

**MULTI CLEANER**

Creation date	14th August 2024	Version	4.0
Revision date			

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

- 1.1. Product identifier**  
Substance / mixture  
Number  
UFI
- MULTI CLEANER  
mixture  
R 34221 – 1L, R 34222 – 5L, R 34223 – 10L, R 34224 – 25L, R 34225 - 210 L  
TRGQ-UU34-290Q-4RC6
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**  
**Mixture's intended use**  
Cleaning agent. For professional use only.  
**Mixture uses advised against**  
The product should not be used in ways other than those referred in Section 1.
- 1.3. Details of the supplier of the safety data sheet**  
**Supplier**
- |                             |  |
|-----------------------------|--|
| Name or trade name          | RETECH, s.r.o.   |
| Address                     | Vackova 1541/4, Praha 5 - Stodůlky, 155 00<br>Czech Republic |
| Identification number (CRN) | 25018205   |
| VAT Reg No                  | CZ25018205   |
| Phone                       | +420327596428  |
| E-mail                      | info@retech.cz   |
| Web address                 | www.retech.com   |
- Competent person responsible for the safety data sheet**
- |        |                |
|--------|----------------|
| Name   | RETECH, s.r.o. |
| E-mail | info@retech.cz |
- 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. 1B, H314  
Skin Sens. 1A, H317  
Eye Dam. 1, H318  
Aquatic Chronic 3, H412

**Most serious adverse effects on human health and the environment**

Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage.  
Harmful to aquatic life with long lasting effects.

- 2.2. Label elements**

**Hazard pictogram****Signal word**

Danger

**Hazardous substances**

disodium metasilicate  
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

**Hazard statements**

H314 Causes severe skin burns and eye damage.

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H317 May cause an allergic skin reaction.  
 H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
 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 doctor.

**Supplemental information**

EUH071 Corrosive to the respiratory tract.

**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.

**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
Index: 014-010-00-8 CAS: 6834-92-0 EC: 229-912-9 Registration number: 01-2119449811-37	disodium metasilicate	5-<10	Met. Corr. 1, H290 Skin Corr. 1B, H314 STOT SE 3, H335	
CAS: 107-98-2 EC: 203-539-1 Registration number: 01-2119457435-35-0000	1-methoxy-2-propanol	1-<5	Flam. Liq. 3, H226 STOT SE 3, H336	2
CAS: 90170-43-7 EC: 290-476-8 Registration number: 01-2119976233-35	β-Alanine, N-(2-carboxyethyl)-, N-coco alkyl derivs., disodium salts	0.2-<2	Eye Irrit. 2, H319	3
Index: 011-002-00-6 CAS: 1310-73-2 EC: 215-185-5 Registration number: 01-2119457892-27	sodium hydroxide	<0.01	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 %	

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Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
Index: 613-167-00-5 CAS: 55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	<0.0025	Acute Tox. 3, H301 Acute Tox. 2, H310+H330 Skin Corr. 1C, H314 Skin Sens. 1A, H317 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100) EUH071 Specific concentration limit: Eye Irrit. 2, H319: 0.06 % ≤ C < 0.6 % Skin Sens. 1A, H317: C ≥ 0.0015 % Skin Irrit. 2, H315: 0.06 % ≤ C < 0.6 % Skin Corr. 1C, H314: C ≥ 0.6 % Eye Dam. 1, H318: C ≥ 0.6 %	1

**Notes**

- 1 *Note B: Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid ... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.*
- 2 *A substance for which exposure limits are set.*
- 3 *Substance of unknown or variable composition, complex reaction products or biological materials - UVCB.*

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 unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

**If inhaled**

Terminate the exposure immediately; move the affected person to fresh air. Take care of your own safety, do not let the affected person walk! 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. Rinse contaminated areas with a flow of water, lukewarm at best, for 10-30 minutes; do not use any brush, soap or neutralizers. Depending on the situation, call the medical rescue service and always ensure medical treatment. Rinse cautiously with water for several minutes. Rinse skin with water or shower.

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**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 induced 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. May cause an allergic skin reaction.

**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**

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. 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 mist/vapours/spray. 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.

