Safety Data Sheet
ZETA 7 SOLUTION

Revision nr. 6
Dated 07/10/2020

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

1.1. Product identifier

Mixture identification:

Product Name: ZETA 7 SOLUTION

Code: C810048

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

For professional use only. Concentrated disinfectant for dental impressions.

1.3. Details of the supplier of the safety data sheet

Name
Zhermack S.p.a
Via Bovazecchino 100
45021 Badia Polesine (RO)
Italy
tel. +39 0425-597611
fax +39 0425-597689

Competent person responsible for the safety data sheet:
msds@zhermack.com

1.4. Emergency telephone number

UK Emergency number: 999 (24 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)


Warning, Acute Tox. 4, Harmful if swallowed.


Danger, Skin Corr. 1B, Causes severe skin burns and eye damage.


Danger, Eye Dam. 1, Causes serious eye damage.


Warning, STOT SE 3, May cause respiratory irritation.


Warning, STOT SE 3, May cause drowsiness or dizziness.


Warning, Aquatic Acute 1, Very toxic to aquatic life.


Aquatic Chronic 2, Toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:

Danger

Hazard statements:

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

P264 Wash hands thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves/clothing and eye/face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER if you feel unwell.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Special Provisions:

EUH208 Contains (R)-p-mentha-1,8-diene; d-limonene. May produce an allergic reaction.

Contains

didecyldimethylammonium chloride
Butane-1,4 diol
2-aminoethanol; ethanolamine

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

Not Applicable

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
>= 30% - < 40%	Butane-1,4 diol	CAS: 110-63-4 EC: 203-786-5 REACH No.: 01-21194718 49-20-XXXX	3.8/3 STOT SE 3 H336 3.1/4/Oral Acute Tox. 4 H302
>= 10% - < 20%	2-phenoxyethanol	Index number: 603-098-00-9 CAS: 122-99-6 EC: 204-589-7 REACH No.: 01-21194889 43-21-XXXX	3.1/4/Oral Acute Tox. 4 H302 3.3/2 Eye Irrit. 2 H319
>= 10% - < 20%	acetic acid	Index number: 607-002-00-6 CAS: 64-19-7 EC: 200-580-7 REACH No.: 01-21194753 28-30-XXXX	2.6/3 Flam. Liq. 3 H226 3.2/1A Skin Corr. 1A H314
>= 5% - < 10%	2-aminoethanol; ethanolamine	Index number: 603-030-00-8 CAS: 141-43-5 EC: 205-483-3	3.8/3 STOT SE 3 H335 4.1/C3 Aquatic Chronic 3 H412 3.1/4/Oral Acute Tox. 4 H302

		REACH No.: 01-21194864 55-28-XXXX	3.1/4/Dermal Acute Tox. 4 H312 3.1/4/Inhal Acute Tox. 4 H332 3.2/1B Skin Corr. 1B H314
>= 5% - < 10%	didecyldimethylammonium chloride	Index number: 612-131-00-6 CAS: 7173-51-5 EC: 230-525-2	4.1/A1 Aquatic Acute 1 H400 M=10. 4.1/C1 Aquatic Chronic 1 H410 M=1. 3.1/3/Oral Acute Tox. 3 H301 3.2/1B Skin Corr. 1B H314
>=1% - < 3%	Polyalkyleneoxide modified heptamethyltrisiloxane	CAS: 27306-78-1	4.1/C2 Aquatic Chronic 2 H411 3.1/4/Inhal Acute Tox. 4 H332 3.3/2 Eye Irrit. 2 H319
>=1% - < 3%	propan-2-ol; isopropyl alcohol; isopropanol	Index number: 603-117-00-0 CAS: 67-63-0 EC: 200-661-7 REACH No.: 01-21194575 58-25-XXXX	3.8/3 STOT SE 3 H336 2.6/2 Flam. Liq. 2 H225 3.3/2 Eye Irrit. 2 H319
>= 0,1% - < 0,3%	(R)-p-mentha-1,8-diene; d-limonene	Index number: 601-029-00-7 CAS: 5989-27-5 EC: 227-813-5	3.4.2/1 Skin Sens. 1 H317 3.10/1 Asp. Tox. 1 H304 4.1/A1 Aquatic Acute 1 H400 M=1. 4.1/C1 Aquatic Chronic 1 H410 M=1. 2.6/3 Flam. Liq. 3 H226 3.2/2 Skin Irrit. 2 H315
< 0,1 %	Diphenyl ether	CAS: 101-84-8 EC: 202-981-2 REACH No.: 01-21194725 45-33-XXXX	4.1/A1 Aquatic Acute 1 H400 M=1. 4.1/C3 Aquatic Chronic 3 H412 3.3/2 Eye Irrit. 2 H319

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.
Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.
OBTAIN IMMEDIATE MEDICAL ATTENTION.
Wash thoroughly the body (shower or bath).
Remove contaminated clothing immediatley and dispose off safely.
After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.
Protect uninjured eye.

In case of Ingestion:
Do NOT induce vomiting.
Give nothing to eat or drink.
In case of Inhalation:
In case of inhalation, consult a doctor immediately and show him packing or label.

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

None

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Treatment:
None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Water.
Carbon dioxide (CO2).
Extinguishing media which must not be used for safety reasons:
None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.
Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non emergency personnel:
Wear personal protection equipment.
Wear breathing apparatus if exposed to vapours/dusts/aerosols.
Provide adequate ventilation.
Use appropriate respiratory protection.
See protective measures under point 7 and 8.
For emergency responders:
Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.
Use localized ventilation system.
Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
See also section 8 for recommended protective equipment.
Advice on general occupational hygiene:
Contamined clothing should be changed before entering eating areas.
Do not eat or drink while working.

