SAFETY DATA SHEET

Tenozid 8

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

1.1. Product identifier

Trade name

Tenozid 8

Unique formula identifier (UFI)

KX75-Y0QY-6009-JMP5

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

Relevant identified uses of the substance or mixture

Decalcification of bathrooms, etc.

Use descriptors (REACH)

Sectors of use	Description
LCS "PW"	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Product category	Description
PC35	Washing and Cleaning Products (including solvent based products)

Process category	Description
PROC10	Roller application or brushing

Environmental release category	Description
ERC8a	Wide dispersive indoor use of processing aids in open systems

▼Uses advised against

Product category	Description
PC35	Washing and Cleaning Products (including solvent based products)

1.3. Details of the supplier of the safety data sheet

▼Company and address

Cleanstep ApS
Følager 2
2500 Valby
Denmark
5089 8002

▼Contact person

Nazanin Beizaei

▼E-mail

nb@iduna.dk

Revision

11-02-2022

SDS Version

2.0

Date of previous version

2021-05-26 (1.0)

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service).
See section 4 “First aid measures”.

SECTION 2: Hazards identification

▼2.1. Classification of the substance or mixture

Skin Corr. 1B; H314, Causes severe skin burns and eye damage.

Eye Dam. 1; H318, Causes serious eye damage.

2.2. Label elements

Hazard pictogram(s)

Signal word

Danger

▼Hazard statement(s)

Causes severe skin burns and eye damage. (H314)

Safety statement(s)

▼General

Keep out of reach of children. (P102)
If medical advice is needed, have product container or label at hand. (P101)

▼Prevention

Do not breathe vapour/mist. (P260)
Wear eye protection/protective gloves/protective clothing. (P280)

▼Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water . (P303+P361+P353)

▼Storage

Store locked up. (P405)

▼Disposal

Dispose of contents/container to an approved waste disposal plant. (P501)

▼Hazardous substances

methane sulfonic acid
Cocamidopropyl Betain
nonionic surfactant

2.3. Other hazards

Additional labelling

Not applicable

Additional warnings

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

SECTION 3: Composition/information on ingredients

▼3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
methane sulfonic acid	CAS No.: 75-75-2 EC No.: 200-898-6 REACH:	5-10%	Met. Corr. 1, H290 Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318	

	Index No.: 607-145-00-4		STOT SE 3, H335
citric acid	CAS No.: 77-92-9 EC No.: 201-069-1 REACH: 01-2119457026-42 Index No.: 649-129-00-X	1-3%	Eye Irrit. 2, H319
Cocamidopropyl Betain	CAS No.: 147170-44-3 EC No.: REACH: 01-2119489410-39 Index No.:	1-3%	Eye Dam. 1, H318 Aquatic Chronic 3, H412
nonionic surfactant	CAS No.: 160875-66-1 EC No.: 605-450-7 REACH: Index No.:	1-3%	Acute Tox. 4, H302 Eye Dam. 1, H318

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

No special

▼Labelling of contents according to Detergents Regulation (EC) No 648/2004

< 5%

· Amphoteric surfactants

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.
If skin irritation occurs: Get medical advice/attention.

▼Eye contact

Upon irritation of the eye: Remove contact lenses. Flush eyes with plenty of water or salt water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

▼Ingestion

In the case of ingestion, contact a doctor immediately. If the person is conscious, give them water. DO NOT try to induce vomiting, unless this is recommended by a doctor. Hold head facing down to prevent vomit returning mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

Burns

Not applicable

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

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, -irritations and burns in the respiratory organs -as well as coughing. Dermal contact and contact with the eye cause irreversible effects.
Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

IF exposed or concerned:
Get immediate medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Not applicable

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.
If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:
Sulphur oxides.
Carbon oxides (CO / CO2).

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

▼6.3. Methods and material for containment and cleaning up

Use sand, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations.
To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 on “Disposal considerations” in regard of handling of waste.
See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid direct contact with the product.
Smoking, drinking and consumption of food is not allowed in the work area.
See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material

Always store in containers of the same material as the original container.