**6.4. Reference to other sections**

See the Section 7, 8 and 13.

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**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 mist/vapours/spray. Prevent contact with skin and eyes. Contaminated work clothing should not be allowed out of the workplace. 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. Avoid release to the environment.

**7.2. Conditions for safe storage, including any incompatibilities**

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Store locked up.

Content	Packaging type	Material of package
1 l	bottle	HDPE
5 l	jerry can	HDPE
10 l	jerry can	HDPE
25 l	jerry can	HDPE

**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 2000/39/EC**

Substance name (component)	Type	Value
1-methoxy-2-propanol (CAS: 107-98-2)	OEL 8 hours	375 mg/m <sup>3</sup>
	OEL 8 hours	100 ppm
	OEL 15 minutes	568 mg/m <sup>3</sup>
	OEL 15 minutes	150 ppm

Notes

Skin.

**DNEL**

1-methoxy-2-propanol			
Workers / consumers	Route of exposure	Value	Effect
Workers	Inhalation	369 mg/m <sup>3</sup>	Chronic effects systemic
Workers	Inhalation	553.5 mg/m <sup>3</sup>	Acute effects systemic
Workers	Inhalation	553.5 mg/m <sup>3</sup>	Acute effects local
Workers	Dermal	183 mg/kg bw/day	Chronic effects systemic
Consumers	Inhalation	43.9 mg/m <sup>3</sup>	Chronic effects systemic
Consumers	Dermal	78 mg/kg bw/day	Chronic effects systemic
Consumers	Oral	33 mg/kg bw/day	Chronic effects systemic

disodium metasilicate			
Workers / consumers	Route of exposure	Value	Effect
Workers	Inhalation	6.22 mg/m <sup>3</sup>	Chronic effects systemic
Workers	Dermal	1.49 mg/kg bw	Chronic effects systemic
Consumers	Inhalation	1.55 mg/m <sup>3</sup>	Chronic effects systemic
Consumers	Dermal	0.74 mg/kg bw	Chronic effects systemic
Consumers	Oral	0.74 mg/kg bw	Chronic effects systemic

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<b>sodium hydroxide</b>			
Workers / consumers	Route of exposure	Value	Effect
Workers	Inhalation	1 mg/m <sup>3</sup>	Chronic effects local
Consumers	Inhalation	1 mg/m <sup>3</sup>	Chronic effects local

<b>β-Alanine, N-(2-carboxyethyl)-, N-coco alkyl derivs., disodium salts</b>			
Workers / consumers	Route of exposure	Value	Effect
Workers	Inhalation	980 mg/m <sup>3</sup>	Chronic effects systemic
Workers	Dermal	2.67 mg/kg bw/day	Chronic effects systemic

**PNEC**

<b>1-methoxy-2-propanol</b>	
Route of exposure	Value
Freshwater environment	10 mg/l
Marine water	1 mg/l
Microorganisms in sewage treatment	100 mg/l
Freshwater sediment	52.3 mg/kg of dry substance of sediment
Sea sediments	5.2 mg/kg of dry substance of sediment
Soil (agricultural)	4.59 mg/kg of dry substance of soil

<b>disodium metasilicate</b>	
Route of exposure	Value
Freshwater environment	7.5 mg/l
Marine water	1 mg/l
Water (intermittent release)	7.5 mg/l
Microorganisms in sewage treatment	1000 mg/l

<b>β-Alanine, N-(2-carboxyethyl)-, N-coco alkyl derivs., disodium salts</b>	
Route of exposure	Value
Freshwater environment	0.1 mg/l
Marine water	0.01 mg/l
Microorganisms in sewage treatment	0.3 mg/l

**8.2. Exposure controls**

Take off contaminated clothing and wash before reuse. 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.

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**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	colourless
Odour	characteristic
Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	100 °C
Flammability	data not available
Lower and upper explosion limit	data not available
Flash point	>60 °C
Auto-ignition temperature	data not available
Decomposition temperature	data not available
pH	12.5-13.5 (undiluted)
Kinematic viscosity	data not available
Solubility in water	soluble
Solubility in fats	data not available
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	0.99-1
Relative vapour density	data not available
Particle characteristics	data not available
Form	liquid
data not available	

**9.2. Other information**

Evaporation rate	non-applicable
Oxidising properties	The product has no oxidizing properties.
Explosive properties	The product does not have explosive properties.

