

SAFETY DATA SHEET

## Natriumhypochlorit 15%

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

#### 1.1. Product identifier

Trade name

Natriumhypochlorit 15%

Other names / Synonyms

Sodium hypochlorite

Unique formula identifier (UFI)

FDH7-PEV1-HS1F-4PCU

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

▼ Relevant identified uses of the substance or mixture

Industrial purposes

Restricted to professional users.

Uses advised against

None known.

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

Company and address

**S. Sørensen I/S**

Tigervej 11

DK-7700 Thisted

Denmark

+45 97922622

www.s-sorensen.dk

E-mail

s.sorensen@s-sorensen.dk

Revision

13/02/2024

SDS Version

1.1

Date of previous version

25/04/2023 (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

Met. Corr. 1; H290, May be corrosive to metals.

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

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)**

May be corrosive to metals. (H290)  
 Causes severe skin burns and eye damage. (H314)  
 Very toxic to aquatic life with long lasting effects. (H410)

**Precautionary statement(s)**

**General**

-

**Prevention**

Avoid release to the environment. (P273)  
 Do not breathe vapour/mist. (P260)  
 Wear eye protection/protective gloves/protective clothing. (P280)

**Response**

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water . (P303+P361+P353)  
 IF INHALED: Remove person to fresh air and keep comfortable for breathing. (P304+P340)  
 Immediately call a POISON CENTER/doctor. (P310)  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
 Continue rinsing. (P305+P351+P338)  
 Collect spillage. (P391)

**Storage**

-

**▼ Disposal**

Dispose of contents/container in accordance with local regulation (P501)

**Hazardous substances**

sodium hypochlorite, solution ... % Cl active  
 sodium hydroxide

**Additional labelling**

UFI: FDH7-PEV1-HS1F-4PCU

**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) 2018/605.

**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
sodium hypochlorite, solution ... % Cl active	CAS No.: 7681-52-9 EC No.: 231-668-3 REACH: 01-2119488154-34-XXXX Index No.: 017-011-00-1	10-20%	EUH031 Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1)	

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

**Other information**

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## 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

Flush exposed area with water for a long time - at least 30 minutes. It may be necessary to flush for several hours. Use a comfortable water temperature (20-30 °C). Contact Poison Information/doctor/hospital for further advice on follow-up and treatment. Upon irritation: rinse with water. In the event of continued irritation, seek medical assistance.

#### ▼ 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

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 from returning to the 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.

### 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.

Store in a container with a resistant inner liner.

##### Recommended storage material

Keep only in original packaging.

##### Storage temperature

Dry, cool and well ventilated

Protect from heat and direct sunlight

##### Incompatible materials

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

Strong acids

Reducing agents

Metal

#### 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

Short term exposure limit (15 minutes) (mg/m<sup>3</sup>): 2

Annotations:

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

Statutory order 202 on exposure limits for substances and mixtures (21/02/2023)

#### DNEL

sodium hydroxide

Duration:	Route of exposure:	DNEL:
Long term – Local effects - General population	Inhalation	1 mg/m <sup>3</sup>
Long term – Local effects - Workers	Inhalation	1 mg/m <sup>3</sup>

sodium hypochlorite, solution ... % Cl active

Duration:	Route of exposure:	DNEL:
Long term – Local effects - General population	Inhalation	1.55 mg/m <sup>3</sup>

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Long term – Local effects - Workers	Inhalation	1.55 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Inhalation	1.55 mg/m <sup>3</sup>
Long term – Systemic effects - Workers	Inhalation	1.55 mg/m <sup>3</sup>
Short term – Local effects - General population	Inhalation	3.1 mg/m <sup>3</sup>
Short term – Local effects - Workers	Inhalation	3.1 mg/m <sup>3</sup>
Short term – Systemic effects - General population	Inhalation	3.1 mg/m <sup>3</sup>
Short term – Systemic effects - Workers	Inhalation	3.1 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Oral	260 µg/kgbw/day

#### PNEC

sodium hypochlorite, solution ... % Cl active

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		210 ng/L
Intermittent release (freshwater)		260 ng/L
Marine water		42 ng/L
Predators		11.1 mg/kg
Sewage treatment plant		4.69 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

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to 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

Work situation	Type	Class	Colour	Standards	
When there is risk of formation of mist/aerosol	B	Class 3 (High capacity)	Gray	EN14387	

##### Skin protection

Recommended	Type/Category	Standards	
Protective suit	-	-	

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	
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

Yellowish

#### Odour / Odour threshold

Sharp/pungent, Chlorine

#### pH

-

#### pH in solution

12 (%)

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

1.25

#### Kinematic viscosity

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

#### Dynamic viscosity

3-4 mPa.s (20 °C)

#### Particle characteristics

Does not apply to liquids.

#### Phase changes

##### Melting point/Freezing point (°C)

-30 - -20

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

Does not apply to liquids.

##### Boiling point (°C)

100

##### Vapour pressure

20 bar (20 °C)

##### Relative vapour density

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

##### Decomposition temperature (°C)

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

#### Data on fire and explosion hazards

##### Flash point (°C)

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

##### Flammability (°C)

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

#### Auto-ignition temperature (°C)

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

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

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

### Solubility

#### Solubility in water

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

#### n-octanol/water coefficient (LogKow)

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

#### Solubility in fat (g/L)

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

### 9.2. Other information

#### Other physical and chemical parameters

No data available.

#### Oxidizing properties

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

## 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 not 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.

Strong acids

Reducing agents

Metal

### 10.6. Hazardous decomposition products

Oxygen, hypochlorous acid, chlorine.

Thermal decomposition may produce corrosive vapours.

## SECTION 11: Toxicological information

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

#### Acute toxicity

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

#### Skin corrosion/irritation

Causes severe skin burns and eye damage.

#### Serious eye damage/irritation

Causes serious eye damage.

#### Respiratory sensitisation

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

#### Skin sensitisation

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

#### Germ cell mutagenicity

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

#### Carcinogenicity

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

#### Reproductive toxicity

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

#### 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

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

Toxic to aquatic life with long lasting effects.

#### 12.2. ▼ Persistence and degradability

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

#### 12.3. ▼ Bioaccumulative potential

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

#### 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 8 – Corrosive

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

Waste group

##### Specific labelling

Not applicable.

##### Contaminated packing

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

### SECTION 14: Transport information

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

	<b>14.1 UN / ID</b>	<b>14.2 UN proper shipping name</b>	<b>14.3 Hazard class(es)</b>	<b>14.4 PG*</b>	<b>14.5 Env**</b>	<b>Other information:</b>
ADR	UN1791	HYPOCHLORITE SOLUTION	Transport hazard class: 8 Label: 8 Classification code: C9  	II	Yes	Limited quantities: 1 L Tunnel restriction code: (E) See below for additional information.
IMDG	UN1791	HYPOCHLORITE SOLUTION	Transport hazard class: 8 Label: 8 Classification code: C9  	II	Yes	Limited quantities: 1 L EmS: F-A S-B See below for additional information.
IATA	UN1791	HYPOCHLORITE SOLUTION	Transport hazard class: 8 Label: 8 Classification code: C9  	II	Yes	See below for additional information.

\* Packing group

\*\* Environmental hazards

**Additional information**

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.

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

**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**

Restricted to professional users.

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

**Additional information**

Not applicable.

**▼ Sources**

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).

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**

H314, 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

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

Søren Sørensen

#### 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: DK-en