HATENBOERWATER

Fresh in water since 1906.

Safety Data Sheet

HADEX® Food Grade Drinking Water Disinfectant

According to Directive EC 1907/2006/EC Annex II

Rev. 18

Date printed : 12-5-2016
Date last revision : 3-3-2016

Material Safety Data Sheet

1 Identification of the product and the company

1.1 Product identification

Product label name:	Hadex®
Producttype	Liquid

1.2 Relevant identified use of the substance or mixture and disapproved use

1.2.1 Relevant identified use

Use of substance:	food grade disinfectant, for disinfection of drinking water systems, drinking water tanks and water installations.

1.2.2 Relevant identified disaproved use

No additional information available

1.3 Identification of the company

Hatenboer-Water BV
Mercuriusweg 8
3113 AR SCHIEDAM
THE NETHERLANDS
info@hatenboer-water.com – www.hatenboer-water.com

1.4 Emergency number

In case of emergency:	Telephone: +31 (0) 30 274 88 88 (National Poisoning Information Center, Netherlands) (Only for medical advice in case of poisoning)

2 Hazards Identification

2.1 Classification of the substance or mixture

Classification according to Directive EC nr. 1272/2008 [CLP]

Irritating, Category 2	H315
Serious eye damage, Category 1	H318
Enviromental hazard, Category 1	H400

Full text of H-phrases, see chapter 16

2.2 Label elements

Labelling according to Directive EC Nr. 1272/2008 [CLP]

Hazard symbols (CLP)

Signal word (CLP)	Danger	
Hazard statements (CLP)	H315	Causes skin irritation
	H318	Causes serious eye damage
	H400	Very toxic to aquatic life
Precautionary statements (CLP)	P102	Keep out of reach of children
	P403/P235	Store in a well ventilated place. Keep cool.
	P273	Avoid release to the environment
	P280	Wear protective gloves/protective clothing/eye protection/face protection
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
	P302+P352	IF ON SKIN: Wash with plenty of water.
	P310	Immediately call a POISON CENTER or doctor
	P391	Collect spillage
	P332+P313	If skin irritation occurs: Get medical advice/attention.
	P362	Take off contaminated clothing
	P501	Dispose of contents/container in accordance with local/national/international regulations
EUH phrases	EUH031	Contact with acids liberates toxic gas

2.3 Other Hazards

This mixtue does not contain any components that can be considered as persistant, bioaccumative and toxic (PBT), or as very persistent and very bioaccumulative (vPvB) on levels of 0.1% or higher.

3 Composition / Information Active Ingredients

3.1 Composition

Chemical name	Productidentification	%	Classification according to regulation (EG) Nr. 1272/2008 [CLP]
Sodium hypochlorite (main constituent)	(CAS-nr) 7681-52-9 (EG nr) 231-668-3 (EU-Identificationnumber) 017-011-00-1 (REACH-nr) 01-2119488154-34-xxxx	4.4	H400 H315 H318 EUH031

For complete text of H-phrase(s): see chapter 16.

4 First Aid Measures

4.1 General First Aid information

General	Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.
After inhalation	Move the victim into fresh air. Respiratory problems: consult a doctor/medical service.
After skin contact	Remove exposed clothing. Rinse immediately for 15 minutes with plenty of water. Consult a doctor or medical service if irritation persists.
After eye contact	Rinse immediately with water. Take victim to a doctor or medical service if irritation persists.
After ingestion	Rinse mouth with water. Immediately after ingestion: Rinse the mouth with water and give lots of water to drink. Do not induce vomiting. Consult doctor/medical service when feeling unwell. Ingestion of large quantities: immediately go to hospital. Consult Poison Information Center.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation	INHALATION: Dry/sore throat. Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes. ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: May cause respiratory irritation. Respiratory difficulties
Symptoms/injuries after skin contact	Red skin
Symptoms/injuries after eye contact	Redness of the eye tissue. Tear production. Swelling of the conjunctiva. Permanent eye damage.
Symptoms/injuries after ingestion	Gastrointestinal complaints. Nausea. Vomiting. Diarrhea.
Chronic symptoms	ON CONTINOUS/REPEATED EXPOSURE/CONTACT: Skin rash/inflammation, hair loss, gastrointestinal complaints

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5 Fire Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media	Use extinguishing agent suitable for type of surrounding of the fire
Unsuitable extinguishing media	None known

5.2 Special hazards arising from the substance or mixture

Fire hazards	DIRECT: non combustible.
Reactivity	DIRECT: no data available INDIRECT: no data available

5.3 Fire fighting instructions

Precautionary measures fire	Exposure to fire/heat: keep upwind, consider evacuation, have neighbourhood close doors and windows.
Fire fighting instructions	Cool tanks/drums with water spray/move into safety. Dilute toxic gases with water spray.
Protective equipment for fire fighters	Heat/fire exposure: wear protective equipment including self contained breathing apparatus.

