

### SAFFTY DATA SHFFT

# Liva Klorrens

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

### 1.1. Product identifier

Trade name

Liva Klorrens

Product no.

1000232010-1000232025

Unique formula identifier (UFI)

XUJH-FW90-NQD9-NH8P

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

Relevant identified uses of the substance or mixture

Rengøringsmiddel med klor. Renser og bleger.

Uses advised against

None known.

# 1.3. Details of the supplier of the safety data sheet

### Company and address

### Velfyld ApS

Adelers Allé 155

4540 Fårevejle

Danmark

+45 7174 6868

www.velfyld.dk

E-mail

info@velfyld.dk

Revision

15/10/2025

**SDS Version** 

1.0

### 1.4. Emergency telephone number

Contact the poison hotline: +45 82 12 12 12 (24 hour service)

See section 4 "First aid measures".

### SECTION 2: Hazards identification

Classified according to Regulation (EC) No. 1272/2008 (CLP).

### 2.1. Classification of the substance or mixture

Skin Irrit. 2; H315, Causes skin irritation.

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

Aquatic Acute 1; H400, Very toxic to aquatic life.

Aquatic Chronic 2; H411, Toxic to aquatic life with long lasting effects.

# 2.2. Label elements

### Hazard pictogram(s)





### Signal word

Danger

#### Hazard statement(s)

Causes skin irritation. (H315)

Causes serious eye damage. (H318)

Very toxic to aquatic life with long lasting effects. (H410)

# Precautionary statement(s)

#### General

If medical advice is needed, have product container or label at hand. (P101)

Keep out of reach of children. (P102)

#### Prevention

Wash hands and exposed skin thoroughly after handling. (P264)

Avoid release to the environment. (P273)

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)

Immediately call a POISON CENTER/doctor. (P310)

#### Storage

Not applicable.

#### Disposal

Dispose of contents/container in accordance with local regulation.

(P501)

### Hazardous substances

sodium hypochlorite

# Additional labelling

EUH031, Contact with acids liberates toxic gas.

UFI: XUJH-FW90-NQD9-NH8P

## 2.3. Other hazards

### Additional warnings

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification. This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2023/707.

# SECTION 3: Composition/information on ingredients

# 3.1. Substances

Not applicable. This product is a mixture.

#### 3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
•		Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318		
disodium metasilicate CAS No.: 10213-79-3 EC No.: 229-912-9 REACH: 01-2119449811-37 Index No.:		1-3%	Met. Corr. 1, H290 Skin Corr. 1B, H314 STOT SE 3, H335	



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

#### Other information

-

#### **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

IF ON SKIN: Wash with plenty of water and soap.

Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

# Eye contact

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

### Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.

In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

# Burns

Not applicable.

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

The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.

### 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:

Halogenated compounds

Some metal oxides



Oxygen, hypochlorous acid, chlorine.

# 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact the chemical emergency services on 72 85 20 00 (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.

Ensure adequate ventilation, especially in confined areas.

Contaminated areas may be slippery.

### 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

### 6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

### 6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

# SECTION 7: Handling and storage

## 7.1. Precautions for safe handling

It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.

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 conditions

No specific requirements.

# Incompatible materials

Strong acids, alkali metals, metal powders, oxidizing materials and amines. Contact with metals can result in decomposition with the formation of oxygen.

# 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

sodium hydroxide; caustic soda

Short term exposure limit (15 minutes) (mg/m³): 2

Annotations:

L = The limit is a ceiling value that at no time may be exceeded.

Statutory order 1619 on exposure limits for substances and mixtures (19/12/2024)

