Safety data sheet

ST MRUC5

SECTION 1. Identification of the substance/mixture and company/company

1.1. Product identifier

Code:	**1MANOVENCL MANUAL**
Name	**OVEN CLEANER**
UFI :	**4KE0-W0K3-A000-5Y25**

1.2. Relevant identified uses of the substance or mixture and non-recommended uses

Description/Application	**removing stubborn dirt for ovens, hobs and grills**

Intended Applications Oven Cleaner Strong cleaner for	**Industrial** **-**	**Professional** **CY : 4.** **PROC: 19, 28, 8a.** **LCS: PW, SL.**	**Consumer** **-**
Not recommended uses **CONSUMER USE**			

1.3. Details of the supplier of the safety data sheet

Company Name Address Place and State	**RM GASTRO CZ s.r.o. Náchodská 818/16 193 00 Praha 9 - H. Počernice Czech Republic Tel.: +420 281 926 604**
E-mail of the competent person Person responsible for the safety data sheet	**obchod@rmgastro.com**

1.4. Emergency telephone number

If you need urgent information, please contact.	**UK: Call NHS 111 or a doctor IRELAND: Emergency Medicine Information: 8:00am – 10:00pm (seven days) Contact the National Poison Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland. Telephone ISALND: 24 hours a day. Phone: +543 2222 or 112 Number: +353 (0)1 809 2166**
	A list of toxicotherapy centers is available at the following link: http://www.who.int/gho/phe/chemical_safety/poisons_centres/en/

SECTION 2. Hazard identification

2.1. Classification of the substance or mixture

The product is classified as hazardous within the meaning of the provisions of Regulation (EC) 1272/2008 (CLP) (as amended). For this reason, the product requires a safety data sheet in accordance with the provisions of Regulation (EU) 2020/878.
Any additional information regarding the potential risk to health and the environment is provided in Sections 11 and 12 of this Sheet.

Hazard classification and labelling:		
Acute toxicity, Category 4 Corrosive to the skin, Category 1A Serious eye damage, Category 1	H302	Harmful if swallowed.
	H314	It causes severe skin burns and eye damage.
	H318	Causes serious eye damage.

2.2. Label elements

Hazard designation within the meaning of Regulation (EC) No 1272/2008 (CLP), as amended.

Hazard warning symbols:

SECTION 2. Hazard identification ... / >>

Signal words: Danger

Standard hazard statements:
H302 Harmful if swallowed.
H314 Causes severe skin corrosion and eye damage.

Instructions for safe handling:

P260	Do not inhale dust/smoke/gas/mist/vapors/aerosols.
P305+P351+P338	IF IN EYES: Rinse carefully with water for a few minutes. Remove contact lenses if they are fitted and can be removed easily. Continue rinsing.
P303+P361+P353	IF IN CONTACT WITH SKIN (or hair): Remove any contaminated garments immediately. Rinse the skin with water [or shower].
P280	Wear protective gloves/clothing and safety glasses/face shield.
P310	Call a POISON CONTROL CENTRE / doctor immediately Wash the skin
P264	thoroughly after use.

Includes: Potassium hydroxide Disodium metasilicate Potassium phosphonate

Composition in accordance with Directive (EC) No. 648/2004

Less than 5% phosphonates, tense-active anions, non-ionic tensoactive substances

2.3. Other hazards

Based on the available data, the product does not contain PBT or vPvB substances in a proportion of ≥ 0.1%.

The product does not contain substances with endocrine-disrupting properties at a concentration of ≥ 0.1%.

SECTION 3. Composition/Ingredient Information

3.2. Mixtures

Includes:

Identification	x = End %	Classification (EC) 1272/2008 (CLP)
Potassium hydroxide *CAS 1310-58-3 8.6 ≤ x < 16.65 CE 215-181-3* *INDEX 019-002-00-8 Reg. REACH 01-2119487136-33-XXXX*		**Met. Corr. 1 H290, Acute Tox. 4 H302, Skin Corr. 1A H314, Eye Dam. 1 H318 Skin Corr. 1 H314: ≥ 2%, Skin Irrit. 2 H315: ≥ 0.5%, Eye Dam. 1 H318: ≥ 2%, Eye Irrit. 2 H319: ≥ 0.5% LD50 Oral: 333**
2- (2-butoxyethoxy)ethanol *CAS 112-34-5 5 ≤ x < 9 CE 203-961-6 INDEX 603-096-00-8 Reg. REACH 01-2119475104-44-XXXX*		**Eye Irrit. 2 H319**
sodium (xylenes and 4-ethylbenzene) sulfonate *CAS 1 ≤ x < 5* CE 701-037-1 INDEX Reg. REACH 01-2119513350-56-XXXX		**Eye Irrit. 2 H319**
Potassium phosphonate *CAS 67953-76-8 1 ≤ x < 5 CE 267-956-0 INDEX*		**Acute Tox. 4 H302 LD50 Oral: 500 mg/kg**
D-glucose, oligomers, C8-10 glycosides *CAS 68515-73-1 1 ≤ x < 3 CE 500-220-1 INDEX Reg. REACH 01-2119488530-36-XXXX*		**Eye Dam. 1 H318**

