SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

MULTI CLEANER

Creation date	24. October 2018		
Revision date		Version	1.1

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

1.1. Product identifier

Substance / mixture	MULTI CLEANER
	mixture
Number	R 34221/22/23/24/25 - 1/5/10/25/210 L (kanystr/sud)

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

mixture's intended use	Cleaning agent.
Disapproved uses of mixture	For professional use only.

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 Czech Republic
Identification number (ID)	25018205
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

RETECH, Suchdol 212, 285 02 Suchdol u Kutné Hory, Czech Republic; Telephone number: +420 327 596 128 (7.30-16.00 hour)
Poisoning information centre, Na Bojišti 1, Praha, Czech Republic, Tel.: non-stop +420 224 919 293 or +420 224 915 402, Information on health risks only - acute poisoning of humans and animals.

SECTION 2: Hazards identification

2.1. Substance or mixture classification

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

The mixture is classified as dangerous.

Skin Irrit. 2, H315
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 skin irritation.

2.2. Label elements

Hazard pictogram

Signal word

Danger

Hazardous substances

disodium metasilicate

Hazard statements

H315	Causes skin irritation.
H318	Causes serious eye damage.

Precautionary statements

P102	Keep out of reach of children.
P280	Wear protective gloves/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
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.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P501	Dispose of contents/container to in accordance with national regulations.

Supplemental information

<5 % amphoteric surfactants, <5 % non-ionic surfactants, <5 % NTA (nitrilotriacetic acid) and salts thereof, <5 % aliphatic hydrocarbons, <5 % ALKYL HYDROXYBENZOATE

2.3. Other hazards

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: 6834-92-0 EC: 229-912-9 Registration number: 01-2119449811-37	disodium metasilicate	1-5	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	1-methoxy-2-propanol	1-5	Flam. Liq. 3, H226 STOT SE 3, H336	1
CAS: 68608-68-4 EC: 271-795-1	beta-Alanine, N-coco alkyl derivs., sodium salts	1-5	Eye Irrit. 2, H319	
CAS: 5064-31-3 EC: 225-768-6	Trisodium nitrilotriacetate	<1	Acute Tox. 4, H302 Eye Irrit. 2, H319 Carc. 2, H351 Specific concentration limit: Carc. 2, H351: C ≥ 5 %	

Notes

1 Substance for which exposure limits of Community for working environment exist.

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.

Inhalation

Transfer the affected person to the fresh air and ensure calm environment for body and mind. In the event of issues, find medical advice.

Skin contact

Immediately wash with water and soap and rinse thoroughly. In the event of issues, find medical advice.

Eye contact

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. In the event of issues, find medical advice.

Ingestion

Rinse out the mouth with clean water. DO NOT INDUCE VOMITING! In the event of issues, find medical advice.

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

Inhalation

Cough. There may be irritation of the throat with a feeling of tightness in the chest.

Skin contact

Causes skin irritation.

Eye contact

Causes serious eye damage.

Ingestion

Nausea.

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

Accommodate extinguishing components to the location of fire.

Unsuitable extinguishing media

not available

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. Nitrogen oxides (NOx), ammonia.

5.3. Advice for firefighters

Use a self-contained breathing apparatus and full-body protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Prevent contact with skin and eyes. Use personal protective equipment for work. Do not touch or walk through spilt material. Danger of slipping on spilled product. Wash hands and exposed parts of the body thoroughly after handling.

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

Absorb spillage to prevent material damage. After removal of the product, wash the contaminated site with plenty of water. Use personal protective equipment for work. Wash hands and exposed parts of the body thoroughly after handling.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Use personal protective equipment as per Section 8. Prevent contact with skin and eyes. Prevent other leakage. Wash hands and exposed parts of the body thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place.

Storage temperature	min 4 °C, max 40 °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

Substance name (component)	Type	Time of exposure	Value	Note	Source
1-methoxy-2-propanol (CAS: 107-98-2)	OEL	8 hours	375 mg/m³		EU limits
	OEL	8 hours	100 ppm		
	OEL	Short-term	568 mg/m³		
	OEL	Short-term	150 ppm		

United Kingdom of Great Britain and Northern Ireland

Substance name (component)	Type	Time of exposure	Value	Note	Source
1-methoxy-2-propanol (CAS: 107-98-2)	WEL	8 hours	375 mg/m³	Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.	GBR
	WEL	15 minutes	560 mg/m³	Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.	
	WEL	8 hours	100 ppm	Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.	
	WEL	15 minutes	150 ppm	Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.	

