

**SAFETY DATA SHEET****refin chlorine 1,5 l (FK0198) EAN7331121416962****SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier****Trade name**

refin chlorine 1,5 l (FK0198) EAN7331121416962

**Product no.**

HK0014

**▼ Unique formula identifier (UFI)**

VV72-A0HN-500P-H1SE

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

Biocide

**Uses advised against**

No special

**1.3. Details of the supplier of the safety data sheet****Company and address****Nopa Nordic A/S**

Havrevænget 13

DK-9500 Hobro

Denmark

Tel.: +45 89 122 122

**E-mail**

mail@nopanordic.com

**Revision**

05-01-2022

**SDS Version**

3.0

**Date of previous version**

2021-12-22 (2.0)

**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**

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

Skin Irrit. 2; H315, Causes skin irritation.

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

Aquatic Chronic 3; H412, Harmful to aquatic life with long lasting effects.

**2.2. Label elements****Hazard pictogram(s)****Signal word**

Danger

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

**Hazard statement(s)**

- Causes serious eye damage. (H318)
- May be corrosive to metals. (H290)
- Causes skin irritation. (H315)
- Harmful to aquatic life with long lasting effects. (H412)

**Safety statement(s)**

**General**

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

**Prevention**

- Keep only in original packaging. (P234)
- Wash hands and exposed skin thoroughly after handling. (P264)
- Wear eye protection. (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**

-

**Disposal**

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

**Hazardous substances**

sodium hypochlorite

**2.3. Other hazards**

**Additional labelling**

EUH206, Warning! Do not use together with other products. May release dangerous gases (chlorine).

Active substance(s):

sodium hypochlorite (2.4 g/100g)

**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
sodium hypochlorite	CAS No.: 7681-52-9 EC No.: 231-668-3 REACH: 01-211948815-4-34 Index No.: 017-011-00-1	1-2,4%	Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1) EUH031 STOT SE 3, H335 (SCL: 25.00 %)	

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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%

- Chlorine-based bleaching Agents

**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 / 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

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

Provide plenty of water for the person to drink and stay with him/her. 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 victim 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

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:

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 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. In the event of leakage to the surroundings, contact local environmental authorities.

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

Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.

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

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

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

##### Storage temperature

At 5-25 °C and away from 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.

#### 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

No data available

##### PNEC

No data available

#### 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

Take off contaminated clothing and wash it before reuse.

**Measures to avoid environmental exposure**

No specific requirements

**Individual protection measures, such as personal protective equipment**

**Generally**

Use only CE marked protective equipment.

**Respiratory Equipment**

No specific requirements

**Skin protection**

No specific requirements

**Hand protection**

No specific requirements

**Eye protection**

Type	Standards
Safety glasses	EN166



**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

**Physical state**

Liquid

**Colour**

Pale yellow

**Odour / Odour threshold**

Characteristic

**pH**

12,1-13,1

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

1.04

**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**

Contact with acids liberates toxic gas.

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

Warning! Do not use in combination with other products. May release dangerous gases (chlorine).

**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.

**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**

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

**Skin corrosion/irritation**

Product/substance	Reference Product chlorine G22970-03
Test method	OECD 431
Species	EpiSkin tissue
Duration	No data available.
Result	No adverse effect observed (Not corrosive)
Other information	

Causes skin irritation.

**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

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.

#### Endocrine disrupting properties

No special

#### Other information

No special

## SECTION 12: Ecological information

### 12.1. Toxicity

Product/substance	sodium hypochlorite
Test method	
Species	Daphnia
Compartment	
Duration	48 hours
Test	EC50
Result	0,141 mg/l ·
Other information	

Product/substance	sodium hypochlorite
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	0,06 mg/l ·
Other information	

Product/substance	sodium hypochlorite
Test method	
Species	Algae
Compartment	
Duration	96 hours
Test	NOEC
Result	0,017 mg/l ·
Other information	

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

Product/substance	sodium hypochlorite
Test method	
Species	Algae
Compartment	
Duration	3 hours
Test	NOEC
Result	0,0021 mg/l ·
Other information	

Product/substance	sodium hypochlorite
Test method	
Species	Fish
Compartment	
Duration	28 days
Test	NOEC
Result	0,04 mg/l ·
Other information	

## 12.2. Persistence and degradability

Product/substance	sodium hypochlorite
Biodegradable	Yes
Test method	
Result	

## 12.3. Bioaccumulative potential

Product/substance	sodium hypochlorite
Test method	
Potential bioaccumulation	No
LogPow	-3,4200
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

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.

Avoid discharge to lakes, streams, sewers, etc.

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



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

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
1791	HYPOCHLORITE SOLUTION	8	III	3 (E)

**IMDG**

UN- or ID number	UN proper shipping name	Labels	Packing group	EmS
1791	HYPOCHLORITE SOLUTION	8	III	F-A, S-B

**MARINE POLLUTANT**

No

**IATA**

UN- or ID number	UN proper shipping name	Labels	Packing group
1791	HYPOCHLORITE SOLUTION	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**

No special

**Demands for specific education**

No specific requirements

**SEVESO - Categories / dangerous substances**

Not applicable

**Additional information**

Not applicable

**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 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the

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

making available on the market and use of biocidal products.  
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

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  
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

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

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vPvB = Very Persistent and Very Bioaccumulative

**Additional information**

The classification of the substance/mixture is based on test data.

**The safety data sheet is validated by**

peb@nopanordic.com

**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