6 Accidental Release Measures

6.1 Personal precautions

6.1.1 For non emergency personnel

Protective equipment	Gloves. Safety glasses. Protective clothing. In case hazardous reaction:self contained breathing apparatus and gas tight suit. For more information on protective clothing see chapter 8.
Emergency procedures	Mark the danger area. No open fire. Clean contaminated clothing. In case of hazardous reaction: keep upwind, consider evacuation

6.1.2 For emergency personnel

No additional information available.

6.2 Environmental precautions

Prevent release to the environment

6.3 Methods and material for containment and cleaning up

For containment	Contain released substance, pump into suitable containers. Consult “Handling and storage” to select material of container. Plug the leak, cut off the supply. Dilute toxic gas with water spray if reacting. Take account of toxic/corrosive precipitation water.
Methods for cleaning up	Clean surfaces with an excess of water. Clean contaminated clothing and materials.

7 Handling and Storage

7.1 Handling

Precaution for safe handling	Normal precautions for working with chemicals should be taken into account.

7.2 Storage

Heat and ignition sources	KEEP SUBSTANCE AWAY FROM: heat sources.
Prohibitions on mixed storage	KEEP SUBSTANCE AWAY FROM: (strong) acids.
Storage area	Store in a dry area. Store in a ventilated area. Meet legal requirements. Keep separated from acids and flammable material. Only use original containers. Avoid direct sunlight

8 Exposure Controls/ Personal Protection

8.1 Controle parameters

Technical control	Not applicable
Exposure limits	No exposure limits are determined

8.2 Personal protection

Protection of the skin	Use gloves. Check gloves before use. Chosen gloves should be conform specifications stated in EC Directive 89/686/EEG and EN 374.
Eye/Face protection	Tight fitted safety glasses or face mask (minimal 20cm). Use eye/face protections approved by official institutes e.g. NIOHS (US) r EN166 (EU).
Respiratory protection	Normal precautions for working with chemicals should be taken into account.
Other protective information	Store in locked space. Keep out of reach of children.
Environmental protection	Prevent leakages if situation is safe. Prevent leakages to sewers Prevent disposal into the environment.

9 Physical and Chemical properties

9.1 Physical and chemical properties

Physical state	Liquid
Colour	Yellow (transparant)
Odour	Mild irritating
Boiling point/range	N.A. (Decomposition when heated)
Melting point/range	Not determined
Flash point	N.A.
Flammability	N.A.
Ignition temperature	N.A.
Explosive properties	N.A.
Explosive limits	N.A.
Oxidizing properties	Oxidizing agent producing free radicals at room/elevated temperatures or by catalytic agent
Vapor pressure	Not determined
Density	1068 kg/m^3 (20 °C)
Bulk density	Not determined
Solubility in water	100%
Solubility in other solvents	Not determined
pH-value	>10
Partition coefficient n-octanol/water	N.A.
Relative Vapordensity	Not available
Viscosity	Not determined
Other remarks	Strong reaction with acid

10 Stability and reactivity

Stability	Decomposition starts at 10 °C
Conditions to avoid	Strong acids Reducing agents Combustable substances Protect against heat and direct sunlight
Incompatible materials	Most metals
Hazardous decomposition products	When in contact with heavy metals, their compounds and their alloys, Sodium hypochlorite decomposes while oxygen will be formed.

11 Toxicological Information

Toxicity data:	Skin LD_{50}: Rabbit: >5000 mg/kg bw Oral LD_{50}: Rat: >10000 mg/kg bw Inhalation LC_{50}: Rat: >10.5 mg/kg bw
Irritation data:	Skin: irritating for the skin. Eyes: severe irritating. Respiratory: irritating to respiratory system. Ingestion: irritating for mouth, throat, stomach and intestines.
Reproductive effects data:	No evidence of gene toxic effects in vivo
Ingredient toxicological data:	Not carcinogenic. Not embryo toxic.