**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.

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**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**

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. No toxicological data is available for the mixture.

**Acute toxicity**

Based on the available data, the criteria for classification of the mixture are not met.

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Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex	Value determination
Oral	ATE		2560000 mg/kg				Calculation of value
Dermal	ATE		3696000 mg/kg				Calculation of value
Inhalation (vapor)	ATE		20000 mg/l				Calculation of value

1-methoxy-2-propanol							
Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex	Value determination
Oral	LD <sub>50</sub>	OECD 401	3739 mg/kg		Rat	M	
Dermal	LD <sub>50</sub>	OECD 402	>2000 mg/kg		Rabbit	F/M	
Inhalation (vapor)	LC <sub>50</sub>	OECD 403	30.02 mg/l	4 hours	Rat		
Oral	LD <sub>50</sub>	OECD 401	4277 mg/kg		Rat	F	

disodium metasilicate							
Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex	Value determination
Oral	LD <sub>50</sub>		1152-1349 mg/kg		Rat		
Inhalation	LD <sub>50</sub>		>2.06 mg/l		Rat		
Dermal	LD <sub>50</sub>		>5000 mg/kg		Rat		

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)							
Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex	Value determination
Oral	LD <sub>50</sub>		64-66 mg/kg		Rat		
Dermal	LD <sub>50</sub>		141 mg/kg		Rat		
Dermal	LD <sub>50</sub>		92.4 mg/kg		Rabbit		
Inhalation (dust/mist)	LC <sub>50</sub>		0.169 mg/l	4 hours	Rat		



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**β-Alanine, N-(2-carboxyethyl)-, N-coco alkyl derivs., disodium salts**

Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex	Value determination
Oral	LD <sub>50</sub>	OECD 423	>2000 mg/kg		Rat	F	

**Skin corrosion/irritation**

Causes severe skin burns and eye damage.

**1-methoxy-2-propanol**

Route of exposure	Result	Method	Exposure time	Species
Skin	Not irritating			

**disodium metasilicate**

Route of exposure	Result	Method	Exposure time	Species
Skin	Corrosive	OECD 404		Rabbit

**sodium hydroxide**

Route of exposure	Result	Method	Exposure time	Species
Skin	Causes damage			

**β-Alanine, N-(2-carboxyethyl)-, N-coco alkyl derivs., disodium salts**

Route of exposure	Result	Method	Exposure time	Species
Skin	Not irritating	EU B.46		Human

**Serious eye damage/irritation**

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

**1-methoxy-2-propanol**

Route of exposure	Result	Method	Exposure time	Species
Eye	Slightly irritating			

**disodium metasilicate**

Route of exposure	Result	Method	Exposure time	Species
Eye	Corrosive			Rabbit

**sodium hydroxide**

Route of exposure	Result	Method	Exposure time	Species
Eye	Serious eye damage			

**β-Alanine, N-(2-carboxyethyl)-, N-coco alkyl derivs., disodium salts**

Route of exposure	Result	Method	Exposure time	Species
Eye	Irritating	OECD 405		Rabbit

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**Respiratory or skin sensitisation**

May cause an allergic skin reaction.

**1-methoxy-2-propanol**

Route of exposure	Result	Exposure time	Species	Sex	Value determination
Skin	Not sensitizing		Guinea-pig		

**disodium metasilicate**

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

**sodium hydroxide**

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

**β-Alanine, N-(2-carboxyethyl)-, N-coco alkyl derivs., disodium salts**

Route of exposure	Result	Exposure time	Species	Sex	Value determination
Skin	Not sensitizing		Guinea-pig		Experimentally

**Germ cell mutagenicity**

Data for the mixture are not available. Based on the available data, the criteria for classification of the mixture are not met.