SECTION 4. First aid instructions

4.1. Description of first aid

EYES: Remove any contact lenses. Immediately rinse your eyes with a stream of water for at least 30/60 minutes; Keep your eyelids properly open. See a doctor immediately.
SKIN: Take off soiled clothing. Take a shower immediately. See a doctor immediately.
INGESTION: Give as much water as possible to drink. See a doctor immediately. Do not induce vomiting unless specifically authorized by a physician. INHALATION: Call a doctor immediately. Take the victim to fresh air, away from the accident site. If the victim stops breathing, perform artificial respiration. Ensure appropriate safety measures for rescuers.

4.2. Key acute and delayed symptoms and effects

Specific information about the symptoms and effects caused by the product is unknown.

4.3. Instruction concerning immediate medical assistance and special treatment

Data not available

SECTION 5. Fire extinguishing measures

5.1. Hash

SUITABLE EXTINGUISHING AGENTS
Common extinguishing agents: carbon dioxide, foam, powder and water mist.
UNSUITABLE FIRE EXTINGUISHING AGENTS
No specific one.

5.2. Particular hazard arising from the substance or mixture

HAZARDS DUE TO EXPOSURE IN THE EVENT OF FIRE
Prevent inhalation of combustion products.

5.3. Instructions for firefighters

GENERAL INFORMATION
Cool the containers with a stream of water to prevent the product from decomposing and the formation of substances potentially hazardous to health. Always wear complete fire protection equipment. Pump out used extinguishing water that must not be discharged into the sewer. Dispose of used fire extinguishing water and fire residues according to applicable standards.
EQUIPMENT
Normal fire extinguishing aids such as open-circuit compressed air breathing equipment (EN 137), fireproof coveralls (EN469), fireproof gloves (EN 659) and firefighter's boots (HO A29 or A30).

SECTION 6. Accidental Leakage Precautions

6.1. Personal protection measures, protective equipment and emergency procedures

If there is no danger, stop the leak.
Wear appropriate protective equipment (including personal protective equipment as specified in section 8 of the Safety Data Sheet) to prevent contamination of skin, eyes and personal clothing. These instructions apply to both persons performing work and emergency interventions.

6.2. Environmental protection measures

Prevent the product from leaking into sewers, surface and subsurface water.

6.3. Methods and material for leakage containment and cleaning

Vacuum the spilled material into a suitable container. Assess the compatibility of the container you will be using for this product according to the information in section 10. Allow the rest to soak into the inert absorbent material.
Ensure adequate ventilation of the leak site. Disposal of contaminated material must be carried out in accordance with the provisions of point 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Ensure adequate grounding of equipment and persons. Never use compressed air when handling, otherwise there is a risk of fire and explosion. Store away from heat sources, sparks and open flames, do not smoke, do not use matches or lighters. Prevent the product from leaking into the environment. Avoid contact with skin and contact with eyes. Do not inhale any dust, fumes, or mists. Do not consume food or beverages or smoke while working. Remove contaminated clothing and protective equipment before entering the dining areas.

7.2. Conditions for the safe storage of substances and mixtures, including incompatible substances and mixtures

Store only in the original container. Store the product in clearly marked containers. The containers must be hermetically sealed. Store in a well-ventilated place, away from ignition sources. Avoid strong impacts. Protect from overheating. Avoid contact with water.

Storage class TRGS 510 (Germany): 8A

7.3. Specific end-use(s)

Attach this safety data sheet to the exposure scenarios.

