Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

MB ActiveCube

Version number: 6.0
Replaces version of: 2019-04-05(5)

Revision: 2020-06-10
First version: 2011-09-14

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

1.1 Product identifier

Trade name **MB ActiveCube**

Registration number (REACH) not relevant (mixture)

CAS number not relevant (mixture)

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

Relevant identified uses Toilet rim block

1.3 Details of the supplier of the safety data sheet

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Please do not use this e-mail adress to ask for the latest safety data sheet. For this purpose contact URIMAT Schweiz AG.

1.4 Emergency telephone number

As above or next toxicological information centre.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

This mixture does not meet the criteria for classification causes serious eye damage: expert judgement AISE-DetNet
Classification logging number DetNet/148, DetNet/149.

Classification

Section	Hazard class	Category	Hazard class and category	Hazard statement
3.2	skin corrosion/irritation	2	Skin Irrit. 2	H315
3.3	serious eye damage/eye irritation	2	Eye Irrit. 2	H319
3.4S	skin sensitisation	1	Skin Sens. 1	H317

Classification				
Section	**Hazard class**	**Category**	**Hazard class and category**	**Hazard statement**
4.1C	hazardous to the aquatic environment - chronic hazard	3	Aquatic Chronic 3	H412

for full text of abbreviations: see SECTION 16

The most important adverse physicochemical, human health and environmental effects

Spillage and fire water can cause pollution of watercourses.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

Signal word warning

Pictograms

GHS07

Hazard statements

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 IF ON SKIN: Wash with plenty of soap and 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.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazardous ingredients for labelling limonene
subtilisin
linalool

2.3 Other hazards

There is no additional information.

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

not relevant (mixture)

3.2 Mixtures

Description of the mixture

Hazardous ingredients

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Specific Conc. Limits	M-Factors
reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide	EC No 932-051-8 REACH Reg. No 01-2119565112-48-xxxx	25 – 50	Skin Irrit. 2 / H315 Eye Dam. 1 / H318 Aquatic Chronic 3 / H412			
amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl	CAS No 90622-77-8 EC No 292-481-0 REACH Reg. No 01-2119489413-33-xxxx	2.5 – 10	Skin Irrit. 2 / H315 Eye Dam. 1 / H318 Aquatic Chronic 2 / H411			
C16-18 alcohols, ethoxylated	CAS No 68439-49-6	1 – 2.5	Eye Irrit. 2 / H319			
limonene	CAS No 138-86-3 EC No 205-341-0 Index No 601-029-00-7	1 – 2.5	Flam. Liq. 3 / H226 Skin Irrit. 2 / H315 Skin Sens. 1 / H317 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410			
subtilisin	CAS No 9014-01-1 EC No 232-752-2 Index No 647-012-00-8	≤ 0.5	Skin Irrit. 2 / H315 Eye Dam. 1 / H318 Resp. Sens. 1 / H334 STOT SE 3 / H335			

Hazardous ingredients						
Name of sub-stance	**Identifier**	**Wt%**	**Classification acc. to GHS**	**Pictograms**	**Specific Conc. Limits**	**M-Factors**
linalool	CAS No 78-70-6 EC No 201-134-4 Index No 603-235-00-2	≤ 0.5	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Skin Sens. 1B / H317			

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Take off immediately all contaminated clothing.
In all cases of doubt, or when symptoms persist, seek medical advice.

Following inhalation

Provide fresh air.
If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions.

Following skin contact

Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice/attention.

Following eye contact

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Remove contact lenses, if present and easy to do. Continue rinsing.

Following ingestion

Rinse mouth. Do not induce vomiting.
Get medical advice/attention if you feel unwell.

Notes for the doctor

none

4.2 Most important symptoms and effects, both acute and delayed

These information are not available.

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

water, foam, alcohol resistant foam, fire extinguishing powder

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products: Section 10.

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes.
Co-ordinate firefighting measures to the fire surroundings.
Do not allow firefighting water to enter drains or water courses.
Collect contaminated firefighting water separately.
Fight fire with normal precautions from a reasonable distance.

Special protective equipment for firefighters

use suitable breathing apparatus

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.
Ventilate affected area.
Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water.
Retain contaminated washing water and dispose of it.
If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advices on how to contain a spill

take up mechanically

Advices on how to clean up a spill

Take up mechanically.

Other information relating to spills and releases

Place in appropriate containers for disposal.
Ventilate affected area.

6.4 Reference to other sections

Personal protective equipment: see section 8.
Incompatible materials: see section 10.
Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes.
Do not breathe dust.

Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation.

Specific notes/details

None.

