination	Source
Drinking water	7.5 mg/l		
Marine water	1 mg/l		
Water (intermittent release)	7.5 mg/l		

sodium metasilicate

Route of exposure	Value	Value determination	Source
Microorganisms in sewage treatment	1000 mg/l		

8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

Protective goggles or face shield (based on the nature of the work performed).

Skin protection

Hand protection: Protective gloves resistant to the product. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Other protection: protective workwear. Contaminated skin should be washed thoroughly.

Respiratory protection

Halfmask with a filter against organic vapours or a self-contained breathing apparatus as appropriate if exposure limit values of substances are exceeded or in a poorly ventilated environment.

Thermal hazard

Not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid
Colour	orange
Odour	characteristic of the composition used for
Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	data not available
Flammability	data not available
Lower and upper explosion limit	data not available
Flash point	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
pH	14 (undiluted at 20 °C)
Kinematic viscosity	data not available
Solubility in water	soluble
Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	data not available
Density and/or relative density	
Density	data not available
Relative density	1,070 g/cm3 (+-) 0,020
Relative vapour density	data not available
Particle characteristics	data not available
Form	orange liquid

9.2. Other information

not available

SECTION 10: Stability and reactivity

10.1. Reactivity

not available

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

Unknown.

10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

SECTION 11: Toxicological information

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

No toxicological data is available for the mixture.

Acute toxicity

Based on available data the classification criteria are not met.

2-(2-butoxyethoxy)ethanol

Route of exposure	Parameter	Value	Exposure time	Species	Sex	Value determination	Source
Oral	LD_{50}	2410 mg/kg		Mouse			SDS
Dermal	LD_{50}	2764 mg/kg		Rabbit			SDS

2-hydroxy-ethylamine

Route of exposure	Parameter	Value	Exposure time	Species	Sex	Value determination	Source
Oral	LD_{50}	1089 mg/kg		Rat			SDS
Skin		2504 mg/kg		Rat			SDS
Inhalation		1.48 mg/l	4 hours				SDS

Alcohols, C11-13-branched, ethoxylated

Route of exposure	Parameter	Value	Exposure time	Species	Sex	Value determination	Source
Oral	LD_{50}	>300-2000 mg/kg		Rat (Rattus norvegicus)		Based on evidence	karta charakterystyki
Dermal	LD_{50}	>2000 mg/kg		Rat (Rattus norvegicus)		Based on evidence	karta charakterystyki

Aminotrimethylene phosphonic acid

Route of exposure	Parameter	Value	Exposure time	Species	Sex	Value determination	Source
Oral	LD_{50}	2910 mg/kg		Rat (Rattus norvegicus)			karta charakterystyki
Dermal	LD_{50}	6310 mg/kg		Rabbit			karta charakterystyki

sodium hydroxide

Route of exposure	Parameter	Value	Exposure time	Species	Sex	Value determination	Source
Intraperitoneally	LD_{50}	40 mg/kg		Mouse			SDS
Oral	LDL_{0}	500 mg/kg		Rabbit			SDS
Oral	TDLo	44 mg/kg		Rat (Rattus norvegicus)			SDS

sodium metasilicate

Route of exposure	Parameter	Value	Exposure time	Species	Sex	Value determination	Source
Oral	LD_{50}	1152-1349 mg/kg		Rat			

sodium metasilicate

Route of exposure	Parameter	Value	Exposure time	Species	Sex	Value determination	Source
Inhalation (vapor)	LC_{50}	>2.06 mg/m³		Rat			
Skin	LD_{50}	>5000 mg/kg		Rat			

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Alcohols, C11-13-branched, ethoxylated

Route of exposure	Result	Exposure time	Species	Value determination	Source
	Not irritating		Rabbit	Based on evidence	katra charakterystyki

Aminotrimethylene phosphonic acid

Route of exposure	Result	Exposure time	Species	Value determination	Source
	Slightly irritating				karta charakterystyki

sodium metasilicate

Route of exposure	Result	Exposure time	Species	Value determination	Source
	Corrosive				

Serious eye damage/irritation

Causes serious eye damage.