SECTION 8. Exposure control/personal protective equipment

8.1. Control parameters

Reference regulations:

DEU	Deutschland	Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56 Límites de exposición profesional para agentes químicos en España 2021 Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS Az innovációért és technológiáért felelős miniszter 5/2020. (II. 6.) ITM rendelete a kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről Decreto Legislativo 9 Aprile 2008, n.81 Grozījumi Ministru kabineta 2007. gada 15. maija noteikumos Nr. 325 "Darba aizsardzības prasības saskarē ar ķīmiskajām vielām darba vietās" (prot. Nr. 32 18. §; prot. Nr. 1 22. §) Arbeidsomstandighedenregeling. Lijst van wettelijke grenswaarden op grond van de artikelen 4.3, eerste lid, en 4.16, eerste lid, van het Arbeidsomstandighedenbesluit Regulation of the Minister of Development, Labour and Technology of 18 February 2021 Amending Regulation on maximum permitted concentrations and intensities of factors harmful to health in the working environment Hotărârea No 53/2021 pentru modificarea hotărârii guvernului nr. 1.218/2006, precum și pentru modificarea și completarea hotărârii guvernului nr. 1.093/2006 Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.
ESP	España	
FRA	France	
HUN	Magyarország	
ITA	Italy	
LVA	Latvia	
NLD	Nederland	
POL	Poland	
ROU	România	
EU	OEL EU	
	TLV-ACGIH	ACGIH 2021

Potassium hydroxide

Limit value of permitted concentration

Species	Country	TWA/8h		STEL/15min		Notes/Comments
		mg/m3	ppm	mg/m3	ppm	
POPPY	DEU	2				

Health - Derived Minimum Effect Level - DNEL / DMEL

Effects on the consumer Route of exposure	Topical		System	Effects on Employees			
Topical				System	Locally	System	
	acute	acute	chronic	chronic	acute	acute	chronic	chronic
Inhalation			1 mg/m3 4h				1 mg/m3 4h	

SECTION 8. Exposure control/personal protective equipment ... / >>

2-(2-butoxyethoxy)ethanol

Limit value of permitted concentration

Species	Country	TWA/8h		STEL/15min		Notes/Comments
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	67	10	100	15	
VLA	ESP	675	10	1012	15	
INSERT	FRA	675	10	1012	15	
IF	HUN	675		1012		
INSERT	ITA	675	10	1012	15	
RV	LVA	675	10	1012	15	
TGG	NLD	50		100		
NDS/NDSCh	POL	67		100		
TLV	ROU	675	10	1012	15	
OEL	EU	67,5	10	101,2	15	

Predicted Environmental Effect Concentration - PNEC.

Reference value in fresh water	1,1	mg/l
Reference value in seawater	0,1	mg/l
Reference value for sediments in fresh water.	4	mg/kg
Reference value for sediments in seawater.	0,4	mg/kg
Reference value for water, intermittent release	11	mg/l
Reference value for STP micro-organisms.	200	mg/l
Reference value for the food chain food chain (secondary poisoning)	56	mg/kg
Reference value for terrestrial environment.	0,32	mg/kg

Health - Derived Minimum Effect Level - DNEL / DMEL

Effects on the consumer Route of exposure	Topical	System		System	Effects on Employees	Locally System		
Topical							Locally	System
	acute	acute	chronic	chronic	acute	acute	chronic	chronic
Oral				5 mg/kg/d				
Inhalation	60.7 mg/m3 4h		40.5 mg/m3 4h	40.5 mg/m3 4h	101.2 mg/m3 4h		67.5 mg/m3 4h	67.5 mg/m3 4h
Dermal				50 mg/kg/d				83 mg/kg/d

sodium (xylenes and 4-ethylbenzene) sulfonate

Predicted Environmental Effect Concentration - PNEC.

Reference value in fresh water	0,23	mg/l
Reference value for water, intermittent release	2,3	mg/l
Reference value for STP micro-organisms.	100	mg/l

Health - Derived Minimum Effect Level - DNEL / DMEL

Effects on the consumer Route of exposure	Topical	System		System	Effects on Employees	Locally System		
Topical							Locally	System
	acute	acute	chronic	chronic	acute	acute	chronic	chronic
Oral				3.8 mg/kg/d				
Inhalation				13.2 mg/m3 4h				53.6 mg/m3 4h
Dermal				3.8 mg/kg/d				7.6 mg/kg/d

Legend: (C) = CEILING ; INHALATION = Inhalable fraction ; RESPIR = Respirable fraction ; THORAK = Thoracic fraction. VND = hazard identified, but no DNEL/PNEC is reported; NEA = no exposure is expected ; NPI = no hazard identified ; LOW = low danger ; MED = medium hazard ; HIGH = High Hazard.

