

## SAFETY DATA SHEET

## refin chlorine 1,5 I (FK0198) EAN7331121416962

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

## 1.1. Product identifier

## Trade name

refin chlorine 1,5 I (FK0198) EAN7331121416962

## Product no.

HK0014

## Unique formula identifier (UFI)

VQ30-50X7-400K-91ME

## 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

23-11-2021

## SDS Version

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 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

## Hazard statement(s)

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

Causes serious eye damage. (H318)  
 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

-

##### Response

IF ON SKIN: Wash with plenty of water / water and soap. (P302+P352)  
 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.

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

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

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

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.

##### 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

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

### 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)

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

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

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

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	

Product/substance	sodium hypochlorite
Test method	
Species	Algae

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

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. 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.

## 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.**

Not dangerous goods according to ADR, IATA and IMDG.

**ADR/RID**

Not applicable

**IMDG**

Not applicable

**MARINE POLLUTANT**

No

**IATA**

Not applicable

**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 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.

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

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  
 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.

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

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