DNEL

1-methoxy-2-propanol

Workers / consumers	Route of exposure	Value	Effect	Determining method
Workers	Inhalation	553.5 mg/m³	Systemic acute effects	
Workers	Inhalation	369 mg/m³	Systemic chronic effects	
Workers	Dermal	50.6 mg/kg/24hour	Systemic chronic effects	
Consumers	Dermal	18.1 mg/kg/24hour	Systemic chronic effects	
Consumers	Inhalation	43.9 mg/m³	Systemic chronic effects	
Consumers	Oral	3.3 mg/kg/24hour	Systemic chronic effects	

beta-Alanine, N-coco alkyl derivs., sodium salts

Workers / consumers	Route of exposure	Value	Effect	Determining method
Workers	Dermal	12.5 mg/kg	Systemic chronic effects	
Consumers	Dermal	7.5 mg/kg/24hour	Systemic chronic effects	
Workers	Inhalation	44 mg/m³	Systemic chronic effects	

disodium metasilicate

Workers / consumers	Route of exposure	Value	Effect	Determining method
Workers	Dermal	1.49 mg/kg/24hour	Systemic chronic effects	
Workers	Inhalation	6.22 mg/m³	Systemic chronic effects	
Consumers	Dermal	0.74 mg/kg/24hour	Systemic chronic effects	
Consumers	Inhalation	1.55 mg/m³	Systemic chronic effects	
Consumers	Oral	0.74 mg/kg/24hour	Systemic chronic effects	

PNEC

1-methoxy-2-propanol

Route of exposure	Value	Determining method
Freshwater environment	10 mg/l	
Seawater	1 mg/l	
Microorganisms in wastewater treatment plants	100 mg/l	
Freshwater sediment	41.6 mg/kg	
Sea sediments	4.17 mg/kg	
Soil (agricultural)	2.47 mg/kg	

beta-Alanine, N-coco alkyl derivs., sodium salts

Route of exposure	Value	Determining method
Freshwater environment	0.0135 mg/l	
Microorganisms in wastewater treatment plants	300 mg/l	
Soil (agricultural)	0.8 mg/kg	
Freshwater sediment	1 mg/kg	
Sea sediments	0.1 mg/kg	
Seawater	0.00135 mg/l	

8.2. Exposure controls

Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Tightly sealed goggles.

Skin protection

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Material of gloves: Rubber (natural, latex). Neoprene. PVC.

Other protection: protective workwear.

Respiratory protection

Under regular circumstances it is not necessary.

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

Appearance	
Physical state	liquid at 20°C
color	colourless
Odour	mild
Odour threshold	data not available
pH	13-14 (-% solution)
Melting point/freezing point	data not available
Initial boiling point and boiling range	data not available
Flash point	data not available
Evaporation rate	non-applicable
Flammability (solid, gas)	data not available
Upper/lower flammability or explosive limits	
flammability limits	data not available
explosive limits	data not available
Vapour pressure	data not available
Vapour density	data not available
Relative density	1.030
Solubility(ies)	
solubility in water	soluble
solubility in fats	data not available
Partition coefficient: n-octanol/water	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
Viscosity	data not available

Explosive properties data not available
Oxidising properties data not available
data not available

9.2. Other information

Density data not available
ignition temperature data not available

SECTION 10: Stability and reactivity

10.1. Reactivity

When used in the standard way, there is not any dangerous reaction with other substances.

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

not available

10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use.

10.5. Incompatible materials

Unknown.

10.6. Hazardous decomposition products

Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire. Nitrogen oxides (NOx), ammonia.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

No toxicological data is available for the mixture.

Acute toxicity

Based on available data the classification criteria are not met.

1-methoxy-2-propanol

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD_{50}	4016 mg/kg		Rat	
Oral	ATE	4016 mg/kg			
Dermal	LD_{50}	20001 mg/kg		Rat	
Dermal	ATE	20001 mg/kg			
Inhalation (dust/mist)	LD_{50}	7559 mg/l		Rat	
Inhalation (dust/mist)	ATE	7559 mg/l			

disodium metasilicate

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Dermal	LD_{50}	5000 mg/kg		Rat	
Dermal	ATE	5000 mg/kg			

Trisodium nitrilotriacetate

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD_{50}	1470 mg/kg		Rat	
Oral	ATE	1470 mg/kg			
Dermal	LD_{50}	2000.1 mg/kg		Rabbit	

Trisodium nitrilotriacetate

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Dermal	ATE	2000.1 mg/kg			
Inhalation (dust/mist)	LC_{50}	5.01 mg/l		Rat	
Inhalation (dust/mist)	ATE	5.01 mg/l			

Skin corrosion/irritation
Causes skin irritation.