7.2. Conditions for safe storage, including any incompatibilities

Always keep in a well ventilated place.
Keep away from food, drink and feed.
Incompatible materials:
See section 10.5.
Instructions as regards storage premises:
Cool and adequately ventilated.

7.3. Specific end use(s)

See section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ZETA 7 SOLUTION
Butane-1,4 diol - CAS: 110-63-4

OEL Type	TWA		Duration	STEL		Duration	Notes	Country
MAK	200 mg/m3	50 ppm	8h	800 mg/m3	200 ppm	15min	Inhalable	GERMANY
MAK	200 mg/m3	50 ppm	8h	800 mg/m3	200 ppm	15min		AUSTRIA

2-phenoxyethanol - CAS: 122-99-6

OEL Type	TWA		Duration	STEL		Duration	Notes	Country
MV	110 mg/m3	20 ppm	8h	110 mg/m3	20 ppm	15min	Skin	SLOVENIA
MAK	110 mg/m3	20 ppm	8h	110 mg/m3	20 ppm	15min		SWITZERLAND
HTP	110 mg/m3	20 ppm	8h	290 mg/m3	50 ppm	15min	Skin	FINLAND
MAK	110 mg/m3	20 ppm	8h	Ceiling 110 mg/m3	Ceiling 20 ppm	15min		AUSTRIA
NDS/NDSCh	230 mg/m3		8h					POLAND
VME/VLE	110 mg/m3	20 ppm	8h	110 mg/m3	20 ppm	15min		SWITZERLAND
MAK	5.7 mg/m3	1 ppm	8h	5.7 mg/m3	1 ppm	15min		GERMANY
AGW	5.7 mg/m3	1 ppm	8h	Ceiling 5.7 mg/m3	Ceiling 1 ppm	15min		GERMANY

acetic acid - CAS: 64-19-7

OEL Type	TWA		Duration	STEL		Duration	Notes	Country

MAK	25 mg/m3	10 ppm	8h	50 mg/m3	20 ppm	15min		GERMANY
AGW	25 mg/m3	10 ppm	8h	50 mg/m3	20 ppm	15min		GERMANY
MAK	25 mg/m3	10 ppm	8h	50 mg/m3	20 ppm	15min		SWITZERLAND
VME/VLE	25 mg/m3	10 ppm	8h	50 mg/m3	20 ppm	15min		SWITZERLAND
MV	25 mg/m3	10 ppm	8h	50 mg/m3	20 ppm	15min		SLOVENIA
AK	25 mg/m3		8h	50 mg/m3		15min		HUNGARY
GVI/KGVI	25 mg/m3	10 ppm	8h	50 mg/m3	20 ppm	15min		CROATIA
HTP	13 mg/m3	5 ppm	8h	25 mg/m3	10 ppm	15min		FINLAND
MAK	25 mg/m3	10 ppm	8h	50 mg/m3	20 ppm	15min		AUSTRIA
NDS/NDSCh	25 mg/m3		8h	50 mg/m3		15min		POLAND
NGV/KGV	13 mg/m3	5 ppm	8h	25 mg/m3	10 ppm	15min		SWEDEN
NPEL	25 mg/m3	10 ppm	8h	50 mg/m3	20 ppm	15min		SLOVAKIA (Slovak Republic)
EU	25 mg/m3	10 ppm	8h	50 mg/m3	20 ppm			
OELV	25 mg/m3	10 ppm	8h	50 mg/m3	20 ppm	15min		IRELAND
RD	25 mg/m3	10 ppm	8h	50 mg/m3	20 ppm	15min		LITHUANIA
RV	25 mg/m3	10 ppm	8h	50 mg/m3	20 ppm	15min		LATVIA
TGG	25 mg/m3		8h	50 mg/m3		15min		NETHERLANDS
TLV	25 mg/m3	10 ppm	8h	25 mg/m3	10 ppm	15min		ESTONIA
TLV	25 mg/m3	10 ppm	8h	50 mg/m3	20 ppm	15min		MALTA
TLV	25 mg/m3	10 ppm	8h	50 mg/m3	20 ppm	15min		NORWAY
TLV	25 mg/m3	10 ppm	8h	50 mg/m3	20 ppm	15min		ROMANIA
TLV	25 mg/m3	10.2 ppm	8h	50 mg/m3	20.4 ppm	15min		CZECH REPUBLIC
TLV	25 mg/m3	10 ppm	8h					DENMARK
TLV	25 mg/m3	10 ppm	8h	50 mg/m3	20 ppm	15min		CYPRUS
TLV	25 mg/m3	10 ppm	8h	37 mg/m3	15 ppm	15min		GREECE
VL	25 mg/m3	10 ppm	8h	50 mg/m3	20 ppm	15min		LUXEMBOURG
VLE	25	10 ppm	8h	50	20 ppm	15min		PORTUGAL

	mg/m3			mg/m3				
VLEP				25 mg/m3	10 ppm	15min		FRANCE
VLEP	25 mg/m3	10 ppm	8h	50 mg/m3	20 ppm	15min		ITALY
VLEP	25 mg/m3	10 ppm	8h	38 mg/m3	15 ppm	15min		BELGIUM
WEL	25 mg/m3	10 ppm	8h	50 mg/m3	20 ppm	15min		UNITED KINGDOM
VLA	25 mg/m3	10 ppm	8h	50 mg/m3	20 ppm	15min		SPAIN
ACGIH		10 ppm	8h		15 ppm		URT and eye irr, pulm func	