Advice on general occupational hygiene

Do not eat, drink and smoke in work areas.
Wash hands after use.
Preventive skin protection (barrier creams/ointments) is recommended.
Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities

Flammability hazards

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Incompatible substances or mixtures

Incompatible materials: see section 10.

Protect against external exposure, such as

heat

Consideration of other advice

Keep away from food, drink and animal feedingstuffs.

General rule

Keep out of reach of children.

Ventilation requirements

Provision of sufficient ventilation.

Packaging compatibilities

Keep only in original container.

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Notation	Source
GB	dust		WEL		10			i	EH40/2005
GB	dust		WEL		4			r	EH40/2005
GB	cycloalkanes (>C7)	5989-27-5	WEL		800				EH40/2005
GB	subtilisin (bacillus subtilis carlsberg)	9014-01-1	WEL		0.00004				EH40/2005

Notation

i	inhalable fraction
r	respirable fraction
STEL	short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)
TWA	time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

Relevant DNELs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide		DNEL	6 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide		DNEL	85 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

Relevant DNELs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide		DNEL	1.5 mg/m³	human, inhalatory	consumer (private households)	chronic - systemic effects
reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide		DNEL	42.5 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects
reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide		DNEL	0.425 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects
amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl	90622-77-8	DNEL	73.4 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl	90622-77-8	DNEL	4.16 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl	90622-77-8	DNEL	93.6 µg/cm²	human, dermal	worker (industry)	chronic - local effects
amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl	90622-77-8	DNEL	21.73 mg/m³	human, inhalatory	consumer (private households)	chronic - systemic effects
amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl	90622-77-8	DNEL	2.5 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects
amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl	90622-77-8	DNEL	56.2 µg/cm²	human, dermal	consumer (private households)	chronic - local effects

Relevant DNELs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl	90622-77-8	DNEL	6.25 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects
subtilisin	9014-01-1	DNEL	1.8 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects
linalool	78-70-6	DNEL	2.8 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
linalool	78-70-6	DNEL	2.5 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
linalool	78-70-6	DNEL	0.7 mg/m³	human, inhalatory	consumer (private households)	chronic - systemic effects
linalool	78-70-6	DNEL	1.25 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects
linalool	78-70-6	DNEL	0.2 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects

Relevant PNECs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Environmental compartment
reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide		PNEC	0.268 $^{mg}/_{l}$	freshwater
reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide		PNEC	0.027 $^{mg}/_{l}$	marine water
reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide		PNEC	5.6 $^{mg}/_{l}$	sewage treatment plant (STP)

Relevant PNECs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Environmental compartment
reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide		PNEC	8.1 mg/kg	freshwater sediment
reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide		PNEC	8.1 mg/kg	marine sediment
reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide		PNEC	35 mg/kg	soil
amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl	90622-77-8	PNEC	0.007 mg/l	freshwater
amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl	90622-77-8	PNEC	0.001 mg/l	marine water
amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl	90622-77-8	PNEC	830 mg/l	sewage treatment plant (STP)
amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl	90622-77-8	PNEC	1.201 mg/kg	freshwater sediment
amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl	90622-77-8	PNEC	0.12 mg/kg	marine sediment
subtilisin	9014-01-1	PNEC	1.7 µg/l	freshwater
subtilisin	9014-01-1	PNEC	0.17 µg/l	marine water
subtilisin	9014-01-1	PNEC	65,000 µg/l	sewage treatment plant (STP)
subtilisin	9014-01-1	PNEC	568 µg/kg	soil
linalool	78-70-6	PNEC	0.2 mg/l	freshwater
linalool	78-70-6	PNEC	0.02 mg/l	marine water
linalool	78-70-6	PNEC	10 mg/l	sewage treatment plant (STP)
linalool	78-70-6	PNEC	2.22 mg/kg	freshwater sediment
linalool	78-70-6	PNEC	0.222 mg/kg	marine sediment

Relevant PNECs of components of the mixture				
Name of substance	**CAS No**	**Endpoint**	**Threshold level**	**Environmental compartment**
linalool	78-70-6	PNEC	0.327 $^{mg}/_{kg}$	soil

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

In case of spillage: Wear eye/face protection.

Hand protection

Protective gloves		
Material	**Material thickness**	**Breakthrough times of the glove material**
no information available	no information available	no information available

Respiratory protection

In case of inadequate ventilation wear respiratory protection.
Particulate filter device (EN 143).