8.2. Limitation of exposure

Since the use of appropriate technical measures should always take precedence over equipping with personal protective equipment, ensure good ventilation in the workplace by means of effective local extraction.
If necessary, consult your chemical suppliers when choosing personal protective equipment.
Personal protective equipment must bear the CE marking, which proves its conformity with the applicable regulations.
When choosing risk management measures and working conditions, consult the attached exposure scenarios.
Install an emergency shower with an eyewash tray.
HAND PROTECTION
To protect your hands, wear work gloves of category III (see EN 374).
When choosing a work glove, the following must be taken into account: compatibility, decomposition, tear time and permeation.
In the case of products, the resistance of work gloves to chemical reagents must be checked before use, as it is not predictable.
The wear time of gloves depends on how long and how they are used.

SECTION 8. Exposure control/personal protective equipment ... / >>

2-(2-butoxyethoxy)ethanol

Limit value of permitted concentration

Species	Country	TWA/8h		STEL/15min		Notes/Comments
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	67	10	100	15	
VLA	ESP	675	10	1012	15	
INSERT	FRA	675	10	1012	15	
IF	HUN	675		1012		
INSERT	ITA	675	10	1012	15	
RV	LVA	675	10	1012	15	
TGG	NLD	50		100		
NDS/NDSCh	POL	67		100		
TLV	ROU	675	10	1012	15	
OEL	EU	67,5	10	101,2	15	

Predicted Environmental Effect Concentration - PNEC.

Reference value in fresh water	1,1	mg/l
Reference value in seawater	0,1	mg/l
Reference value for sediments in fresh water.	4	mg/kg
Reference value for sediments in seawater.	0,4	mg/kg
Reference value for water, intermittent release	11	mg/l
Reference value for STP micro-organisms.	200	mg/l
Reference value for the food chain food chain (secondary poisoning)	56	mg/kg
Reference value for terrestrial environment.	0,32	mg/kg

Health - Derived Minimum Effect Level - DNEL / DMEL

Effects on the consumer Route of exposure Topical System					Effects on Employees			
Topical				System	Locally System		Locally	System
	acute	acute	chronic	chronic	acute	acute	chronic	chronic
Oral				5 mg/kg/d				
Inhalation	60.7 mg/m3 4h		40.5 mg/m3 4h	40.5 mg/m3 4h	101.2 mg/m3 4h		67.5 mg/m3 4h	67.5 mg/m3 4h
Dermal				50 mg/kg/d				83 mg/kg/d

sodium (xylenes and 4-ethylbenzene) sulfonate

Predicted Environmental Effect Concentration - PNEC.

Reference value in fresh water	0,23	mg/l
Reference value for water, intermittent release	2,3	mg/l
Reference value for STP micro-organisms.	100	mg/l

Health - Derived Minimum Effect Level - DNEL / DMEL

Effects on the consumer Route of exposure Topical System					Effects on Employees			
Topical				System	Locally System		Locally	System
	acute	acute	chronic	chronic	acute	acute	chronic	chronic
Oral				3.8 mg/kg/d				
Inhalation				13.2 mg/m3 4h				53.6 mg/m3 4h
Dermal				3.8 mg/kg/d				7.6 mg/kg/d

Legend: (C) = CEILING ; INHALATION = Inhalable fraction ; RESPIR = Respirable fraction ; THORAK = Thoracic fraction. VND = hazard identified, but no DNEL/PNEC is reported; NEA = no exposure is expected ; NPI = no hazard identified ; LOW = low danger ; MED = medium hazard ; HIGH = High Hazard.

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If necessary, consult your chemical suppliers when choosing personal protective equipment.
Personal protective equipment must bear the CE marking, which proves its conformity with the applicable regulations.
When choosing risk management measures and working conditions, consult the attached exposure scenarios.
Install an emergency shower with an eyewash tray.
HAND PROTECTION
To protect your hands, wear work gloves of category III (see EN 374).
When choosing a work glove, the following must be taken into account: compatibility, decomposition, tear time and permeation.
In the case of products, the resistance of work gloves to chemical reagents must be checked before use, as it is not predictable.
The wear time of gloves depends on how long and how they are used.

SECTION 8. Exposure control/personal protective equipment ... / >>

SKIN PROTECTION
Wear long-sleeved workwear and safety work shoes of category III (Council Ref. 2016/425 and EN ISO 20344). After taking off your protective clothing, wash yourself with soap and water.