Serious eye damage/irritation
Causes serious eye damage.

Respiratory or skin sensitisation
Based on available data the classification criteria are not met.

Germ cell mutagenicity
Based on available data the classification criteria are not met.

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.

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.

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity
Data for the mixture are not available.

1-methoxy-2-propanol

Parameter	Value	Time of exposure	Species	Environment
LC_{50}	6812 mg/l	96 hour	Fishes (Leuciscus idus)	
LC_{50}	>1000 mg/l	96 hour	Fishes (Pimephales promelas)	
EC_{50}	21100-25900 mg/l	48 hour	Invertebrates (Daphnia magna)	
EC_{50}	>1000 mg/l		Algae and other aquatic plants (Selenastrum capricornutum)	

beta-Alanine, N-coco alkyl derivs., sodium salts

Parameter	Value	Time of exposure	Species	Environment
EC_{50}	97 mg/l	48 hour	Invertebrates	

disodium metasilicate

Parameter	Value	Time of exposure	Species	Environment
LC_{50}	180 mg/l	96 hour	Fishes (Branchydanio rerio)	
EC_{50}	1700 mg/l	48 hour	Daphnia (Daphnia magna)	
EC_{50}	207 mg/l	72 hour	Algae (Scenedesmus subspicatus)	

12.2. Persistence and degradability

The mixture is biodegradable.

12.3. Bioaccumulative potential

1-methoxy-2-propanol

Parameter	Value	Time of exposure	Species	Environment	Surrounding temperature [°C]
BCF	<100				
Log Kow	0.37				

No bioaccumulation potential.

12.4. Mobility in soil

The product is soluble in water.

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. 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. Perfectly cleaned containers can be submitted for recycling.

Legislation of waste

Council Directive 75/442/EEC on waste, as amended. Decree No. 383/2001 Coll., on details regarding waste handling as amended. Decree No. 93/2016 Coll., (waste catalogue) as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

Waste type code

15 01 02 plastic packaging

Packaging waste type code

15 01 10 packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

14.1. UN number

Not subject to ADR.

14.2. UN proper shipping name

not available

14.3. Transport hazard class(es)

not available

14.4. Packing group

not available

14.5. Environmental hazards

not available

14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not available

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 of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended. The Act No. 350/2011 Coll., on Chemical Substances and Chemical Preparations as amended (the Chemical Act). Decree No. 432/2003 Coll., laying down conditions for assigning categories to individual jobs, limit values of indices from biological exposure tests, conditions for the sampling of biological materials for biological exposure and the particulars of the reports on work with asbestos and biological agents as amended. REGULATION (EC) No 648/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 March 2004 on detergents, as ammended.

15.2. Chemical safety assessment

not available

SECTION 16: Other information

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

H226	Flammable liquid and vapour.
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.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.

Guidelines for safe handling used in the safety data sheet

P102	Keep out of reach of children.
P302+P352	IF ON SKIN: Wash with plenty of water.
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.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P280	Wear protective gloves/eye protection/face protection.
P501	Dispose of contents/container to in accordance with national regulations.

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
DNEL	Derived no-effect level
EC	Identification code for each substance listed in EINECS
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
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
IC_{50}	Concentration causing 50% blockade
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
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
LOAEC	Lowest observed adverse effect concentration
LOAEL	Lowest observed adverse effect level
log Kow	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution From Ships
NOAEC	No observed adverse effect concentration
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
NOEL	No observed effect level
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted no-effect concentration
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
Carc.	Carcinogenicity
Eye Dam.	Serious eye damage
Eye Irrit.	Eye irritation

Flam. Liq.	Flammable liquid
Met. Corr.	Corrosive to metals
Skin Corr.	Skin corrosion
Skin Irrit.	Skin irritation
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. The Act No. 350/2011 Coll., on Chemical Substances and Chemical Preparations 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)

2, 3, 8, 11, 12, 15, 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.