

SAFETY DATA SHEET

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

1.1. Product identifier

Trade name

OxiDes® CIP Product no.

REACH registration number

Not applicable

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

Relevant identified uses of the substance or mixture

PC8 Disinfection Biocidal Products (e.g. Disinfectants, pest control) (PC8) Use in closed, continuous process with occasional controlled exposure (PROC 2) Roller application or brushing (PROC 10) Non industrial spraying (PROC 11) Agriculture, forestry, fishery (SU 1) Industrial uses: Uses of substances as such or in preparations at industrial sites (SU 3) Professional uses: Public domain (administration, education, entertainment, services, craftsmen) (SU 22) Wide dispersive indoor use of processing aids in open systems (ERC8a) Industrial use of substances in closed systems (ERC7)

Uses advised against

The full text of any mentioned and identified use categories are given in section 16

1.3. Details of the supplier of the safety data sheet

Company and address

NCÅ-Verodan A/S Industriparken 5 DK-9560 Hadsund +45 70 27 16 30 www.ncaa.dk Contact person

E-mail mail@ncaa.dk SDS date 2018-04-18 SDS Version 4.0

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

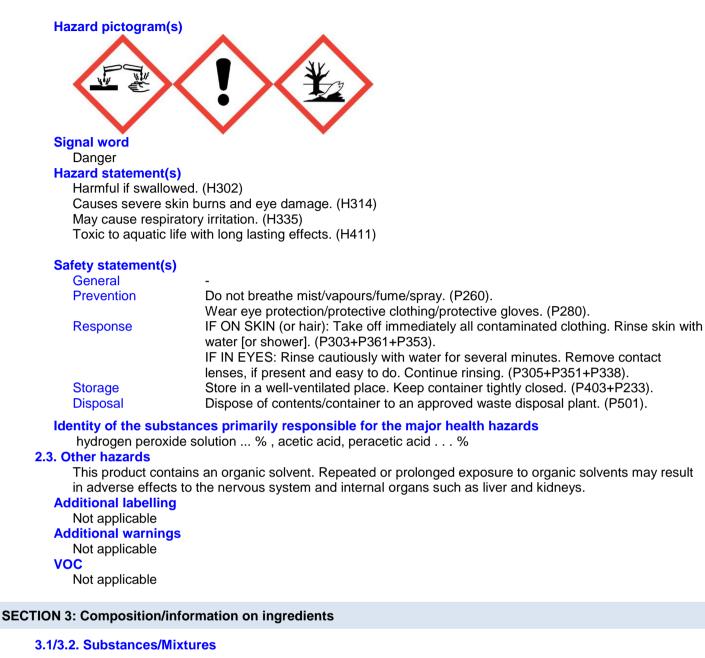
2.1. Classification of the substance or mixture

Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 STOT SE 3; H335 Aquatic Chronic 2; H411 See full text of H-phrases in section 2.2.

2.2. Label elements

NCÅ-Verodan ⁴/s

According to EC-Regulation 2015/830



NAME: hydrogen peroxide solution ... % **IDENTIFICATION NOS.:** CAS-no: 7722-84-1 EC-no: 231-765-0 REACH-no: 01-211948584 5-22-0000 Index-no: 008-003-00-9 CONTENT: 25-40% CLP CLASSIFICATION: Ox. Liquid 1/2, Acute Tox. 4, STOT SE 3, Skin Corr. 1A, Aquatic Chronic 3 H271, H302, H314, H332, H335, H412 NAME: acetic acid **IDENTIFICATION NOS.:** CAS-no: 64-19-7 EC-no: 200-580-7 Index-no: 607-002-00-6 10 - <15% CONTENT: CLP CLASSIFICATION: Flam. Liq. 3, Skin Corr. 1A H226, H314 NOTE: SL peracetic acid . . . % NAME: **IDENTIFICATION NOS.:** CAS-no: 79-21-0 EC-no: 201-186-8 Index-no: 607-094-00-8 2.5 - <5% CONTENT: **CLP CLASSIFICATION:** Org. Perox. C/D/E/F, Flam. Lig. 3, Acute Tox. 3, Acute Tox. 4, STOT SE 3, Skin Corr. 1A, Aquatic Acute 1, Aquatic Chronic 1 H226, H242, H301, H312, H314, H331, H335, H400, H410 (M-acute = 1) (M-chronic = 1)

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

S = Organic solvent L = European occupational exposure limit.