EYE PROTECTION
It is recommended to use a protective shield with a hood or a protective shield with hermetic goggles (see EN 166).
If there is a risk of exposure or splashing of the substance during work, appropriate protection of the mucous membranes (mouth, nose, eyes) must be ensured to prevent accidental absorption of the substance.
RESPIRATORY PROTECTION
In case of exceeding the limit value (e.g. TLV-TWA) of a substance or of one or more substances contained in the product, it is recommended to use a mask with a type A filter, the class (1, 2 or 3) of which is selected on the basis of the limit concentration of serviceability. (see EN 14387). In the event of the presence of gases and vapours of a different nature and/or gases or vapours containing particles (aerosols, fumes, mists, etc.), filters of the combined type shall be provided.
The use of respiratory protective equipment is necessary if the technical measures taken are not sufficiently effective to limit exposure at work to the thresholds considered. However, masks only provide partial protection.
If the substance under consideration is odourless or has an odour threshold higher than the relevant TLV-TWA value, and in an emergency situation, use an open-circuit compressed air breathing apparatus (ref. EN 137) or an external air supply breathing apparatus (ref. EN 138). To choose the right respiratory protective equipment, follow EN 529.
ENVIRONMENTAL EXPOSURE CONTROL
Emissions generated by production processes, including those emitted by ventilation equipment, should be measured with respect to compliance with environmental legislation.
Information on the control of exposure to the environment is provided in the exposure scenarios attached to this safety data sheet.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Features		Value	Information
Physical state Colour Odour Melting point / freezing point Initial boiling point Flammability Lower explosion limits Upper explosion limits Flash point Auto-ignition temperature pH Kinematic viscosity Solubility Partition coefficient: n-octanol/water Vapour pressure		clear liquid brown not available not available > 100°C not available not available	
Density and/or relative density Relative vapour density Particle characteristics	>	100.0000°C not available 12.5-13.5 not available soluble in water not available not available 1.2 not available not applicable	Concentration: 3.1 %

9.2. Additional information

9.2.1. Information concerning physical hazard classes

Data not available

9.2.2. Other safety features

VOC (Directive 2010/75/EU)	0,04 % - 0,45	g/l

SECTION 10. Stability and reactivity

10.1. Reactivity

The substance may break down and/or have a violent reaction.

10.2. Chemical stability

See the previous paragraph.

SECTION 10. Stability and reactivity ... / >>

10.3. Possibility of dangerous reactions

See paragraph 10.1.

10.4. Conditions to be avoided

Due to the decomposition of the product already at room temperature, the product must be stored and used at a controlled temperature. Avoid strong impacts.

10.5. Incompatible Materials

Data not available

10.6. Hazardous breakdown products

Data not available

SECTION 11. Toxicological information

In the absence of experimental toxicological data on the product itself, the potential health hazard of the product was assessed on the basis of the substances contained in the article, according to the criteria set out in the reference classification standard.
Therefore, for the assessment of toxicological effects on exposure to the product, consider the concentrations of the individual hazardous substances that would be listed in Section 3.

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

Metabolism, toxicokinetics, mechanism of action and other information

Data not available

Information on likely exposure routes

Potassium hydroxide If ingested, it causes severe corrosion of the oral cavity and pharynx with the risk of perforation of the esophagus and stomach

Delayed and immediate effects, as well as chronic effects of short- and long-term exposure

Data not available

Interactive effects

Data not available

ACUTE TOXICITY

ATE (Inhalation)	Not Classified (No Significant Constituent)
Blends: ATE (Oral)	1666.67 mg/kg Not Classified (No Significant Constituent)
Blends: ATE (Dermal)	
Blends:	
Potassium Phosphonate LD50 (Oral):	500 mg/kg
Potassium hydroxide LD50 (oral):	333 mg/kg Rat
D-glucose, oligomers, C8-10 glycosides LD50 (Dermal): LD50 (Oral):	> 5000 mg/kg > 2000 mg/kg
2-(2-butoxyethoxy)ethanol LD50 (Dermal): LD50 (Oral):	2764 mg/kg Rabbit 2410 mg/kg Rat
Sodium (xylenes and 4-ethylbenzene) sulfonate LD50 (Dermal): LD50 (Oral): LC50 (Inhalation vapors):	> 2000 mg/kg Rabbit > 7200 mg/kg Rat > 6.41 mg/l/4h Rat