Environmental exposure controls

Use appropriate container to avoid environmental contamination.
Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	solid
Form	solid matter
Colour	blue
Odour	characteristic
Odour threshold	these information are not available

Other safety parameters

pH (value)	>11
Melting point/freezing point	these information are not available

Initial boiling point and boiling range	these information are not available
Flash point	not applicable
Evaporation rate	these information are not available
Flammability (solid, gas)	non-combustible
Explosion limits of dust clouds	not determined
Vapour pressure	these information are not available
Density	these information are not available
Vapour density	these information are not available
Relative density	these information are not available
Solubility(ies)	
Water solubility	not miscible in any proportion
Partition coefficient	
n-octanol/water (log KOW)	these information are not available
Auto-ignition temperature	not relevant (Solid matter)
Relative self-ignition temperature for solids	these information are not available
Decomposition temperature	these information are not available
Viscosity	
Kinematic viscosity	not relevant (solid matter)
Dynamic viscosity	not relevant (solid matter)
Explosive properties	not explosive
Oxidising properties	shall not be classified as oxidising

9.2 Other information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is not reactive under normal ambient conditions.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

10.5 Incompatible materials

oxidisers

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Classification procedure

If not otherwise specified the classification is based on:
Ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Acute toxicity of components of the mixture

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide		oral	LD50	2,240 $^{mg}/_{kg}$	rat
reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide		dermal	LD50	>2,000 $^{mg}/_{kg}$	rat
amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl	90622-77-8	oral	LD50	>2,000 $^{mg}/_{kg}$	rat
amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl	90622-77-8	dermal	LD50	>2,000 $^{mg}/_{kg}$	rabbit
linalool	78-70-6	oral	LD50	2,790 $^{mg}/_{kg}$	rat
linalool	78-70-6	dermal	LD50	5,610 $^{mg}/_{kg}$	rabbit

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye irritation.
This mixture does not meet the criteria for classification causes serious eye damage: expert judgement AISE-DetNet
Classification logging number DetNet/148, DetNet/149.

Skin sensitisation
May cause an allergic skin reaction.

Respiratory sensitisation
Classification could not be established because:
Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Germ cell mutagenicity

Classification could not be established because:
Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Carcinogenicity

Classification could not be established because:
Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Reproductive toxicity

Classification could not be established because:
Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Specific target organ toxicity - single exposure

Classification could not be established because:
Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Specific target organ toxicity - repeated exposure

Classification could not be established because:
Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity (acute)

Test data are not available for the complete mixture.

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl-		EC50	8.8 $^{mg}/_{l}$	daphnia magna	48 h

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
and sodium hydroxide					
reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide		LC50	3.94 mg/l	daphnia magna	96 h
reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide		ErC50	72 mg/l	algae (Desmodesmus subspicatus)	72 h
amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl	90622-77-8	LC50	31 mg/l	zebra fish (Danio rerio)	96 h
amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl	90622-77-8	EC50	37.5 mg/l	daphnia magna	24 h
amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl	90622-77-8	EbC50	1.1 mg/l	algae (Desmodesmus subspicatus)	72 h
amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl	90622-77-8	ErC50	8.7 mg/l	algae (Desmodesmus subspicatus)	72 h
C16-18 alcohols, ethoxylated	68439-49-6	LC50	>10 mg/l	goldfish (Carassius auratus)	96 h
C16-18 alcohols, ethoxylated	68439-49-6	EC50	>10 mg/l	daphnia	48 h
linalool	78-70-6	LC50	27.8 mg/l	rainbow trout (Oncorhynchus mykiss)	96 h
linalool	78-70-6	EC50	59 mg/l	daphnia magna	48 h
linalool	78-70-6	ErC50	156.7 mg/l	algae (Desmodesmus subspicatus)	96 h

Aquatic toxicity (chronic)

Harmful to aquatic life with long lasting effects.
Test data are not available for the complete mixture.

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide		LC50	1.67 $^{mg}/_{l}$	daphnia magna	21 d
reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide		EC50	1.5 $^{mg}/_{l}$	daphnia magna	21 d
reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide		NOEC	0.23 $^{mg}/_{l}$	rainbow trout (Oncorhynchus mykiss)	72 d
reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide		growth (EbCx) 10%	56 $^{mg}/_{l}$	microorganisms	17 h

12.2 Persistence and degradability

Degradability of components of the mixture

Name of substance	CAS No	Process	Degradation rate	Time
reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxide		DOC removal	94 %	28 d
amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl	90622-77-8	oxygen depletion	74 – 82 %	30 d
subtilisin	9014-01-1	carbon dioxide generation	100 %	29 d

Name of substance	CAS No	Process	Degradation rate	Time
subtilisin	9014-01-1	carbon dioxide generation	60 %	7 d
linalool	78-70-6	oxygen depletion	64.2 %	28 d

Biodegradation

Data are not available.

Persistence

Data are not available.

12.3 Bioaccumulative potential

Test data are not available for the complete mixture.