2-aminoethanol; ethanolamine - CAS: 141-43-5

OEL Type	**TWA**		**Duration**	**STEL**		**Duration**	**Notes**	**Country**
AGW	0.5 mg/m3	0.2 ppm	8h	0.5 mg/m3	0.2 ppm	15min	Inhalable fraction and vapour	GERMANY
MAK	0.51 mg/m3	0.2 ppm	8h	0.51 mg/m3	0.2 ppm	15min	Inhalable fraction and vapour	GERMANY
VME/VLE	5 mg/m3	2 ppm	8h	10 mg/m3	4 ppm	15min		SWITZERLAND
MV	2.5 mg/m3	1 ppm	8h	7.6 mg/m3	3 ppm	15min		SLOVENIA
MAK	5 mg/m3	2 ppm	8h	10 mg/m3	4 ppm	15min		SWITZERLAND
AK	2.5 mg/m3		8h	7.6 mg/m3		15min		HUNGARY
GVI/KGVI	2.5 mg/m3	1 ppm	8h	7.6 mg/m3	3 ppm	15min		CROATIA
HTP	2.5 mg/m3	1 ppm	8h	7.6 mg/m3	3 ppm	15min		FINLAND
MAK	2.5 mg/m3	1 ppm	8h	7.6 mg/m3	3 ppm	15min		AUSTRIA
NDS/NDSCh	2.5 mg/m3		8h	7.5 mg/m3		15min		POLAND
NGV/KGV	2.5 mg/m3	1 ppm	8h	7.5 mg/m3	3 ppm	15min		SWEDEN
NPEL	2.5 mg/m3	1 ppm	8h	7.6 mg/m3	3 ppm	15min		SLOVAKIA (Slovak Republic)
EU	2.5 mg/m3	1 ppm	8h	7.6 mg/m3	3 ppm		Skin	
OELV	2.5 mg/m3	1 ppm	8h	7.6 mg/m3	3 ppm	15min		IRELAND
RD	2.5 mg/m3	1 ppm	8h	7.6 mg/m3	3 ppm	15min		LITHUANIA

RV	0.5 mg/m3	0.2 ppm	8h	7.6 mg/m3	3 ppm	15min		LATVIA
TGG	2.5 mg/m3		8h	7.6 mg/m3		15min		NETHERLANDS
TLV	2.5 mg/m3	1 ppm	8h	7.6 mg/m3	3 ppm	15min		GREECE
TLV	2.5 mg/m3	1 ppm	8h	7.6 mg/m3	3 ppm	15min		ESTONIA
TLV	2.5 mg/m3	1 ppm	8h	7.6 mg/m3	3 ppm	15min		MALTA
TLV	2.5 mg/m3	1 ppm	8h					NORWAY
TLV	2.5 mg/m3	1 ppm	8h	7.6 mg/m3	3 ppm	15min		ROMANIA
TLV	2.5 mg/m3	1 ppm	8h	5 mg/m3	2 ppm	15min		DENMARK
TLV	2.5 mg/m3	1 ppm	8h	7.6 mg/m3	3 ppm	15min		BULGARIA
VL	2.5 mg/m3	1 ppm	8h	7.6 mg/m3	3 ppm	15min		LUXEMBOURG
VLE	2.5 mg/m3	1 ppm	8h	7.6 mg/m3	3 ppm	15min		PORTUGAL
VLEP	2.5 mg/m3	1 ppm	8h	7.6 mg/m3	3 ppm	15min		FRANCE
VLEP	2.5 mg/m3	1 ppm	8h	7.6 mg/m3	3 ppm	15min	Skin	ITALY
VLEP	2.5 mg/m3	1 ppm	8h	7.6 mg/m3	3 ppm	15min		BELGIUM
WEL	2.5 mg/m3	1 ppm	8h	7.6 mg/m3	3 ppm	15min		UNITED KINGDOM
VLA	2.5 mg/m3	1 ppm	8h	7.6 mg/m3	3 ppm	15min	Skin	SPAIN
ACGIH		3 ppm	8h		6 ppm		Eye and skin irr	
TLV-ACGIH		3 ppm	8h		6 ppm	15min	Eye and skin irr	

didecyldimethylammonium chloride - CAS: 7173-51-5

OEL Type	TWA		Duration	STEL		Duration	Notes	Country
No data available								

Polyalkyleneoxide modified heptamethyltrisiloxane - CAS: 27306-78-1

OEL Type	TWA		Duration	STEL		Duration	Notes	Country
No data available								

propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0

OEL Type	TWA		Duration	STEL		Duration	Notes	Country
AGW	500	200	8h	1000	400	15min		GERMANY

	mg/m3	ppm		mg/m3	ppm			
MAK	500 mg/m3	200 ppm	8h	1000 mg/m3	400 ppm	15min		GERMANY
MAK	500 mg/m3	200 ppm	8h	1000 mg/m3	400 ppm	15min		SWITZERLAND
VME/VLE	500 mg/m3	200 ppm	8h	1000 mg/m3	400 ppm	15min		SWITZERLAND
MV	500 mg/m3	200 ppm	8h	2000 mg/m3	800 ppm	15min		SLOVENIA
AK	500 mg/m3		8h	2000 mg/m3		15min	Skin	HUNGARY
GVI/KGVI	999 mg/m3	400 ppm	8h	1250 mg/m3	500 ppm	15min		CROATIA
MAK	500 mg/m3	200 ppm	8h	2000 mg/m3	800 ppm	15min		AUSTRIA
NDS/NDSCh	900 mg/m3		8h	1200 mg/m3		15min	Skin	POLAND
NGV/KGV	350 mg/m3	150 ppm	8h	Ceiling 600 mg/m3	Ceiling 250 ppm	15min		SWEDEN
NPEL	500 mg/m3	200 ppm	8h	1000 mg/m3	400 ppm	15min		SLOVAKIA (Slovak Republic)
OELV		200 ppm	8h		400 ppm	15min	Skin	IRELAND
RD	350 mg/m3	150 ppm	8h	600 mg/m3	250 ppm	15min		LITHUANIA
RV	350 mg/m3		8h	600 mg/m3		15min		LATVIA
TGG	650 mg/m3		8h					NETHERLANDS
TLV	350 mg/m3	150 ppm	8h	600 mg/m3	250 ppm	15min		ESTONIA
TLV	245 mg/m3	100 ppm	8h					NORWAY
TLV	200 mg/m3	81 ppm	8h	500 mg/m3	203 ppm	15min		ROMANIA
TLV	500 mg/m3	203.5 ppm	8h	1000 mg/m3	407 ppm	15min		CZECH REPUBLIC
TLV	490 mg/m3	200 ppm	8h					DENMARK
TLV	980 mg/m3		8h	1225 mg/m3		15min		BULGARIA
TLV	980 mg/m3	400 ppm	8h	1225 mg/m3	500 ppm	15min		GREECE
TLV-ACGIH		200 ppm	8h		400 ppm	15min		
VLEP				980 mg/m3	400 ppm	15min		FRANCE
VLEP	500 mg/m3	200 ppm	8h	1000 mg/m3	400 ppm	15min		BELGIUM
WEL	999 mg/m3	400 ppm	8h	1250 mg/m3	500 ppm	15min		UNITED KINGDOM
VLA	500	200	8h	1000	400	15min		SPAIN