#### **DNEL**

disodium metasilicate



Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	0,74 mg/kg uge/dag
Long term – Systemic effects - Workers	Dermal	1,49 mg/kg uge/dag
Long term – Systemic effects - General population	Inhalation	1,55 mg/m3
Long term – Systemic effects - Workers	Inhalation	6,22 mg/m3
Long term – Systemic effects - General population	Oral	0,74 mg/kg uge/dag
sodium hydroxide;caustic soda		
Duration:	Route of exposure:	DNEL:
Long term – Local effects - General population	Inhalation	1 mg/m3
Long term – Local effects - Workers	Inhalation	1 mg/m3
sodium hypochlorite		
Duration:	Route of exposure:	DNEL:
Long term – Local effects - Workers	Inhalation	1,55 mg/m3
Long term – Systemic effects - General population	Inhalation	1,55 mg/m3
Long term – Systemic effects - Workers	Inhalation	1,55 mg/m3
Short term – Local effects - Workers	Inhalation	3,1 mg/m3
Short term – Systemic effects - Workers	Inhalation	3,1 mg/m3
Long term – Systemic effects - General population	Oral	0,26 mg/kg
NEC disodium metasilicate		
Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		7,5 mg/l
Marine water		1 mg/l
Sewage treatment plant		1000 mg/l
sodium hypochlorite		
Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		0,21 μg/l
Marine water		0,042 μg/l
Sewage treatment plant		0,03 mg/l

# 8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

### 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**

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

# Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.

Ensure that eyewash stations and safety showers are located within easy reach.

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

# Hygiene measures



Take off contaminated clothing and wash it before reuse.

# 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.	-	-	The state of the s



# Hand protection

M	laterial	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Lä	atex	0.4	-	EN374-2, EN388	



# Eye protection

Туре	Standards	
Safety glasses	EN166	



# SECTION 9: Physical and chemical properties

# 9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

Clear

Odour / Odour threshold

Characteristic

На

13,2

Density (g/cm<sup>3</sup>)

1.09

Kinematic viscosity

No data available.

Particle characteristics

Does not apply to liquids.

# Phase changes

Melting point/Freezing point (°C)

No data available.

Softening point/range (°C)

Does not apply to liquids.

Boiling point (°C)

No data available.

Vapour pressure



No data available.

Relative vapour density

No data available.

Decomposition temperature (°C)

No data available.

Data on fire and explosion hazards

Flash point (°C)

No data available.

Flammability (°C)

No data available.

Auto-ignition temperature (°C)

No data available.

Lower and upper explosion limit (% v/v)

No data available.

Solubility

Solubility in water

Completely soluble

n-octanol/water coefficient (LogKow)

No data available.

Solubility in fat (q/L)

No data available.

9.2. Other information

Other physical and chemical parameters

No data available.

Oxidizing properties

No data available.

# SECTION 10: Stability and reactivity

# 10.1. Reactivity

Contact with acids liberates toxic gas.

Reacts violently with alkali metals, metal powders, oxidizing materials and amines.

# 10.2. Chemical stability

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

# 10.3. Possibility of hazardous reactions

Contact with acids liberates toxic gas.

# 10.4. Conditions to avoid

Protect from sunlight. Do no expose to temperatures exceeding 20 °C/68 °F.

# 10.5. Incompatible materials

Strong acids, alkali metals, metal powders, oxidizing materials and amines. Contact with metals can result in decomposition with the formation of oxygen.

# 10.6. Hazardous decomposition products

Oxygen, hypochlorous acid, chlorine.

# SECTION 11: Toxicological information

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

### Acute toxicity

Product/substance sodium hypochlorite

Species: Rat Route of exposure: Oral Test: LD50

Result:  $> 1100 \text{ mg/kg} \cdot$ 



Product/substance sodium hypochlorite

Species: Rat
Route of exposure: Inhalation
Test: LC50
Result: > 10,5 mg/l ·

Product/substance sodium hypochlorite

Species: Rabbit Route of exposure: Dermal Test: LD50

Result:  $> 20000 \text{ mg/kg} \cdot$ 

Product/substance disodium metasilicate

Species: Rat
Route of exposure: Oral
Test: LD50

Result: 1152 - 1349 mg/kg ·

Product/substance disodium metasilicate

Species: Rat
Route of exposure: Inhalation
Test: LD50
Result: > 2,06 g/m3 ·

Product/substance disodium metasilicate

Species: Rat
Route of exposure: Dermal
Test: LD50

Result:  $> 5000 \text{ mg/kg} \cdot$ 

Product/substance sodium hydroxide;caustic soda

Species: Rabbit Route of exposure: Oral Test: LD50

Result: 325 mg/kg bw ·

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

### Skin corrosion/irritation

Causes skin irritation.

# Serious eye damage/irritation

Causes serious eye damage.