Bioaccumulative potential of components of the mixture

Name of substance	CAS No	BCF	Log KOW
reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl-, and sodium hydroxide			0.7 (pH value: 6, 20 °C)
amides, C12-18(even-numbered) and C18(unsatd.), N-hydroxyethyl	90622-77-8	56.8	4.3 (25 °C)
subtilisin	9014-01-1		-3.1 (pH value: 9.2, 25 °C)
linalool	78-70-6		2.9 (pH value: 7, 20 °C)

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects

Data are not available.

Endocrine disrupting potential

None of the ingredients are listed.

Remarks

Wassergefährdungsklasse, WGK (water hazard class): 2

SECTION 13: Disposal considerations

13.1 Waste treatment methods

This material and its container must be disposed of as hazardous waste.

Sewage disposal-relevant information

Do not empty into drains.

Waste treatment of containers/packagings

Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions.

SECTION 14: Transport information

14.1	**UN number**	not subject to transport regulations
14.2	**UN proper shipping name**	-
14.3	**Transport hazard class(es)**	none
	Class	-
14.4	**Packing group**	not assigned to a packing group
14.5	**Environmental hazards**	non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user

There is no additional information.

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

The cargo is not intended to be carried in bulk.

14.8 Information for each of the UN Model Regulations

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN).

Not subject to ADR, RID and ADN.

International Maritime Dangerous Goods Code (IMDG)

Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR)

Not subject to ICAO-IATA.

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

Restrictions according to REACH, Annex XVII

Name of substance	Name acc. to inventory	CAS No	Restriction
C16-18 alcohols, ethoxylated	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC		R3
limonene	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC		R3
limonene	flammable / pyrophoric		R40
linalool	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC		R3

Legend

R3 1. Shall not be used in:
- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- tricks and jokes,
- games for one or more participants, or any article intended to be used as such, even with ornamental aspects,
2. Articles not complying with paragraph 1 shall not be placed on the market.
3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:
- can be used as fuel in decorative oil lamps for supply to the general public, and,
- present an aspiration hazard and are labelled with R65 or H304,
4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).
5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:
(a) lamp oils, labelled with R65 or H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: 'Keep lamps filled with this liquid out of the reach of children'; and, by 1 December 2010, 'Just a sip of lamp oil - or even sucking the wick of lamps - may lead to life-threatening lung damage';
(b) grill lighter fluids, labelled with R65 or H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: 'Just a sip of grill lighter may lead to life threatening lung damage';
(c) lamp oils and grill lighters, labelled with R65 or H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.
6. No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordance with Article 69 of the present Regulation with a view to ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled R65 or H304, intended for supply to the general public.
7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with R65 or H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled R65 or H304 to the competent authority in the Member State concerned. Member States shall make those data available to the Commission.

Legend

R40 1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:
- metallic glitter intended mainly for decoration,
- artificial snow and frost,
- 'whoopee' cushions,
- silly string aerosols,
- imitation excrement,
- horns for parties,
- decorative flakes and foams,
- artificial cobwebs,
- stink bombs.

2. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with:
'For professional users only'.

3. By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/324/EEC (2).

4. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated.

List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list

none of the ingredients are listed

Seveso Directive

2012/18/EU (Seveso III)

No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the application of lower and upper-tier requirements	Notes
	not assigned		

Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II

none of the ingredients are listed

Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

none of the ingredients are listed

Regulation 648/2004/EC on detergents

Labelling of contents

Wt%	Constituents
≥30%	anionic surfactants
< 5 %	non-ionic surfactants
	enzymes (subtilisin) perfumes (LIMONENE, LINALOOL)

Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD)

none of the ingredients are listed

Regulation 98/2013/EU on the marketing and use of explosives precursors

none of the ingredients are listed

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.
Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)
3.2		Hazardous ingredients: change in the listing (table)
8.1		Relevant DNELs of components of the mixture: change in the listing (table)
8.1		Relevant PNECs of components of the mixture: change in the listing (table)
15.1		Restrictions according to REACH, Annex XVII: change in the listing (table)

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
Aquatic Acute	Hazardous to the aquatic environment - acute hazard
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
BCF	Bioconcentration factor
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)

Abbr.	Descriptions of used abbreviations
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-licence/)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
log KOW	n-Octanol/water
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
Resp. Sens.	Respiratory sensitisation
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
Skin Sens.	Skin sensitisation
STEL	Short-term exposure limit
STOT SE	Specific target organ toxicity - single exposure
SVHC	Substance of Very High Concern
TWA	Time-weighted average
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.
Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN).
International Maritime Dangerous Goods Code (IMDG).
Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties.
Health hazards.
Environmental hazards.
The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Responsible for the safety data sheet

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Disclaimer

This information is based upon the present state of our knowledge.
This SDS has been compiled and is solely intended for this product.