	mg/m3	ppm		mg/m3	ppm			
ACGIH		200 ppm	8h		400 ppm		A4, BEI - Eye and URT irr, CNS impair	

(R)-p-mentha-1,8-diene; d-limonene - CAS: 5989-27-5

OEL Type	TWA		Duration	STEL		Duration	Notes	Country
HTP	140 mg/m3	25 ppm	8h	280 mg/m3	50 ppm	15min		FINLAND
MAK	28 mg/m3	5 ppm	8h	110 mg/m3	20 ppm	15min		GERMANY
AGW	28 mg/m3	5 ppm	8h	112 mg/m3	20 ppm	15min		GERMANY
MAK	40 mg/m3	7 ppm	8h	80 mg/m3	14 ppm	15min		SWITZERLAND

Diphenyl ether - CAS: 101-84-8

OEL Type	TWA		Duration	STEL		Duration	Notes	Country
AGW	7.1 mg/m3	1 ppm	8h	7.1 mg/m3	1 ppm	15min	Inhalable	GERMANY
MAK	7.1 mg/m3	1 ppm	8h	7.1 mg/m3	1 ppm	15min	Inhalable	GERMANY
OELV	7 mg/m3	1 ppm	8h					IRELAND
NDS/NDSCh	7 mg/m3		8h	14 mg/m3		15min		POLAND
TLV	5 mg/m3	0.7 ppm	8h	10 mg/m3	1.4 ppm	15min		ROMANIA
VLA	7.1 mg/m3	1 ppm	8h	14.2 mg/m3	2 ppm	15min		SPAIN
MAK	7 mg/m3	1 ppm	8h	7 mg/m3	1 ppm	15min		SWITZERLAND
WEL	7.1 mg/m3	1 ppm	8h					UNITED KINGDOM
VLEP	7 mg/m3	1 ppm	8h	14 mg/m3	2 ppm	15min		BELGIUM
MAK	7 mg/m3	1 ppm	8h					AUSTRIA
TLV	7 mg/m3	1 ppm	8h	14 mg/m3	2 ppm	15min		DENMARK
EU	7 mg/m3	1 ppm	8h	14 mg/m3	2 ppm			
HTP	7 mg/m3	1 ppm	8h	21 mg/m3	3 ppm	15min		FINLAND
VLEP	7 mg/m3	1 ppm	8h					FRANCE
ACGIH		1 ppm	8h		2 ppm		(V) - URT and eye	

							irr, nausea	

DNEL Exposure Limit Values

Butane-1,4 diol - CAS: 110-63-4

Worker Professional: 19 mg/kg bw/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Professional: 136 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 8 mg/kg bw/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Consumer: 29 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Professional: 958 mg/m3 - Consumer: 340 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

2-phenoxyethanol - CAS: 122-99-6

Worker Professional: 5.07 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects

Consumer: 9.23 mg/kg - Exposure: Human Oral - Frequency: Short Term, systemic effects

Consumer: 10.42 mg/kg/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Consumer: 2.41 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 9.23 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

Worker Professional: 20.83 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Professional: 5.07 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

acetic acid - CAS: 64-19-7

Consumer: 25 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Consumer: 25 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Professional: 25 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Worker Professional: 25 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

2-aminoethanol; ethanolamine - CAS: 141-43-5

Worker Professional: 3.3 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects

Consumer: 2 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects

Worker Professional: 1 mg/kg/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Consumer: 0.24 mg/kg/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Consumer: 3.75 mg/kg/d - Exposure: Human Oral - Frequency: Long Term, systemic effects

propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0

Consumer: 319 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Consumer: 89 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 26 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

Worker Professional: 888 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Worker Professional: 500 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Diphenyl ether - CAS: 101-84-8

Worker Professional: 7 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects
Worker Professional: 59 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Professional: 25 mg/kg bw/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

Butane-1,4 diol - CAS: 110-63-4

Target: Fresh Water - Value: 0.813 mg/l
Target: Marine water - Value: 0.081 mg/l
Target: intermittent release - Value: 8.13 mg/l
Target: Microorganisms in sewage treatments - Value: 1554 mg/l
Target: Soil (agricultural) - Value: 0.244 mg/kg

2-phenoxyethanol - CAS: 122-99-6

Target: Freshwater sediments - Value: 7.2366 mg/kg
Target: Marine water sediments - Value: 0.7237 mg/kg
Target: Microorganisms in sewage treatments - Value: 24.8 mg/l
Target: Soil (agricultural) - Value: 1.26 mg/kg
Target: Fresh Water - Value: 0.943 mg/l
Target: intermittent release - Value: 3.44 mg/l
Target: Marine water - Value: 0.0943 mg/l

acetic acid - CAS: 64-19-7

Target: Soil (agricultural) - Value: 0.478 mg/kg
Target: Fresh Water - Value: 3.058 mg/l
Target: intermittent release - Value: 3.058 mg/l
Target: Marine water - Value: 0.3058 mg/l
Target: Freshwater sediments - Value: 11.36 mg/kg
Target: Marine water sediments - Value: 1.136 mg/kg
Target: Microorganisms in sewage treatments - Value: 85 mg/l