Alcohols, C11-13-branched, ethoxylated

Route of exposure	Result	Exposure time	Species	Value determination	Source
	Irritating, Serious eye damage		Rabbit	Based on evidence	karta charakterystyki

Aminotrimethylene phosphonic acid

Route of exposure	Result	Exposure time	Species	Value determination	Source
	Irritating				karta charakterystyki

sodium metasilicate

Route of exposure	Result	Exposure time	Species	Value determination	Source
	Serious eye damage				

Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

Alcohols, C11-13-branched, ethoxylated

Route of exposure	Result	Exposure time	Species	Sex	Value determination	Source
	No effect		Guinea-pig (Cavia aperea f. porcellus)		Based on evidence	karta charaktery styki

sodium metasilicate

Route of exposure	Result	Exposure time	Species	Sex	Value determination	Source
	Not sensitizing					

Germ cell mutagenicity

Based on available data the classification criteria are not met.

Alcohols, C11-13-branched, ethoxylated

Result	Exposure time	Specific target organ	Species	Sex	Value determination	Source
No effect					Based on evidence	karta charakterystyki

Carcinogenicity

Based on available data the classification criteria are not met.

Reproductive toxicity

Based on available data the classification criteria are not met.

Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

sodium metasilicate

Route of exposure	Parameter	Value	Result	Species	Sex
			Irritating		

Toxicity for specific target organ - 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

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

2-(2-butoxyethoxy)ethanol

Parameter	Method	Value	Exposure time	Species	Environment	Value determination	Source
LC_{50}		1300 mg/l		Fish (Lepomis macrochirus)			SDS
EC_{50}		>100 mg/l		Aquatic invertebrates (Daphnia magna)			SDS
EC_{50}	OECD 201	>100 mg/l		Algae (Scenedesmus subspicatus)			SDS
EC_{10}	OECD 209	>1995 mg/l					SDS

2-hydroxy-ethylamine

Parameter	Method	Value	Exposure time	Species	Environment	Value determination	Source
LC_{50}		349 mg/l	96 hours	Fish (Cyprinus carpio)			SDS
EC_{50}		65 mg/l	48 hours	Daphnia (Daphnia magna)			SDS
ErC_{50}		2.5 mg/l	72 hours	Algae (Selenastrum capricornutum)			SDS
EC_{50}		>1000 mg/l	3 hours	Microorganisms (Photobacterium phosphoreum)			SDS

Alcohols, C11-13-branched, ethoxylated

Parameter	Method	Value	Exposure time	Species	Environment	Value determination	Source
LC_{50}	OECD 203	>1-10 mg/kg	96 hours	Fish (Oncorhynchus mykiss)		Based on evidence	karta charakterystyki
EC_{50}	OECD 202	>1-10 mg/l	48 hours	Daphnia (Daphnia magna)		Based on evidence	karta charakterystyki
EC_{50}	OECD 201	>1-10 mg/l	72 hours	Algae (Desmodesmus subspicatus)		Based on evidence	karta charakterystyki

Aminotrimethylene phosphonic acid

Parameter	Method	Value	Exposure time	Species	Environment	Value determination	Source
EC_{50}		297 mg/l	48 hours	Daphnia (Daphnia magna)			karta charakterystyki
NOEC		≥25 mg/l	28 days	Daphnia (Daphnia magna)			karta charakterystyki
LC_{50}	OECD 203	8132 mg/l	96 hours	Fish			karta charakterystyki
LC_{50}	OECD 203	1212 mg/l	96 hours	Fish			karta charakterystyki
LC_{50}		160 mg/l	96 hours				karta charakterystyki
LC_{50}		23 mg/l	60 days				karta charakterystyki
EC_{50}		94 mg/l	48 hours				karta charakterystyki
NOEC		95 mg/l	96 hours				karta charakterystyki

sodium hydroxide

Parameter	Method	Value	Exposure time	Species	Environment	Value determination	Source
EC_{50}		40.4 mg/l	48 hours	Aquatic invertebrates (Ceriodaphnia dubia)			SDS
EC_{50}		22 mg/l	15 minutes	Microorganisms (Photobacterium phosphoreum)			SDS

sodium metasilicate

Parameter	Method	Value	Exposure time	Species	Environment	Value determination	Source
LC_{50}		210 mg/l	96 hours				
EC_{50}		1700 mg/l	48 hours				
EC_{50}		207 mg/l	72 hours				

Chronic toxicity

2-hydroxy-ethylamine

Parameter	Value	Exposure time	Species	Environment	Source
NOEC	1.2 mg/l	96 hours	Fish (Oryzias latipes)		SDS
NOEC	0.85 mg/l		Aquatic invertebrates (Daphnia magna)		SDS
LOEC	3.6 mg/l		Fish (Oryzias latipes)		SDS