Storage temperature

> 0°C

Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No substances are listed in the national list of substances with an occupational exposure limit.

DNEL

Product/substance	methane sulfonic acid
DNEL	0,7 mg/m3
Route of exposure	Inhalation
Duration	Long term – Local effects

Product/substance	methane sulfonic acid
DNEL	19,44 mg/kg
Route of exposure	Dermal
Duration	Long term – Systemic effects - Workers

Product/substance	Cocamidopropyl Betain
DNEL	12,5 mg/kg
Route of exposure	Dermal
Duration	Long term – Systemic effects - Workers

Product/substance	Cocamidopropyl Betain
DNEL	44 mg/m3
Route of exposure	Inhalation
Duration	Long term – Systemic effects - Workers

PNEC

Product/substance	methane sulfonic acid
PNEC	0,012 mg/l
Route of exposure	Freshwater
Duration of Exposure	

Product/substance	methane sulfonic acid
PNEC	0,0012 mg/l
Route of exposure	Marine water
Duration of Exposure	

Product/substance	methane sulfonic acid
PNEC	0,12 mg/l
Route of exposure	Intermittent release
Duration of Exposure	

Product/substance	methane sulfonic acid
PNEC	0,0251 mg/kg
Route of exposure	Freshwater sediment

Duration of Exposure	

Product/substance	methane sulfonic acid
PNEC	0,00183 mg/kg
Route of exposure	Soil
Duration of Exposure	

Product/substance	methane sulfonic acid
PNEC	100 mg/l
Route of exposure	Sewage treatment plant
Duration of Exposure	

Product/substance	citric acid
PNEC	0,44
Route of exposure	Freshwater
Duration of Exposure	

Product/substance	citric acid
PNEC	0,044
Route of exposure	Marine water
Duration of Exposure	

Product/substance	citric acid
PNEC	>1000
Route of exposure	Sewage treatment plant
Duration of Exposure	

Product/substance	Cocamidopropyl Betain
PNEC	0,0135 mg/l
Route of exposure	Freshwater
Duration of Exposure	Continuous

Product/substance	Cocamidopropyl Betain
PNEC	0,00135 mg/l
Route of exposure	Marine water
Duration of Exposure	

Product/substance	Cocamidopropyl Betain
PNEC	0,1 mg/kg
Route of exposure	Marine water sediment
Duration of Exposure	

Product/substance	Cocamidopropyl Betain
PNEC	0,8 mg/kg
Route of exposure	Soil
Duration of Exposure	

Product/substance	Cocamidopropyl Betain
PNEC	3000 mg/l
Route of exposure	Sewage treatment plant
Duration of Exposure	

Product/substance	Cocamidopropyl Betain
PNEC	1mg/kg tør vægt
Route of exposure	Freshwater sediment
Duration of Exposure	

▼8.2. Exposure controls

Control is unnecessary if the product is used as intended.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Occupational exposure limits have not been defined for the substances in this product.

▼Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of vapours.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

▼Generally

Use only CE marked protective equipment.

Respiratory Equipment

No specific requirements

▼Skin protection

Recommended	Type/Category	Standards	
Dedicated work clothing should be worn	-	-	

▼Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Nitrile	0.4	> 480	EN374-2, EN374-3, EN388	

▼Eye protection

Type	Standards	
Wear safety glasses with side shields.	EN166	

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

▼Physical state

Liquid

Colour

Colourless

▼Odour / Odour threshold

Characteristic

▼pH

1+/-1

▼pH in solution

2 (2%)

▼Density (g/cm³)

1.08 (20 °C)

▼Kinematic viscosity

Testing not relevant or not possible due to nature of the product.

▼Particle characteristics

Does not apply to liquids.

Phase changes

▼Melting point/Freezing point (°C)

Testing not relevant or not possible due to nature of the product.

▼Softening point/range (waxes and pastes) (°C)

Does not apply to liquids.

Boiling point (°C)

Testing not relevant or not possible due to nature of the product.