2-aminoethanol; ethanolamine - CAS: 141-43-5

Target: Soil (agricultural) - Value: 0.037 mg/kg
Target: intermittent release - Value: 0.025 mg/l
Target: Freshwater sediments - Value: 0.434 mg/kg
Target: Marine water sediments - Value: 0.043 mg/kg
Target: Microorganisms in sewage treatments - Value: 100 mg/l
Target: Fresh Water - Value: 0.085 mg/l
Target: Marine water - Value: 0.009 mg/l

propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0

Value: 552 mg/kg
Target: Soil (agricultural) - Value: 28 mg/kg
Target: Fresh Water - Value: 140.9 mg/l
Target: Marine water - Value: 140.9 mg/l
Target: Freshwater sediments - Value: 552 mg/kg

Diphenyl ether - CAS: 101-84-8

Target: Fresh Water - Value: 0 mg/l
Target: Marine water - Value: 0 mg/l
Target: Freshwater sediments - Value: 0.093 mg/kg
Target: Marine water sediments - Value: 0.009 mg/kg
Target: intermittent release - Value: 0.005 mg/l
Target: Microorganisms in sewage treatments - Value: 10 mg/l
Target: Soil (agricultural) - Value: 0.018 mg/kg

Biological Exposure Index
propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0
Value: 40 mg/L - Biological Indicator: Acetone in urine - Sampling Period: End of turn; End of working week

8.2. Exposure controls

Precautionary measures:
Give adequate ventilation to the premises where the product is stored and/or handled.

Eye protection:
Wear airtight protective goggles.

Protection for skin:
Wear professional overalls and safety footwear.

Protection for hands:
Protect hands with work gloves.
The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.
The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

Respiratory protection:
Use respiratory protection where ventilation is insufficient or exposure is prolonged.
Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered (e.g. TLV-TWA).

Thermal Hazards:
None

Environmental exposure controls:
None

Appropriate engineering controls:
None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Appearance and colour:	Liquid,yellow	--	--
Odour:	Lemon	--	--
Odour threshold:	Not available	--	--
pH:	4,5 - 6,0 (sol. 1%)	--	--
Melting point / freezing point:	Not available	--	--
Initial boiling point and boiling range:	Not available	--	--
Flash point:	> 100 ° C	EN ISO 3679	--
Evaporation rate:	Not available	--	--
Solid/gas flammability:	Not Relevant	--	--
Upper/lower flammability or explosive limits:	Not available	--	--
Vapour pressure:	Not available	--	--
Vapour density:	Not available	--	--
Relative density:	1.01 - 1.09 g/cm3	--	--
Solubility in water:	Soluble	--	--
Solubility in oil:	Not available	--	--
Partition coefficient (n-octanol/water):	Not Relevant	--	--
Auto-ignition temperature:	Not available	--	--

Decomposition temperature:	Not available	--	--
Viscosity:	Not available	--	--
Explosive properties:	Not available	--	--
Oxidizing properties:	Not available	--	--

9.2. Other information

Properties	Value	Method:	Notes
Miscibility:	Not available	--	--
Fat Solubility:	Not available	--	--
Conductivity:	Not available	--	--
Substance Groups relevant properties	Not available	--	--

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

10.4. Conditions to avoid

Avoid bunching of electrostatic charges.
Heat, direct sunlight.
Avoid moisture and high temperature.

10.5. Incompatible materials

Avoid contact with strong oxidizing materials.
Acids
Alkalis

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

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a) acute toxicity

The product is classified: Acute Tox. 4 H302
ATEmix - Oral 905,89 mg/kg bw

b) skin corrosion/irritation

The product is classified: Skin Corr. 1B H314

c) serious eye damage/irritation

The product is classified: Eye Dam. 1 H318

d) respiratory or skin sensitisation

Not classified

e) germ cell mutagenicity

Not classified

f) carcinogenicity

Not classified

g) reproductive toxicity
Not classified

h) STOT-single exposure
The product is classified: STOT SE 3 H335;STOT SE 3 H336

i) STOT-repeated exposure
Not classified

j) aspiration hazard
Not classified

Toxicological information of the main substances found in the product:

Butane-1,4 diol - CAS: 110-63-4

a) acute toxicity:
Test: LC50 - Route: Inhalation - Species: Rat > 5.1 mg/l - Duration: 4h - Source: (OECD 403, ECHA dossier).
Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg - Source: (study report, ECHA dossier).
Test: LD50 - Route: Oral - Species: Rat 1500 mg/kg - Source: (study report, ECHA dossier).

b) skin corrosion/irritation:
Species: Rabbit - Based on available data, the classification criteria are not met - Source: (Draize test, ECHA dossier).

c) serious eye damage/irritation:
Species: Rabbit - Based on available data, the classification criteria are not met - Source: (Draize test, ECHA dossier).

d) respiratory or skin sensitisation:
Test: Skin Sensitization - Species: Guinea pig - Based on available data, the classification criteria are not met - Source: (Guinea pig maximization test, ECHA dossier).

e) germ cell mutagenicity:
Test: In vitro - Negative - Source: (OECD 476, GLP, ECHA dossier).
Test: In vivo - No data available for the product

f) carcinogenicity:
No data available for the product

j) aspiration hazard:
Test: Developmental toxicity - Route: Inhalation - Species: Mouse - Not applicable - Source: (MSDS supplier).