**1-methoxy-2-propanol**

Result	Method	Exposure time	Specific target organ	Species	Sex	Value determination	Source
Negative	in vitro					Literary studies	

**disodium metasilicate**

Result	Method	Exposure time	Specific target organ	Species	Sex	Value determination	Source
Negative	in vitro						
Negative	in vivo						

**sodium hydroxide**

Result	Method	Exposure time	Specific target organ	Species	Sex	Value determination	Source
No effect	in vitro						
No effect	in vivo						

**β-Alanine, N-(2-carboxyethyl)-, N-coco alkyl derivs., disodium salts**

Result	Method	Exposure time	Specific target organ	Species	Sex	Value determination	Source
Negative	OECD 476			Mouse (lymphoma)		Experimentally	in vitro

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**Carcinogenicity**

Data for the mixture are not available. Based on the available data, the criteria for classification of the mixture are not met.

1-methoxy-2-propanol					
Route of exposure	Parameter	Value	Result	Species	Sex
			Not carcinogenic		

disodium metasilicate					
Route of exposure	Parameter	Value	Result	Species	Sex
			Not carcinogenic		

**Reproductive toxicity**

Data for the mixture are not available. Based on the available data, the criteria for classification of the mixture are not met.

1-methoxy-2-propanol							
Effect	Parameter	Method	Value	Specific target organ	Result	Species	Sex
				Fetus	Fetotoxicity, Maternal toxicity		

disodium metasilicate							
Effect	Parameter	Method	Value	Specific target organ	Result	Species	Sex
Developmental toxicity					Negative		
Effects on fertility					Negative		

β-Alanine, N-(2-carboxyethyl)-, N-coco alkyl derivs., disodium salts							
Effect	Parameter	Method	Value	Specific target organ	Result	Species	Sex
Maternal toxicity	NOAEL	OECD 422	>43 mg/kg bw/day			Rat	F/M

**Toxicity for specific target organ - single exposure**

Data for the mixture are not available. Based on the available data, the criteria for classification of the mixture are not met.

disodium metasilicate					
Route of exposure	Parameter	Value	Result	Species	Sex
Inhalation			Irritating		

**Toxicity for specific target organ - repeated exposure**

Data for the mixture are not available. Based on the available data, the criteria for classification of the mixture are not met.

1-methoxy-2-propanol						
Route of exposure	Parameter	Value	Specific target organ	Result	Species	Sex
Inhalation			Nervous system	Drowsiness, Dizziness		

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1-methoxy-2-propanol						
Route of exposure	Parameter	Value	Specific target organ	Result	Species	Sex
			Liver		Mammals	
			Kidney	Positive, Tumor formation	Rat	M
			Nervous system	Drowsiness		

disodium metasilicate						
Route of exposure	Parameter	Value	Specific target organ	Result	Species	Sex
				No effect		

**Repeated dose toxicity**

disodium metasilicate							
Route of exposure	Parameter	Result	Method	Value	Exposure time	Species	Sex
Oral	NOAEL			227 mg/kg bw/day		Rat	
Oral	NOAEL			260 mg/kg bw/day		Mouse	

$\beta$ -Alanine, N-(2-carboxyethyl)-, N-coco alkyl derivs., disodium salts							
Route of exposure	Parameter	Result	Method	Value	Exposure time	Species	Sex
Oral	NOAEL		OECD 422	43 mg/kg		Rat	F/M
Oral	LOAEL		OECD 422	160 mg/kg		Rat	F/M

**Aspiration hazard**

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

**11.2. Information on other hazards**
**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.

**Other information**

not available

**SECTION 12: Ecological information**
**12.1. Toxicity**

Harmful to aquatic life with long lasting effects.