Vapour pressure

Testing not relevant or not possible due to nature of the product.

▼Relative vapour density

Testing not relevant or not possible due to nature of the product.

Decomposition temperature (°C)

Testing not relevant or not possible due to nature of the product.

Data on fire and explosion hazards

Flash point (°C)

Testing not relevant or not possible due to nature of the product.

Ignition (°C)

Testing not relevant or not possible due to nature of the product.

Auto flammability (°C)

Testing not relevant or not possible due to nature of the product.

▼Lower and upper explosion limit (% v/v)

Testing not relevant or not possible due to nature of the product.

Solubility

Solubility in water

Soluble

n-octanol/water coefficient

Testing not relevant or not possible due to nature of the product.

Solubility in fat (g/L)

Testing not relevant or not possible due to nature of the product.

9.2. Other information

▼Other physical and chemical parameters

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 “Handling and storage”.

10.3. Possibility of hazardous reactions

No special

10.4. Conditions to avoid

No special

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

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

▼Acute toxicity

Product/substance	methane sulfonic acid
Test method	
Species	Rat
Route of exposure	Oral
Test	
Result	649 mg/kg ·
Other information	

Product/substance	methane sulfonic acid
Test method	
Species	Rabbit
Route of exposure	Dermal
Test	LD50
Result	1000-2000 mg/kg
Other information	

Product/substance	methane sulfonic acid
Test method	
Species	Rat
Route of exposure	Oral
Test	NOAEL
Result	>= 1200 mg/kg ·
Other information	

Product/substance	methane sulfonic acid
Test method	
Species	Rat
Route of exposure	Oral
Test	NOAEL
Result	>=1200 mg/kg ·
Other information	

Product/substance	citric acid
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	6730 mg/kg ·
Other information	

Product/substance	citric acid
Test method	

Species	Rat
Route of exposure	Dermal
Test	LD50
Result	>2000 mg/kg ·
Other information	

Product/substance	Cocamidopropyl Betain
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	>8100 mg/kg ·
Other information	

Product/substance	Cocamidopropyl Betain
Test method	
Species	
Route of exposure	Oral
Test	NOAEL
Result	100 mg/kg ·
Other information	

Product/substance	Cocamidopropyl Betain
Test method	
Species	Rat
Route of exposure	Dermal
Test	LD50
Result	2000 mg/kg ·
Other information	

Product/substance	nonionic surfactant
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	200-2000 mg/kg ·
Other information	

Skin corrosion/irritation

Causes severe skin burns and eye damage.

▼Serious eye damage/irritation

Product/substance	methane sulfonic acid
Test method	OECD 405
Species	Rabbit
Duration	No data available.
Result	Adverse effect observed (Corrosive)
Other information	

Causes serious eye damage.

Respiratory sensitisation

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

Skin sensitisation

Product/substance	Cocamidopropyl Betain
Test method	OECD 406
Species	Guinea pig
Result	No adverse effect observed (not sensitising)
Other information	

Germ cell mutagenicity

Product/substance	Cocamidopropyl Betain
Test method	
Species	
Conclusion	No adverse effect observed
Other information	

Carcinogenicity

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

Reproductive toxicity

Product/substance	Cocamidopropyl Betain
Test method	
Species	
Duration	
Test	OECD 414
Result	100 mg/kg
Conclusion	
Other information	

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

11.2. Information on other hazards

▼Long term effects

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, -irritations and burns in the respiratory organs -as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

▼Endocrine disrupting properties

No special

▼Other information

No special

SECTION 12: Ecological information

▼12.1. Toxicity

Product/substance	methane sulfonic acid
Test method	
Species	Daphnia
Compartment	
Duration	48 hours
Test	EC50
Result	10-100 mg/l ·

Other information

Product/substance	citric acid
Test method	
Species	Daphnia
Compartment	
Duration	72 hours
Test	EC50
Result	120 mg/l ·
Other information	

Product/substance	Cocamidopropyl Betain
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	25 mg/l ·
Other information	