### Respiratory sensitisation

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

# Skin sensitisation

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

# Germ cell mutagenicity

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

# Carcinogenicity

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

# Reproductive toxicity

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

# STOT-single exposure

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

# STOT-repeated exposure

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

### Aspiration hazard



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

#### 11.2. Information on other hazards

### Long term effects

The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.

# Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

#### Other information

None known.

# SECTION 12: Ecological information

# 12.1. Toxicity

Product/substance sodium hypochlorite

Species: Fish
Duration: 96 hours
Test: LC50

Result: 0,03 - 0,6 mg/l ·

Product/substance sodium hypochlorite

Species: Daphnia
Duration: 48 hours
Test: EC50
Result: 0,026 mg/l⋅

Product/substance sodium hypochlorite

Species: Daphnia
Duration: 48 hours
Test: EC50
Result: 0,141 mg/l·

Product/substance disodium metasilicate

Species: Fish
Duration: 96 hours
Test: LC50
Result: 210 mg/l·

Product/substance disodium metasilicate

Species: Daphnia
Duration: 96 hours
Test: EC50
Result: 1700 mg/l·

Product/substance disodium metasilicate

Species: Algae
Duration: 72 hours
Test: EC50
Result: 207 mg/l·

Product/substance sodium hydroxide;caustic soda

Species: Fish
Duration: 48 hours
Test: LC50
Result: 189 mg/l·

Product/substance sodium hydroxide; caustic soda



Species: Daphnia
Duration: 48 hours
Test: EC50
Result: 40,4 mg/l·

Very toxic to aquatic life with long lasting effects.

# 12.2. Persistence and degradability

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

### 12.3. Bioaccumulative potential

Product/substance disodium metasilicate

Conclusion: No potential for bioaccumulation

### 12.4. Mobility in soil

No data available.

#### 12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

### 12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

### 12.7. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste. (\*)

HP 12 - Release of an acute toxic gas

HP 14 - Ecotoxic

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

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

### EWC code

20 01 29\* Detergents containing dangerous substances

# Specific labelling

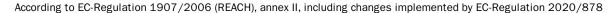
Not applicable.

### Contaminated packing

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

# **SECTION 14: Transport information**

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other informatio n:
ADR	3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (sodium hypochlorite)	Transport hazard class: 8 Label: 8 Classification code: C5	III	Yes	Limited quantities: 5 L Tunnel restriction code: 3 (E) See below for additional information





	14.1 UN / II	14.2 D UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other informatio n:
IMDG	3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (sodium hypochlorite)	Transport hazard class: 8 Label: 8 Classification code: C5	III	Yes	Limited quantities: 5 L EmS: F-A S-B See below for additional information .
IATA	3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (sodium hypochlorite)	Transport hazard class: 8 Label: 8 Classification code: C5	III	Yes	See below for additional information

<sup>\*</sup> Packing group

#### Additional information

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

ADR / See Table A, section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

# 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

E1 - ENVIRONMENTAL HAZARDS, Qualifying quantity (lower-tier): 100 tonnes / (upper-tier): 200 tonnes

Product registration number

2145634

### Additional information

Not applicable.

The Danish Working Environment Authority's executive order no. 1049 of 30 May 2021 on young people's work. Based on Council Directive 94/33 / EC of 22 June 1994 on the protection of young people at work.

Executive Order no. 372 of 25 April 2016 on control of the risk of major accidents with dangerous substances.

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

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP).

<sup>\*\*</sup> Environmental hazards



Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

#### 15.2. Chemical safety assessment

No

### SECTION 16: Other information

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

EUH031, Contact with acids liberates toxic gas.

H290, May be corrosive to metals.

H314, Causes severe skin burns and eye damage.

H318, Causes serious eye damage.

H335, May cause respiratory irritation.

H400, Very toxic to aquatic life.

H410, Very toxic to aquatic life with long lasting effects.

### 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 (European conformity)

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

EuPCS = European Product Categorisation System

EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

GWP = Global warming potential

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** 

UVBC = Unknown or variable composition, complex reaction products or of biological materials

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

### Additional information



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

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

# The safety data sheet is validated by

mbh

### Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a 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: DK-en