Other information

 $\begin{array}{l} \mbox{ATEmix(inhale, vapour) > 20} \\ \mbox{ATEmix(dermal) > 2000} \\ \mbox{ATEmix(oral) = 796,736 - 1195,104} \\ \mbox{Eye Cat. 1 Sum = Sum(Ci/S(G)CLi) = > 1 - 1,3368} \\ \mbox{Skin Cat. 2 Sum = Sum(Ci/S(G)CLi) = 5,2664 - 7,8996} \\ \mbox{N chronic (CAT 2) Sum = Sum(Ci/(M(chronic)i*25)*0.1*10^{A}CATi) = 1,5488 - 2,3232} \\ \mbox{N acute (CAT 1) Sum = Sum(Ci/M(acute)i*25) = 0,15488 - 0,23232} \end{array}$

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. The doctor can contact The National Poisons Information Service (dial 111, 24 h service).

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

Bring the person into fresh air and stay with him/her.

Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with soap and water. Skin cleanser can be used. DO NOT use solvents or thinners.

Eye contact

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.

Ingestion

In the case of ingestion, contact a doctor immediately and bring the safety data sheet or label. If the person is conscious, give them water. DO NOT try to induce vomiting, unless this is recommended by a doctor. Hold head facing down to prevent vomit returning 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.

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

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.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous catabolic substances are produced. These are: Carbon oxides. Fire will result in dense black smoke. Exposure to combustion

3/11



products may harm your health. Fire fighters should wear appropriate protection equipment. 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.

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 inhalation of vapours from spilled material. 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. It is recommended to install waste collection trays to prevent emissions to the waste water system and surrounding environment.

6.3. Methods and material for containment and cleaning up

Use sand, sawdust, 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 on "Disposal considerations" in regard of handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Smoking, storage of tobacco, consumption and storage of food or liquids are not allowed in the workrooms. It is recommended to install waste collection trays to prevent emissions to the waste water system and surrounding environment. See section on 'Exposure controls/personal protection' for information on personal protection. Avoid direct contact with the product.

7.2. Conditions for safe storage, including any incompatibilities

Always store in containers of the same material as the original container. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Storage temperature

No data available.

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

OEL

hydrogen peroxide solution ... % Long-term exposure limit (8-hour TWA reference period): 1 ppm | 1,4 mg/m³ Short-term exposure limit (15-minute reference period): 2 ppm | 2,8 mg/m³ **DNEL / PNEC** DNEL (hydrogen peroxide solution ... %): 3 mg/m³ Exposure: Inhalation Duration of Exposure: Short term – Local effects - Workers

DNEL (hydrogen peroxide solution ... %): 1,4 mg/m³ Exposure: Inhalation Duration of Exposure: Long term – Local effects - Workers

PNEC (hydrogen peroxide solution ... %): 0,0126 mg/l Exposure: Marine water

PNEC (hydrogen peroxide solution ... %): 0,047 mg/l Exposure: Marine water sediment

8.2. Exposure controls

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

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General recommendations

Observe general occupational hygiene standards.

Exposure scenarios

In the event exposure scenarios are appended to the safety data sheet, the operational conditions and risk management measures in these shall be complied with.

Exposure limits

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

Appropriate technical measures

Airborne gas and dust concentrations must be kept at a minimum and below current limit values (see above). Installation of an exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and -showers are clearly marked.

Hygiene measures

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

Measures to avoid environmental exposure

Keep containment 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

If ventilation at the work place is insufficient, use a half- or full mask with an appropriate filter or an airsupplied breathing apparatus depending on the specific work situation and how long you will be using the product.

Skin protection

Wear appropriate protection clothing, e.g. coveralls in polypropylene approved type 6 and Category III.

Hand protection

Recommended: Neoprene. Breakthrough time: > 60 minutes (Class 3)

Material thickness: 0,68 mm.