**Acute toxicity**

1-methoxy-2-propanol							
Parameter	Method	Value	Exposure time	Species	Environment	Value determination	Source
LC <sub>50</sub>		6812 mg/l	96 hours	Fish (Leuciscus idus)		Static system	DIN 38412

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**1-methoxy-2-propanol**

Parameter	Method	Value	Exposure time	Species	Environment	Value determination	Source
LC <sub>50</sub>	OECD 203	≥1000 mg/l	96 hours	Fish (Oncorhynchus mykiss)		Semi static system	
LC <sub>50</sub>	OECD 203	20800 mg/l	96 hours	Fish (Pimephales promelas)		Static system	
LC <sub>50</sub>	OECD 202	21100-25900 mg/l	48 hours	Daphnia (Daphnia magna)		Static system	

**disodium metasilicate**

Parameter	Method	Value	Exposure time	Species	Environment	Value determination	Source
LC <sub>50</sub>		210 mg/l	96 hours	Fish (Branchydanio rerio)			
EC <sub>50</sub>		1700 mg/l	96 hours	Daphnia (Daphnia magna)			
EC <sub>50</sub>		>345.4 mg/l	72 hours	Algae (Scenedesmus subspicatus)		Indicator of growth	
EC <sub>50</sub>		207 mg/l	72 hours	Algae (Scenedesmus subspicatus)		Biomass	

**reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)**

Parameter	Method	Value	Exposure time	Species	Environment	Value determination	Source
LC <sub>50</sub>		0.19 mg/l	96 hours	Fish (Oncorhynchus mykiss)			
EC <sub>50</sub>		0.16 mg/l	48 hours	Daphnia (Daphnia magna)			
ErC <sub>50</sub>		0.0052 mg/l	48 hours	Algae (Skeletonema costatum)			

**sodium hydroxide**

Parameter	Method	Value	Exposure time	Species	Environment	Value determination	Source
EC <sub>50</sub>		40.4 mg/l	48 hours	Daphnia (Ceriodaphnia)		Immobilization	

**β-Alanine, N-(2-carboxyethyl)-, N-coco alkyl derivs., disodium salts**

Parameter	Method	Value	Exposure time	Species	Environment	Value determination	Source
NOEC	OECD 203	3.2 mg/l	96 hours	Fish (Oncorhynchus mykiss)		Static system, Mortality and sublethal effects	

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<b>β-Alanine, N-(2-carboxyethyl)-, N-coco alkyl derivs., disodium salts</b>							
Parameter	Method	Value	Exposure time	Species	Environment	Value determination	Source
LC <sub>50</sub>	OECD 203	4.2 mg/l	96 hours	Fish (Oncorhynchus mykiss)		Static system, Mortality and sublethal effects	
NOEC	EU C.2	3 mg/l	48 hours	Daphnia (Daphnia magna)		Static system, Immobilization	
EC <sub>50</sub>	EU C.2	29 mg/l	48 hours	Daphnia (Daphnia magna)		Static system, Immobilization	
EC <sub>10</sub>		5.5 mg/l	72 hours	Algae (Chlorella vulgaris)		Static system, Indicator of growth	
EC <sub>50</sub>		9.4 mg/l	72 hours	Algae (Chlorella vulgaris)		Static system, Indicator of growth	
EC <sub>50</sub>	OECD 209	300 mg/l	3 hours		Activated sludge	Static system	
EC <sub>0</sub>	OECD 209	30 mg/l	3 hours		Activated sludge	Static system	

**Chronic toxicity**

<b>1-methoxy-2-propanol</b>						
Parameter	Method	Value	Exposure time	Species	Environment	Value determination
ErC <sub>50</sub>	OECD 201	>1000 mg/l	7 days	Algae (Pseudokirchneriella subcapitata)		Static system, Indicator of growth

<b>reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)</b>						
Parameter	Method	Value	Exposure time	Species	Environment	Value determination
NOEC	OECD 201	0.0004 mg/l		Algae		

<b>β-Alanine, N-(2-carboxyethyl)-, N-coco alkyl derivs., disodium salts</b>						
Parameter	Method	Value	Exposure time	Species	Environment	Value determination
NOEC	OECD 211	10 mg/l	21 days	Daphnia (Daphnia magna)		Reproduction, Semi static system

**12.2. Persistence and degradability**

Data for the mixture are not available. Surfactants are biodegradable according to the European Parliament and Council Regulation (EC) No. 648/2004 on detergents, as amended.