12.2. Persistence and degradability

Biodegradability

Alcohols, C11-13-branched, ethoxylated

Parameter	Method	Value	Exposure time	Environment	Value determination	Result	Source
	OECD 301A	>70 %	28 days		Based on evidence	Easily biodegradable	karta charakterystyki
	OECD 301B	>60 %	28 days		Based on evidence	Easily biodegradable	karta charakterystyki

Aminotrimethylene phosphonic acid

Parameter	Method	Value	Exposure time	Environment	Value determination	Result	Source
	OECD 301D	22-23 %	28 days			Hardly biodegradable	karta charakterystyki
EC_0		200 mg/l	30 minutes				karta charakterystyki

Surfactants are biodegradable according to the European Parliament and Council Regulation (EC) No. 648/2004 on detergents, as amended. The mixture is biodegradable.

12.3. Bioaccumulative potential

Not available.

12.4. Mobility in soil

Not available.

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Endocrine disrupting properties

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

Waste type code

07 06 04 other organic solvents, washing liquids and mother liquors *

Packaging waste type code

15 01 02 plastic packaging

(*) - Hazardous waste according to Directive 2008/98/EC on hazardous waste

SECTION 14: Transport information

14.1. UN number or ID number

UN 1719

14.2. UN proper shipping name

CAUSTIC ALKALI LIQUID, N.O.S. (sodium metasilicate, 2-hydroxy-ethylamine)

14.3. Transport hazard class(es)

8 Corrosive substances

14.4. Packing group

III - substances presenting low danger

14.5. Environmental hazards

No

14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Maritime transport in bulk according to IMO instruments

not relevant

Additional information

Hazard identification No.

UN number 1719

Safety signs 8

Marine transport - IMDG

EmS (emergency plan) , S-B

SECTION 15: Regulatory information

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. REGULATION (EC) No 648/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 March 2004 on detergents, as ammended. Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Restrictions pursuant to Annex XVII of Regulation (EC) No. 1907/2006 (REACH), as amended

2-(2-butoxyethoxy)ethanol

Restriction	Conditions of restriction
55	1. Shall not be placed on the market for the first time after 27 June 2010, for supply to the general public, as a constituent of spray paints or spray cleaners in aerosol dispensers in concentrations equal to or greater than 3 % by weight. 2. Spray paints and spray cleaners in aerosol dispensers containing DEGBE and not conforming to paragraph 1 shall not be placed on the market for supply to the general public after 27 December 2010. 3. Without prejudice to other Community legislation concerning the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that paints other than spray paints containing DEGBE in concentrations equal to or greater than 3 % by weight of that are placed on the market for supply to the general public are visibly, legibly and indelibly marked by 27 December 2010 as follows: "Do not use in paint spraying equipment".

15.2. Chemical safety assessment

For mixture:
A Chemical Safety Assessment has not been carried out.
For the following substances, mixtures:
Alcohols, C11-13-branched, ethoxylated: A Chemical Safety Assessment has not been carried out.
Aminotrimethylene phosphonic acid: the manufacturer has not performed a chemical safety assessment
2-hydroxy-ethylamine: A Chemical Safety Assessment has been carried out.
Sodium hydroxide: the manufacturer has performed a chemical safety assessment
sodium metasilicate: the manufacturer has performed a chemical safety assessment
2-(2-butoxyethoxy)ethanol: A Chemical Safety Assessment has been carried out

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H302+H312+H332	Harmful if swallowed, in contact with skin or if inhaled.

Guidelines for safe handling used in the safety data sheet

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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.
P405	Store locked up.

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service

CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
EC	Identification code for each substance listed in EINECS
EC_0	Concentration of a substance when it is affected 0% of the population
EC_{10}	Concentration of a substance when it is affected 10% of the population
EC_{50}	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
EuPCS	European Product Categorisation System
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC_{50}	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD_{50}	Lethal dose of a substance in which it can be expected death of 50% of the population
log Kow	Octanol-water partition coefficient
NOEC	No observed effect concentration
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative

Acute Tox.	Acute toxicity
Eye Dam.	Serious eye damage
Met. Corr.	Corrosive to metals
Skin Corr.	Skin corrosion
STOT SE	Specific target organ toxicity - single exposure

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

The changes (which information has been added, deleted or modified)

The version 5.0 replaces the SDS version from 17 May 2022. Changes were made in sections 1, 2, 13, 15 and 16.

More information

Classification procedure - calculation method.

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.