2-phenoxyethanol - CAS: 122-99-6

a) acute toxicity:
Test: LD50 - Route: Skin - Species: Rabbit 5000 mg/kg - Source: (MSDS supplier).
Test: LD50 - Route: Oral - Species: Rat 1850 mg/kg - Source: (OECD 401, MSDS supplier).

b) skin corrosion/irritation:
Species: Rabbit - Based on available data, the classification criteria are not met - Source: (OECD 404, MSDS supplier).

c) serious eye damage/irritation:
Species: Rabbit - Eye Irritant - Source: (OECD 405, MSDS supplier).

d) respiratory or skin sensitisation:
Test: Skin Sensitization - Species: Guinea pig - Based on available data, the classification criteria are not met - Source: (OECD 406, MSDS supplier).

acetic acid - CAS: 64-19-7

a) acute toxicity:
Test: LC50 - Route: Inhalation - Species: Rat > 16000 ppm - Duration: 4h - Source: (MSDS supplier).
Test: LD50 - Route: Oral - Species: Rat 3310 mg/kg - Source: (MSDS supplier).

b) skin corrosion/irritation:
Species: Rabbit - Skin Corrosive - Source: (OECD 404, MSDS supplier).
c) serious eye damage/irritation:
Species: Rabbit - Eye Corrosive - Source: (OECD 405, MSDS supplier).
e) germ cell mutagenicity:
Test: In vitro - Negative - Source: (MSDS supplier).
Test: In vivo - Negative - Source: (MSDS supplier).
g) reproductive toxicity:
Negative - Source: (MSDS supplier).
2-aminoethanol; ethanolamine - CAS: 141-43-5
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat 1515 mg/kg - Source: (OECD 401, MSDS supplier).
Test: LC50 - Route: Inhalation - Species: Rat > 1.3 mg/l - Duration: ZHE_6H - Source: (IRT, MSDS supplier).
Test: LD50 - Route: Skin - Species: Rabbit 2504 mg/kg - Source: (OECD 402, MSDS supplier).
b) skin corrosion/irritation:
Species: Rabbit - Skin Corrosive - Source: (OECD 404, MSDS supplier).
c) serious eye damage/irritation:
Species: Rabbit - Eye Corrosive - Source: (OECD 405, MSDS supplier).
d) respiratory or skin sensitisation:
Test: Skin Sensitization - Species: Guinea pig - Based on available data, the classification criteria are not met - Source: (OECD 406, MSDS supplier).
didecyldimethylammonium chloride - CAS: 7173-51-5
a) acute toxicity:
Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg - Source: (OECD 402, ECHA dossier).
Test: LD50 - Route: Oral - Species: Rat 658 mg/kg - Source: (OECD TG 401, ECHA dossier).
b) skin corrosion/irritation:
Species: Rabbit - Skin Irritant - Source: (OECD 404, MSDS supplier).
c) serious eye damage/irritation:
No data available for the product
d) respiratory or skin sensitisation:
Test: Skin Sensitization - Species: Guinea pig - Negative - Source: (US-EPA, Buehler Test, MSDS supplier).
e) germ cell mutagenicity:
Test: In vitro - Species: Salmonella Typhimurium - Negative - Source: (OECD 471, Test di ames, MSDS supplier).
Test: In vivo - Route: Oral - Species: Rat - Negative - Source: (OECD 475, MSDS supplier).
f) carcinogenicity:
No data available for the product
g) reproductive toxicity:
No data available for the product
j) aspiration hazard:
No data available for the product
Polyalkyleneoxide modified heptamethyltrisiloxane - CAS: 27306-78-1
a) acute toxicity:
Test: LC50 - Route: Inhalation - Species: Rat 2 mg/l - Duration: 4h - Source: (MSDS supplier)
Test: LD50 - Route: Skin - Species: Rat > 2000 mg/l - Source: (MSDS supplier)
Test: LD50 - Route: Oral - Species: Rat > 2000 mg/l - Source: (MSDS supplier).
b) skin corrosion/irritation:

Species: Rat - Based on available data, the classification criteria are not met - Source: (MSDS supplier).

c) serious eye damage/irritation:
Species: Rabbit - Eye Irritant - Source: (MSDS supplier).

d) respiratory or skin sensitisation:
Test: Skin Sensitization - Species: Guinea pig - Based on available data, the classification criteria are not met - Source: (MSDS supplier).

e) germ cell mutagenicity:
Test: In vitro - Negative - Source: (Test di ames, MSDS supplier).
Test: In vivo - Species: Mouse - Negative - Source: (MSDS supplier).

f) carcinogenicity:
No data available for the product

g) reproductive toxicity:
No data available for the product

h) STOT-single exposure:
No data available for the product

i) STOT-repeated exposure:
No data available for the product

j) aspiration hazard:
No data available for the product

propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0

a) acute toxicity:
Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg - Source: (MSDS supplier).
Test: LC50 - Route: Inhalation - Species: Rat > 20 mg/l - Duration: 4h - Source: (MSDS supplier).
Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg - Source: (MSDS supplier).