SECTION 11. Toxicological information ... / >>

CORROSIVE/IRRITATING TO THE SKIN

Corrosive to the skin Classification according to the experimental pH value

Potassium hydroxide
Etching the skin

Disodium metasilicate Result: corrosive Species: Rabbit, New Zealand white Method: in vivo study, OECD guideline 404 (Acute dermal irritation/corrosion) Reliability: 2 Source: ECHA documentation

SERIOUS EYE DAMAGE / EYE IRRITATION

Causes serious eye damage

Potassium hydroxide
Highly corrosive

D-glucose, oligomers, C8-10 glycosides
Causes serious eye damage

Disodium metasilicate Result: corrosive Species: Rabbit, New Zealand white Method: FHSA (Federal Hazardous Substances Act) listed in C.F.R. 1500.42 et.seq. , no GL Reliability: 4 Source: ECHA dossier

RESPIRATORY SENSITISATION/SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

Disodium
Respiratory Irritant
Metasilicate

Respiratory sensitization

Data not available

Skin sensitization

Data not available

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

Adverse effects on sexual function and fertility

Data not available

Adverse effects on the development of the offspring

Data not available

Effects on or through lactation

SECTION 11. Toxicological information ... / >>

Data not available

SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

Target authorities

Data not available

Method of exposure

Data not available

SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

Target authorities

Data not available

Method of exposure

Data not available

DANGEROUS IF INHALED

Does not meet the classification criteria for this hazard class

11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors for which an evaluation of effects on human health is ongoing.

SECTION 12. Environmental information

Adopt good working practices, avoid littering. Notify the competent authorities if the substance has entered watercourses or if soil or vegetation has been contaminated.

12.1. Toxicity

Potassium Hydroxide LC50 - for Fish	80 mg/l/96h Gambusia affinis
D-glucose, oligomers, C8-10 glycosides LC50 - for Fish EC50 - for Crustaceans EC50 - for Algae / Aquatic Plants Chronic NOEC for fish Chronic NOEC for crustaceans	96.64 mg/l/96h 31.62 mg/l/48h 19.82 mg/l/72h 1.8 mg/l 28d 2 mg/l 21d
Disodium Metasilicate LC50 - for Fish EC50 - for Crustaceans	210 mg/l/96h Brachydanio rerio 216 mg/l/96h
2-(2-butoxyethoxy)ethanol LC50 - for Fish EC50 - for Crustaceans EC50 - for Algae / Aquatic Plants	1300 mg/l/96h Lepomis macrochirus > 100 mg/l/48h Daphnia magna > 100 mg/l/72h Selenastrum capricornutum
sodium (xylenes and 4-ethylbenzene) sulfonate LC50 - for Fish EC50 - for Crustaceans	1000 mg/l/96h Oncorhynchus mykiss 1000 mg/l/48h Daphnia magna

12.2. Persistence and degradability

SECTION 12. Environmental information ... / >>

Disodium metasilicate As inorganic substances and due to their chemical structure, soluble silicates are not prone to biodegradation.

Potassium phosphonate
Degradability: not specified

Potassium hydroxide Decomposition
capacity: not specified

D-glucose, oligomers, C8-10 glycosides Rapid degradation	100%, 28d, OECD 301E
2-(2-butoxyethoxy)ethanol Rapid Decomposition	89-93%, 28D, OECD301C
sodium (xylenes and 4-ethylbenzene) sulfonate Rapid decomposition	100%, 28d, OECD 301B

12.3. Bioaccumulation potential

D-glucose, oligomers, C8-10 glycosides Partition coefficient n-octanol/water	< 1.77 Log Kow
BCF	< 100
2-(2-butoxyethoxy)ethanol Partition coefficient n-octanol/water	56 Log Kow
sodium (xylenes and 4-ethylbenzene) sulfonate BCF	< 2.3

12.4. Mobility in soil

Due to the strong dependence on pH and concentration leading to a dynamic polymerization-depolymerization equilibrium with speciation in various mono-, oligo- and polymer anions and amorphous silica, calculations of distribution in different environmental components are not feasible. (HERA 2005).

12.5. Results of PBT and vPvB assessments

Based on the available data, the product does not contain PBT or vPvB substances in a proportion of ≥ 0.1%.

12.6. Endocrine-disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors for which an environmental impact assessment is ongoing.