Product/substance	Cocamidopropyl Betain
Test method	
Species	Crustacean
Compartment	
Duration	48 hours
Test	EC50
Result	45mg/l ·
Other information	

Product/substance	Cocamidopropyl Betain
Test method	
Species	Daphnia
Compartment	
Duration	No data available.
Test	NOEC
Result	<1 mg/l ·
Other information	

Product/substance	Cocamidopropyl Betain
Test method	
Species	Fish
Compartment	
Duration	No data available.
Test	NOEC
Result	<1 mg/l ·
Other information	

Product/substance	nonionic surfactant
Test method	
Species	Fish
Compartment	
Duration	96 hours

Test	LC50
Result	10-100 mg/l ·
Other information	

Product/substance	nonionic surfactant
Test method	
Species	Daphnia
Compartment	
Duration	72 hours
Test	EC50
Result	1-10 mg/l ·
Other information	

12.2. Persistence and degradability

Product/substance	methane sulfonic acid
Biodegradable	Yes
Test method	OECD 301 A
Result	>70

Product/substance	nonionic surfactant
Biodegradable	Yes
Test method	OECD 301 B
Result	>60%

12.3. Bioaccumulative potential

Product/substance	citric acid
Test method	
Potential bioaccumulation	No data available
LogPow	-1.7200
BCF	No data available
Other information	

Product/substance	Cocamidopropyl Betain
Test method	
Potential bioaccumulation	No data available
LogPow	4.2310
BCF	No data available
Other information	

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

▼12.6. Endocrine disrupting properties

No special

▼12.7. Other adverse effects

No special

SECTION 13: Disposal considerations

▼13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.
HP 8 – Corrosive
Dispose of contents/container to an approved waste disposal plant.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

EWC code

20 01 29* Detergents containing dangerous substances

Specific labelling

Not applicable

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

▼14.1. - 14.4.

This product is within scope of the regulations of transport of dangerous goods.

ADR/RID

UN- or ID number	UN proper shipping name	Labels	Packing group	Tunnel restriction code
3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Methane sulfonic acid)	8	III	3 (E)

▼IMDG

UN- or ID number	UN proper shipping name	Labels	Packing group	EmS
3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Methane sulfonic acid)	8	III	F-A, S-B

▼MARINE POLLUTANT

No

IATA

UN- or ID number	UN proper shipping name	Labels	Packing group
3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Methane sulfonic acid)	8	III

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

▼14.7. Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information

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

▼Restrictions for application

People under the age of 18 shall not be exposed to this product.

Demands for specific education

No specific requirements

SEVESO - Categories / dangerous substances

Not applicable

▼Additional information

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Tactile warning.

If this product is sold in retail, it must be delivered with child-resistant fastening.

▼Sources

The Management of Health and Safety at Work Regulations 1999

Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

CLP Regulation (EC) No 1272/2008, as retained and amended in UK law.

EC-Regulation 1907/2006 (REACH), as amended by UK REACH Regulations SI 2019/758

15.2. Chemical safety assessment

No

SECTION 16: Other information

▼Full text of H-phrases as mentioned in section 3

H290, May be corrosive to metals.

H302, Harmful if swallowed.

H312, Harmful in contact with skin.

H314, Causes severe skin burns and eye damage.

H318, Causes serious eye damage.

H319, Causes serious eye irritation.

H335, May cause respiratory irritation.

H412, Harmful to aquatic life with long lasting effects.

The full text of identified uses as mentioned in section 1

LCS "PW" = Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

PROC10 = Roller application or brushing

PC35 = Washing and Cleaning Products (including solvent based products)

ERC8a = Wide dispersive indoor use of processing aids in open systems

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EINECS = European Inventory of Existing Commercial chemical Substances

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IARC = International Agency for Research on Cancer (IARC)

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit.
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVCB = Complex hydrocarbon substance
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

▼Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)

▼The safety data sheet is validated by

NB

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.
The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.
It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.
Country-language: GB-en