(R)-p-mentha-1,8-diene; d-limonene - CAS: 5989-27-5

a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg - Source: (OECD 423, ECHA dossier).

b) skin corrosion/irritation:
Species: Rabbit - Skin Irritant - Source: (comparable to OECD 404, in vivo, ECHA dossier).

c) serious eye damage/irritation:
Species: Rabbit - Based on available data, the classification criteria are not met - Source: (comparable to OECD 405, in vivo, ECHA dossier).

d) respiratory or skin sensitisation:
Test: Skin Sensitization - Species: Mouse - Positive - Source: (OECD 429, in vivo, Mouse local lymphnode assay, ECHA dossier).

e) germ cell mutagenicity:
Test: In vitro - Negative - Source: (OECD 476, 473, 479, ECHA dossier).
Test: In vivo - Route: Oral - Species: Rat - Negative - Source: (publication, ECHA dossier).

f) carcinogenicity:
Species: Rat - Notes: Mechanism of nephrocarcinogenicity male-rat specific. Not relevant for humans. - Positive - Source: (similar to OECD 451, GLP, ECHA dossier).

g) reproductive toxicity:
Insufficient data

i) STOT-repeated exposure:
Test: NOAEL - Route: Oral - Species: Mouse 1650 mg/kg - Source: (similar to OECD 407, GLP, ECHA dossier).

j) aspiration hazard:
No data available for the product

Diphenyl ether - CAS: 101-84-8

a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg - Source: (ECHA dossier).

b) skin corrosion/irritation:
Species: Rabbit - Based on available data, the classification criteria are not met - Source: (FIFRA-TSCA, GLP, ECHA dossier).
c) serious eye damage/irritation:
Species: Rabbit - Eye Irritant - Source: (ECHA dossier).
d) respiratory or skin sensitisation:
Test: Skin Sensitization - Based on available data, the classification criteria are not met - Source: (epicutaneous test, ECHA dossier).
e) germ cell mutagenicity:
Test: In vitro - Negative - Source: (ECHA dossier).
i) STOT-repeated exposure:
Route: Skin - Species: Rat - Negative - Source: (ECHA dossier).

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

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The product is classified: Aquatic Acute 1 - H400; Aquatic Chronic 2 - H411

Butane-1,4 diol - CAS: 110-63-4

a) Aquatic acute toxicity:
Endpoint: EC50 - Species: Daphnia 813 mg/l - Duration h: 48h (OECD 202, GLP, Daphnia magna, freshwater, ECHA dossier).
Endpoint: LC50 - Species: Fish > 30000 mg/l - Duration h: 96h (study report, Pimephales promelas, freshwater, ECHA dossier).

2-phenoxyethanol - CAS: 122-99-6

a) Aquatic acute toxicity:
Endpoint: EC10 - Species: Daphnia > 100 mg/l - Duration h: 48h (MSDS supplier).
Endpoint: EC50 - Species: Algae > 100 mg/l - Duration h: 72h (MSDS supplier).
Endpoint: LC50 - Species: Fish > 100 mg/l - Duration h: 96h (MSDS supplier).

acetic acid - CAS: 64-19-7

a) Aquatic acute toxicity:
Endpoint: EC50 - Species: Daphnia > 301 mg/l - Duration h: 48h (OECD 202, Daphnia magna, MSDS supplier).
Endpoint: LC50 - Species: Fish > 301 mg/l - Duration h: 96h (similar to OECD 203, Oncorhynchus mykiss, MSDS supplier).
Endpoint: LC50 - Species: Algae > 301 - Duration h: 72h (MSDS supplier).

2-aminoethanol; ethanolamine - CAS: 141-43-5

a) Aquatic acute toxicity:
Endpoint: EC50 - Species: Daphnia 27.04 mg/l - Duration h: 48h (OECD 202, Daphnia magna, MSDS supplier).
Endpoint: IC50 - Species: Algae 2.8 mg/l - Duration h: 72h (OECD 201, Selenastrum capricornutum, MSDS supplier).
Endpoint: LC50 - Species: Fish 349 mg/l - Duration h: 96h (Cyprinus carpio, MSDS supplier).
b) Aquatic chronic toxicity:
Endpoint: NOEC - Species: Fish 1.2 - Duration h: 30d (OECD 210, Oryzias latipes, MSDS supplier).
Endpoint: NOEC - Species: Daphnia 0.85 - Duration h: 21d (OECD 211, Daphnia magna, MSDS supplier).

didecyldimethylammonium chloride - CAS: 7173-51-5

a) Aquatic acute toxicity:
Endpoint: EC50 - Species: Daphnia 0.029 mg/l - Duration h: 48h (OECD 202, Daphnia magna, ECHA dossier).
Endpoint: LC50 - Species: Fish 0.49 mg/l - Duration h: 96h (OECD 203, Danio rerio, ECHA dossier).

Endpoint: NOEC - Species: Daphnia 0.021 mg/l (OECD 211, 21 d, Daphnia magna, ECHA dossier).
Endpoint: IC50 - Species: Algae 0.062 mg/l - Duration h: 72h (OECD 201, Pseudokirchneriella subcapitata, ECHA dossier).

Polyalkyleneoxide modified heptamethyltrisiloxane - CAS: 27306-78-1

a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish 6.8 mg/l - Duration h: 96h (Brachydanio rerio, MSDS supplier)
Endpoint: IC50 - Species: Algae 32 mg/l - Duration h: 72h (Pseudokirchneriella subcapitata, MSDS supplier)
Endpoint: EC50 - Species: Daphnia 25 mg/l - Duration h: 48h (Daphnia similis, MSDS supplier).
Endpoint: NOEC - Species: Fish 3.2 mg/l (Oncorhynchus mykiss, 96h, MSDS supplier).
Endpoint: NOEC - Species: Daphnia 5.6 mg/l (Daphnia magna, 48h, MSDS supplier).

propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0

a) Aquatic acute toxicity:
Endpoint: EC50 - Species: Daphnia > 10000 mg/l - Duration h: 48h (similar to OECD 202, Daphnia magna, ECHA dossier).
Endpoint: LC50 - Species: Fish 9640 mg/l - Duration h: 96h (similar to OECD 203, Pimephales promelas, ECHA dossier).

(R)-p-mentha-1,8-diene; d-limonene - CAS: 5989-27-5

a) Aquatic acute toxicity:
Endpoint: EC50 - Species: Daphnia 0.307 mg/l - Duration h: 48h (OECD 202, Daphnia magna, static, freshwater, ECHA dossier).
Endpoint: LC50 - Species: Fish < 1 mg/l - Duration h: 96h (similar or equivalent to OECD 203, Pimephales promelas, freshwater, ECHA dossier).
Endpoint: IC50 - Species: Algae < 0.32 mg/l - Duration h: 72h (OECD 201, Pseudokirchneriella subcapitata, ECHA dossier).