12.7. Other adverse effects

Data not available

SECTION 13. Disposal instructions

13.1. Waste management methods

Reuse if possible. Product residues should be considered hazardous waste. The hazardous properties of waste partially containing this product must be evaluated in accordance with the applicable legal regulations.
Reuse if possible. As such, product residues are considered other waste that is not hazardous. Disposal must be entrusted to a company authorized to manage waste, according to national and, if applicable, local regulations: Act No. 185/2001 Coll., on Waste, as amended, Decree No. 383/2001 Coll., on the details of waste management, as amended, Decree No. 93/2016 Coll., Waste Catalogue, as amended

CONTAMINATED PACKAGING
Contaminated packaging must be sent for recycling or disposal in accordance with national waste management standards.
Shipments of waste may be subject to ADR.
CONTAMINATED PACKAGING
Contaminated packaging must be sent for recycling or disposal in accordance with national waste management standards.

SECTION 14. Shipping Information

14.1. UN number or ID number

ADR/RID, IMDG, IATA: 3266

14.2. Official (UN) Designation for Transport

ADR/RID: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.(Potassium hydroxide; Disodium metasilicate)
IMDG: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Potassium hydroxide; Disodium metasilicate)
IATA: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.(Potassium hydroxide; Disodium metasilicate)

14.3. Hazard class(s) for transport

ADR / RID:	Class: 8	Safety Mark: 8	
IMDG:	Class: 8	Safety Mark: 8	
IATA:	Class: 8	Safety Mark: 8	

14.4. Packaging group

ADR/RID, IMDG, IATA: II

14.5. Environmental hazard

ADR/RID: NO
IMDG: NO
IATA: NO

14.6. Special precautions for users

ADR / RID:	HIN - Kemler: 80	Limited Quantities: 1 L	Code for traffic restrictions in tunnels: (E)
IMDG:	Special provisions - EMS: F-A, S-B	Limited Quantities: 1 L	
IATA:	Circulation: Passport: Special provisions	Maximum Quantity: 30 L Maximum Quantity: 1 L A3, A803	Packing Instructions: 855 Packing Instructions: 851

14.7. Maritime bulk transport according to IMO instruments

Irrelevant information

SECTION 15. Regulatory Information

15.1. Safety, health and environmental rules/specific legislation on the substance or mixture

Category Seveso - Directive 2012/18/EU: None

Restriction on the product or substances contained in Annex XVII to Regulation (EC) No 1907/2006 Product Point Substances contained Point Point
3

75
55 2- (2-butoxyethoxy)ethanol
REACH Reg. No.: 01-2119475104-44-XXXX

Council Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors is not applicable

SECTION 15. Regulatory information ... / >>

Substances listed in the Candidate List (Article 59 of REACH) According to available data, the content of SVHC substances in the product ≥ not 0.1%.

Substances requiring authorisation (Annex XIV to REACH) None

Substances subject to the export reporting obligation Regulation (EC) 649/2012: None

Substances subject to the Rotterdam Convention: None

Substances subject to the Stockholm Convention: None

Hygiene checks
Workers exposed to this chemical do not need to undergo medical examinations, provided that hazard assessment data are available to demonstrate that the hazard to the health and safety of workers is moderate and that the measures set out in Directive 98/24/EC are respected.

(EC) No 648/2004
Composition in accordance with Directive (EC) No. 648/2004 The surfactant(s) contained in this product is (are) in accordance with the biodegradability criteria of Directive (EC) No. 648/2004 on detergents. The data confirming this declaration shall be made available to the competent institutions of the Member States of the Union at their direct request or at the request of the detergent manufacturer.

Classification in terms of pollution of water resources in Germany (AwSV, vom 18. April 2017) WGK 3: Substances highly harmful to water resources

15.2. Chemical safety assessment

A chemical safety assessment of the following substances was prepared:
Disodium metasilicate

SECTION 16. Learn more

Text of the hazard designation (H) given in sections 2-3 of the form:

Met. Corr. 1 **Acute Tox. 4** **Skin Corr. 1A** **Eye Dam. 1** **STOT SE 3**	Substance or mixture corrosive to metals, Category 1 Acute toxicity, Category 4 Corrosive to skin, Category 1A Serious eye damage, Category 1 Specific target organ toxicity - single exposure, Category 3 May be corrosive to metals.
H290 H302	Harmful if swallowed.
H314 H318	It causes severe skin burns and eye damage. Causes serious eye damage.
H335	It can cause respiratory irritation.