12 Ecological information

12.1 Toxicity

Environmental behavior:	Hadex® is based on a special formula with an added active ingredient, sodium hypochlorite, of < 5%. No experimental ecological data available.
Mobility in earth:	Decomposes.
Ecological toxicity:	Fish: Acute toxicity, 96h-LC50: 6 - 32mg/l Daphnia: Acute toxicity, 96h-LC50: 2.1mg/l Plankton: Acute toxicity, 48h-LC50: 0.4mg/l

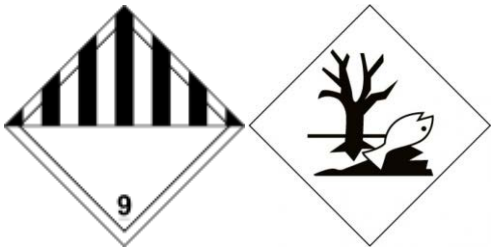
13 Disposal Considerations

Special disposal instructions	Waste disposal accordance with regulations.
Empty containers	Waste disposal accordance with regulations.

14 Transport Information

14.1 UN-Number

UN number: 3082
Proper Shipping Name (PSN): Environmentally Hazardous substances Liquid, N.O.S. (sodium hypochlorite <5%)



14.2 Landtransport

ADR class	9
Proper shipping name	Environmentally Hazardous substances Liquid, N.O.S. (sodium hypochlorite <5%)
Packing group	III
Special provisions	274, 335, 375, 601
Ltd Qty	5L
Tunnel code	3(E)

14.3 Sea transport

IMO/IMDG class	9
Proper shipping name	Environmentally Hazardous substances Liquid, N.O.S. (sodium hypochlorite <5%)
Marine pollutant	Yes
Packing group	III
Special provisions	274, 335, 969
Ltd Qty	5L
EMS	F-A, S-F
Segregation Group	None

14.4 Air transport

IATA class	9	
Proper shipping name	Environmentally Hazardous substances Liquid, N.O.S. (sodium hypochlorite <5%)	
Packing group	III	
Hazard label	Miscellaneous	
Passengers & cargo aircraft	Max Net Qty/Pkg: 450 L	Pkg Inst: 964
Ltd Qty	Max Net Qty/Pkg : 30 kg	Pkg Inst: Y964
Cargo aircraft only	Max Net Qty/Pkg : 450L	Pkg Inst: 964
Special provisions	A97, A158	

14.5 Bulk transport according to appendix II, MARPOL 73/78 and the IBC-code

Not applicable

The regulations above are valid on the revision date of this Material Safety Data Sheet. Due to possible changes in transport regulations for dangerous materials, we advise you to confirm the validity with your own transport organisation.

15 Regulatory Information

15.1 Specific regulatory health, safety and enviromental rules for substance or mixture

15.1.1 European Union

CTGB allowance number	9574 N
VOC	N.A.

15.1.2 National

German

VwVwS, reference of appendices	Waterbedreigingsklasse (WGK) 2, waterbedreigend

Norwegian

NIPH	Approved for use with potable water in the offshore

15.2 Chemical safety evaluation

A chemical safety evaluation has not been done for this product.

16 Other information

Information compiled on: March 2016

All information concerning our product is supplied to the best of our knowledge and believed to be reliable. However, no warranty is made, either expressed or implied, regarding its accuracy or the result to be obtained from the use of the information. It remains the user's responsibility to determine the safety, toxicity and suitability for his own use.

16.1 Full text of H- and EUH- phrases

Overview of all H- and EUH- phrases used in this document

H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H400	Very toxic to aquatic life
EUH031	Contact with acids liberates toxic gas

16.2 Document control

Changes with respect to previous safety sheets that influence risk measures: none

16.3 Abbreviations

CTGB	College voor de toelating van gewasbeschermingsmiddelen en biociden (Board for the Authorisation of Plant Protection Products and Biocides in the Netherlands
VwVwS	Verwaltungsvorschrift wassergefährdende stoffe
NIPH	Norwegian Institute of Public Health

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