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**Biodegradability**

**1-methoxy-2-propanol**

Parameter	Method	Value	Exposure time	Environment	Result
	OECD 301E	96 %	28 days		Easily biodegradable

**β-Alanine, N-(2-carboxyethyl)-, N-coco alkyl derivs., disodium salts**

Parameter	Method	Value	Exposure time	Environment	Result
	OECD 301B	96 %	28 days	Activated sludge	Easily biodegradable

**12.3. Bioaccumulative potential**

Data for the mixture are not available.

**1-methoxy-2-propanol**

Parameter	Value	Exposure time	Species	Environment	Temperature [°C]
BCF	<2				
Log Pow	0.37				

**β-Alanine, N-(2-carboxyethyl)-, N-coco alkyl derivs., disodium salts**

Parameter	Value	Exposure time	Species	Environment	Temperature [°C]
Log Pow	<1				

**12.4. Mobility in soil**

Data for the mixture are not available.

**1-methoxy-2-propanol**

Parameter	Value	Value determination
Log Koc	0.2-1	Estimated value

**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**

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.

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**Waste type code**

16 03 04 inorganic wastes other than those mentioned in 16 03 03

**Packaging waste type code**

15 01 02 plastic packaging

15 01 10\* packaging containing residues of or contaminated by hazardous substances

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

**SECTION 14: Transport information****14.1. UN number or ID number**

UN 1760

**14.2. UN proper shipping name**

CORROSIVE LIQUID, N.O.S. (disodium metasilicate; Glutamic acid, N,N-diacetic acid, tetra sodium salt)

**14.3. Transport hazard class(es)**

8 Corrosive substances

**14.4. Packing group**

III

**14.5. Environmental hazards**

not relevant

**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.

**80**

UN number

**1760**

Classification code

C9

Safety signs

8

**Road transport - ADR**

Limited quantities 5 L

Excepted quantities E1

Transport category 3

Tunnel restriction code (E)

**Railway transport - RID**

Excepted quantities E1

Transport category 3

**Air transport - ICAO/IATA**

Packaging instructions for limited amount Y841

Packaging instructions passenger 852

Cargo packaging instructions 856

**Marine transport - IMDG**

EmS (emergency plan) F-A, S-B

MFAG 760



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**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 amended. 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).

**Additional information in accordance with Regulation (EC) no. 648/2004 on detergents, as amended**

Composition according to (EC) No 648/2004, as amended: <5 % amphoteric surfactants, Reakční směs: 5-chlor-2-methylisothiazol-3(2H)-on a 2-methylisothiazol-3(2H)-on (3:1)

**15.2. Chemical safety assessment**

A chemical safety assessment has not been carried out.

**SECTION 16: Other information****A list of standard risk phrases used in the safety data sheet**

EUH071	Corrosive to the respiratory tract.
H226	Flammable liquid and vapour.
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H310+H330	Fatal in contact with skin or if inhaled.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

**Guidelines for safe handling used in the safety data sheet**

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
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 doctor.

**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**

Acute Tox.	Acute toxicity
ADR	European agreement concerning the international carriage of dangerous goods by road
Aquatic Acute	Hazardous to the aquatic environment

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Aquatic Chronic	Hazardous to the aquatic environment (chronic)
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 <sub>0</sub>	Concentration of a substance when it is affected 0 % of the population
EC <sub>10</sub>	Concentration of a substance when it is affected 10 % of the population
EC <sub>50</sub>	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
Eye Dam.	Serious eye damage
Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquid
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 <sub>50</sub>	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD <sub>50</sub>	Lethal dose of a substance in which it can be expected death of 50% of the population
LOAEL	Lowest observed adverse effect level
log Kow	Octanol-water partition coefficient
Met. Corr.	Corrosive to metals
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
OEL	Occupational Exposure Limits
PBT	Persistent, bioaccumulative and toxic
PMT	Persistent, mobile and toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
Skin Corr.	Skin corrosion
Skin Irrit.	Skin irritation
Skin Sens.	Skin sensitization
STOT SE	Specific target organ toxicity - single exposure
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
vPvM	Very persistent and very mobile

**Training guidelines**

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

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**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 4.0 replaces the SDS version from Thursday, 15 September 2022. Changes were made in sections 1, 2, 3, 8, 9, 11, 12, 13, 15 and 16.

**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.