Usage Descriptor System:

LCS PW LCS SL	Wide use by professional workers Time of use Manual activities involving contact with hands Manual maintenance (cleaning and repair) of machinery Transport of a substance or preparation (filling/draining) in non-specialized facilities Food production
PROC 19 **PROC** 28 **PROC** 8a **SS 4**	

LEGEND:
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- ATE: Acute toxicity estimation
- CAS: Numerical identifier according to the Chemical Abstract Service database
- CE50: Concentration at which the effect is felt in 50% of the tested population
- CE: Numerical identifier in ESIS (European Database of Existing Chemicals)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived Level of Exposure Without Consequences
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of Classification and Labeling of Chemicals

SECTION 16. Learn more ... / >>

- IATA DGR: International Air Transport Association Dangerous Goods Handbook
- IC50: Concentration inducing 50% immobilization of the test population
- IMDG: International Regulation for the Maritime Transport of Dangerous Goods
- IMO: International Maritime Organization
- INDEX: Numerical identifier according to Annex VI to CLP
- LC50: 50% lethal concentration
- LD50: 50% lethal dose
- OEL: Occupational exposure limit value
- PBT: Persistent, bioaccumulative and toxic according to REACH
- PEC: Predicted concentration in the environment
- PEL: Permissible Exposure Limit
- PNEC: Predicted No Effect Concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulations for the International Carriage of Dangerous Goods by Rail
- TLV: Limit value of permitted concentration
- TLV CEILING: The concentration that must not be exceeded at any time during occupational exposure.
- TWA: Time-Balanced Average
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic compound
- vPvB: Highly persistent and highly bioaccumulative according to REACH
- WGK: Wassergefährdungsklassen (Deutschland).

GENERAL BIBLIOGRAPHY:
1. Regulation (EC) 1907/2006 of the European Parliament and of the Council (REACH)
2. Regulation (EC) No 1272/2008 of the European Parliament and of the Council (CLP)
3. Regulation (EU) 2020/878 of the A of the Council (Annex II to the REACH Regulation)
4. Regulation (EC) 790/2009 of the European Parliament and of the Council (i.e. etc.)
5. Regulation (EU) 286/2011 of the European Parliament and of the Council (II et al. CLP)
6. Regulation (EU) 618/2012 of the European Parliament and of the Council (III et al. CLP)
7. Regulation (EU) 487/2013 of the European Parliament and of the Council (IV et al. CLP)
8. Regulation (EU) 944/2013 of the European Parliament and of the Council (et al. CLP)
9. Regulation (EU) 605/2014 of the European Parliament and of the Council (VI et al. CLP)
10. Regulation (EU) 2015/1221 of the European Parliament and of the Council (VII et alp.)
11. Regulation (EU) 2016/918 of the European Parliament and of the Council (VIII et alp.)
12. Regulation (EU) 2016/1179 of the Council (IX et al. CLP)
13. Regulation (EU) 2017/776 of the Council (X et seq.)
14. Regulation (EU) 2018/669 of the Council (XI et clp)
15. Regulation (EU) 2019/521 of the A of the Council (XII et al. CLP)
16. Commission Delegated Regulation (EU) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148 of the Council
18. Commission Delegated Regulation (EU) 2020/217 (XIV et al. CLP)
19. Commission Delegated Regulation (EU) 2020/1182 (XV Atp. CLP)
20. Commission Delegated Regulation (EU) 2021/643 (XVI Atp. CLP)
21. Commission Delegated Regulation (EU) 2021/849 (XVII Atp. CLP)

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- Website: IFA GESTIS
- Website: ECHA Agenzia
- Database of Model Safety Data Sheets (SDS) for Chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note to users: the information contained in this sheet is based on our knowledge as of the date of the last version. The user must check the appropriateness and completeness of the information relating to the specific use of the product.

Do not consider this document as a guarantee of the specific characteristics of the product.
As the use of the product does not fall under our direct control, the user is responsible for complying with applicable laws and regulations regarding occupational health and safety. We are not responsible for improper use.
Provide workers who work with chemicals with the necessary knowledge.

CALCULATION METHODS FOR CLASSIFICATION
Chemical and physical hazards: The classification of the product is based on the criteria set out in CLP, Annex I, Part 2. The data required for the evaluation of the chemical-physical properties are given in Section 9.
Health hazards: The classification of the product is based on the calculation methods according to CLP, Annex I, Part 3, unless otherwise specified in Section 11.

SECTION 16. Learn more ... / >>

Environmental hazards: Product classification is based on calculation methods according to CLP, Annex I, Part 4, unless otherwise specified in Section 12.

Changes from previous revision: Changes have
been made to the following sections:
02/03/09/11/12/15/16.