Diphenyl ether - CAS: 101-84-8

a) Aquatic acute toxicity:
Endpoint: EC10 - Species: Fish 4.2 mg/l - Duration h: 96h (study report, Oncorhynchus mykiss, ECHA dossier).
Endpoint: EC50 - Species: Daphnia 1.7 mg/l - Duration h: 48h (OECD 202, Daphnia magna, ECHA dossier).

12.2. Persistence and degradability

Butane-1,4 diol - CAS: 110-63-4
Biodegradability: Readily biodegradable

2-phenoxyethanol - CAS: 122-99-6
Biodegradability: Readily biodegradable

2-aminoethanol; ethanolamine - CAS: 141-43-5
Biodegradability: Readily biodegradable

didecyldimethylammonium chloride - CAS: 7173-51-5
Biodegradability: Readily biodegradable

Polyalkyleneoxide modified heptamethyltrisiloxane - CAS: 27306-78-1
Biodegradability: Non-readily biodegradable

propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0
Biodegradability: Readily biodegradable

(R)-p-mentha-1,8-diene; d-limonene - CAS: 5989-27-5
Biodegradability: Readily biodegradable

Diphenyl ether - CAS: 101-84-8
Biodegradability: Readily biodegradable

12.3. Bioaccumulative potential

propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0
Test: Kow - Partition coefficient 0.05

12.4. Mobility in soil

Not available

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number

ADR-UN Number:	3265
IATA-UN Number:	3265
IMDG-UN Number:	3265

14.2. UN proper shipping name

ADR-Shipping Name:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.(acetic acid, didecyldimethylammonium chloride)
IATA-Shipping Name:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.(acetic acid, didecyldimethylammonium chloride)
IMDG-Shipping Name:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.(acetic acid, didecyldimethylammonium chloride)

14.3. Transport hazard class(es)

ADR-Class:	8
IATA-Class:	8
IATA-Label:	8
IMDG-Class:	8

14.4. Packing group

ADR-Packing Group:	II
IATA-Packing group:	II
IMDG-Packing group:	II

14.5. Environmental hazards

ADR-Enviromental Pollutant:	Yes
IMDG-Marine pollutant:	Marine Pollutant

14.6. Special precautions for user

ADR-Subsidiary hazards:	-
ADR-S.P.:	274
ADR-Transport category (Tunnel restriction code):	2 (E)
ADR - Hazard identification number:	80
IATA-Passenger Aircraft:	851
IATA-Subsidiary hazards:	-
IATA-Cargo Aircraft:	855
IATA-S.P.:	A3 A803
IATA-ERG:	8L
IMDG-EmS:	F-A,

S-B
IMDG-Subsidiary hazards: -
IMDG-Stowage and handling: Category B SW2
IMDG-Segregation: SGG1 SG36 SG49

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

Not Applicable

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) 2015/830
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Regulation (EU) n. 2017/776 (ATP 10 CLP)
Regulation (EU) n. 2018/669 (ATP 11 CLP)
Regulation (EU) n. 2018/1480 (ATP 13 CLP)
Regulation (EU) n. 2019/521 (ATP 12 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restrictions related to the substances contained:

No restriction.

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

Product belongs to category: E1, E2

Lagerklasse according to TRGS 510:

LGK 8A: Combustible corrosive substances

WGK Classification (Water hazard class - Verwaltungsvorschrift wassergefährdende Stoffe)

WGK3 - Highly hazardous for water

Lagerklasse according to TRGS 510:

LGK 8A: Combustible corrosive substances

Composition according to Annex VII.a of Reg. (EC) 648/2004:

15% = x < 30%: phenols;
5% = x <15%: disinfectant;
< 5%: non-ionic surfactants, parfume (Limonene, Citral, Linalool, Geraniol, Citronellol, Hexyl Cinnamal)

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

didecyldimethylammonium chloride.

California Proposition 65

Substance(s) listed under California Proposition 65:
None.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.
Substances for which a Chemical Safety Assessment has been carried out:

Butane-1,4 diol
2-phenoxyethanol
acetic acid
2-aminoethanol; ethanolamine
propan-2-ol; isopropyl alcohol; isopropanol

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H336 May cause drowsiness or dizziness.
H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H226 Flammable liquid and vapour.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.
H312 Harmful in contact with skin.
H332 Harmful if inhaled.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H301 Toxic if swallowed.
H411 Toxic to aquatic life with long lasting effects.
H225 Highly flammable liquid and vapour.
H317 May cause an allergic skin reaction.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.

Hazard class and hazard category	Code	Description
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Acute Tox. 3	3.1/3/Oral	Acute toxicity (oral), Category 3
Acute Tox. 4	3.1/4/Dermal	Acute toxicity (dermal), Category 4
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Asp. Tox. 1	3.10/1	Aspiration hazard, Category 1
Skin Corr. 1A	3.2/1A	Skin corrosion, Category 1A
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2

Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	**Classification procedure**
Acute Tox. 4, H302	Calculation method
Skin Corr. 1B, H314	Calculation method
Eye Dam. 1, H318	Calculation method
STOT SE 3, H335	Calculation method
STOT SE 3, H336	Calculation method
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 2, H411	Calculation method

This document was prepared by a competent person who has received appropriate training.
Main bibliographic sources:

ECHA – European Chemical Agency
GESTIS - Information system on hazardous substances of the German Social Accident Insurance
IARC – International Agency for Research on Cancer
IPCS INCHEM – International Programme on Chemical Safety
ISS – Istituto Superiore di Sanità
PubChem - open chemistry database at the National Institutes of Health (NIH)

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.
It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.
This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.

PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.