Eye protection

Wear safety glasses with side shields.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Liquid
Colour	Clear
Odour	Sharp/pungent
Odour threshold (ppm)	No data available.
pH	1,1
Viscosity (40°C)	No data available.
Density (g/cm ³)	1,1
Phase changes	
Melting point (°C)	-20
Boiling point (°C)	No data available.
Vapour pressure	No data available.
Decomposition temperature (°C)	No data available.
Evaporation rate (n-butylacetate = 100)	No data available.
Data on fire and explosion hazards	
Flash point (°C)	100
Ignition (°C)	No data available.
Auto flammability (°C)	No data available.
Explosion limits (% v/v)	No data available.
Explosive properties	No data available.



Solubility Solubility in water n-octanol/water coefficient 9.2. Other information Solubility in fat (g/L)

Soluble No data available.

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity No data available

10.2. Chemical stability

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

- 10.3. Possibility of hazardous reactions Nothing special
- 10.4. Conditions to avoid
- Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure.
- 10.5. Incompatible materials
 Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

 10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Substance: peracetic acid . . . % Species: Rat Test: LD50 Route of exposure: Oral Result: 100 mg/kg

Substance: peracetic acid . . . % Species: Rabbit Test: LD50 Route of exposure: Dermal Result: 1100 mg/kg

Substance: peracetic acid . . . % Species: Rat Test: LC50 Route of exposure: Inhalation Result: 0,512 mg/l

Substance: acetic acid Species: Rat Test: LD50 Route of exposure: Oral Result: 3310 mgKG

Substance: hydrogen peroxide solution ... % Species: Rat Test: LD50 Route of exposure: Oral Result: 1193 mg/kg

Substance: hydrogen peroxide solution ... % Species: Rabbit Test: LD50 Route of exposure: Dermal Result: >2000 mg/kg

Substance: hydrogen peroxide solution ... % Species: Rat Test: LC50 Route of exposure: Inhalation Result: 170 mg/m3



Skin corrosion/irritation

Causes severe skin burns and eye damage.

Data on substance: acetic acid Organism: Rabbit Duration of Exposure: 48 h Observation Period: 48 h Result: 1060

Data on substance: acetic acid Organism: Rabbit Duration of Exposure: 48 h Result: 1060

Data on substance: peracetic acid . . . % Test: OECD Guideline 404 Organism: Rabbit Result: Corrosive to skin

Serious eye damage/irritation

Causes serious eye damage.

Data on substance: peracetic acid . . . % Test: OECD Guideline 404 Organism: Rabbit Result: Corrosive to eyes Respiratory or skin sensitisation No data available.

Germ cell mutagenicity

Data on substance: peracetic acid . . . % No adverse effect observed.

Data on substance: acetic acid No adverse effect observed.

Data on substance: hydrogen peroxide solution ... % No adverse effect observed. Carcinogenicity

Data on substance: peracetic acid . . . % No adverse effect observed.

Data on substance: acetic acid No adverse effect observed.

Data on substance: hydrogen peroxide solution ... % No adverse effect observed. Reproductive toxicity

Data on substance: acetic acid No adverse effect observed.

Data on substance: hydrogen peroxide solution ... % No adverse effect observed.

STOT-single exposure May cause respiratory irritation.

STOT-repeated exposure

No data available.

Aspiration hazard

Data on substance: acetic acid Result: 16000 ppm/4 h

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.

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure. 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 to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

SECTION 12: Ecological information

12.1. Toxicity

Substance: peracetic acid . . . % Species: Fish Test: LC50 Duration: 96 h Result: 1,6 mg/l

Substance: peracetic acid . . . % Species: Daphnia Test: EC50 Duration: 48 h Result: 1,94 mg/l

Substance: peracetic acid . . . % Species: Algae Test: EC50 Duration: 72 h Result: 0,86 mg/l

Substance: peracetic acid . . . % Species: Daphnia Test: NOEC Duration: 21 d Result: 0,34 mg/l

Substance: peracetic acid . . . % Species: Fish Test: NOEC Duration: 33 d Result: 0,0022 mg/l

Substance: acetic acid Species: Fish Test: LC50 Duration: 24 h Result: 251 mg/l

Substance: acetic acid Species: Fish Test: LC50 Duration: 96 h Result: 75 mg/l

Substance: acetic acid Species: Daphnia Test: LC50 Duration: 96 h Result: 47 mg/l

Substance: hydrogen peroxide solution ... % Species: Fish Test: LC50 Duration: 96 h Result: 16,4 mg/l

Substance: hydrogen peroxide solution ... % Species: Crustacean Test: EC50 Duration: 48 h

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According to EC-Regulation 2015/830

Result: 2,4 mg/l

Substance: hydrogen peroxide solution ... % Species: Algae Test: EC50 Duration: 72 h Result: 1,38 mg/l

12.2. Persistence and degradability

Substance	Biodegradability
peracetic acid %	Yes
acetic acid	Yes
hydrogen peroxide solution	Yes

12.3. Bioaccumulative potential

Substance	Potential bioaccumulation
peracetic acid %	No
acetic acid	No
hydrogen peroxide solution	No

LogPow -0,6 No data available -1,57

No data available

Modified OECD Screening Test

Test

Result

>70% No data available No data available

BCF

No data available No data available No data available

12.4. Mobility in soil

peracetic acid . . . %: Log Koc= -0,39674, Calculated from LogPow (). hydrogen peroxide solution: Log Koc= -1,164883, Calculated from LogPow ().

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. 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 due to poor biodegradability, 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.

Waste

EWC code

16 09 04

oxidising substances, not otherwise specified

Specific labelling

Contaminated packing

Contaminated packaging 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	
14.1. UN number	3149
14.2. UN proper shipping name	HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE with acid(s), water and not more than 5% peroxyacetic acid, STABILIZED
14.3. Transport hazard class(es)	5.1(8)
14.4. Packing group	II
Notes	
Tunnel restriction code	-
IMDG	
UN-no.	3149
Proper Shipping Name	HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE, STABILIZED with acid(s), water and not more than 5% peroxyacetic acid
Class	5.1(8)
PG*	ll
EmS	F-H, S-Q

№ NCÅ-Verodan ⁴/s

According to EC-Regulation 2015/830

MP**	-
Hazardous constituent	-
ΙΑΤΑ/ΙCΑΟ	
UN-no.	3149
Proper Shipping Name	HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE, STABILIZED with acid(s), water and not more than 5% peroxyacetic acid
Class	5.1(8)
PG*	I

14.5. Environmental hazards

14.6. Special precautions for user

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code No data available

(*) Packing group (**) Marine pollutant

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 cf. Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered. Demands for specific education

Additional information

Not applicable

Seveso

Seveso III Part 1: E2

Sources

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

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.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677. The Stationery Office, 2002.

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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (CLP). EC regulation 1907/2006 (REACH).

The Control of Major Accident Hazards (COMAH) Regulations 2015.

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

- H226 Flammable liquid and vapour.
- H242 Heating may cause a fire.
- H271 May cause fire or explosion; strong oxidiser.
- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H331 Toxic if inhaled.



H332 - Harmful if inhaled.

H335 - May cause respiratory irritation.

H400 - Very toxic to aquatic life.

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

H412 - Harmful to aquatic life with long lasting effects.

The full text of identified uses as mentioned in section 1

PC8 = Biocidal Products (e.g. Disinfectants, pest control)

PROC 2 = Use in closed, continuous process with occasional controlled exposure

PROC 10 = Roller application or brushing

PROC 11 = Non industrial spraying

SU 1 = Agriculture, forestry, fishery

SU 3 = Industrial uses: Uses of substances as such or in preparations at industrial sites

SU 22 = Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

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

ERC7 = Industrial use of substances in closed systems

Additional label elements

Not applicable

Other

In accordance with Regulation (EC) No. 1272/2008 (CLP) the evaluation of the classification of the mixture is based on:

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

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

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.

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.

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The safety data sheet is validated by AJA

Date of last essential change (First cipher in SDS version) 2018-02-16(4.0) Date of last minor change (Last cipher in SDS version) 2018-02-16

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