



**HATENBOERWATER**

*Fresh in water since 1906.*

Material Safety Datasheet

# **HADEX<sup>®</sup> Food Grade Drinking Water Disinfectant**

According to EC-directive 1907/2006

Revision: 16.0

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## Material Safety Data Sheet

### 1 Identification of the Product and the Company

#### *Identification of the Product*

Product label name: Hadex®

Chemical description/application: Hadex Food Grade drink water disinfectant, disinfection of piping, water tanks water fed plants.

Product type: Liquid

#### *Identification of the Company*

Company: Hatenboer-Water b.v.  
Mercuriusweg 8  
3113 AR Schiedam P.O. Box 6013  
3002AA Rotterdam

Phone: +[31] 10 409 12 00  
Fax: +[31] 10 409 12 10  
e-mail : info@hatenboer-water.com  
www.hatenboer-water.com

#### *Emergency Numbers*

In Case of emergency: Nationaal Vergiftigingen Informatie Centrum (National Poisoning Information Center)  
Tel.: +31 (0)30 274 88 88  
(Only for medical advice in case of poisoning)

Police, Fire and Ambulance: Tel.: 112 (in the Netherlands)

## 2 Hazards Identification

### *Hazards to Humans*

Classification according to Directive 67/548/EEC or 1999/45

- Dangerous for the environment (N, R50), Irritant (Xi, R41), irritating (Xi, R38)

Hazard Class and Category Code

Ordinances EC 1272/2008

Classification in accordance with Regulation (EC) No 1272/2008

- Dangerous - Category 1 - Warning (H400)
- Serious damage to eyes - Category 1 - Danger (H318)
- Irritant-category 2 - (H315)

label elements

Labelling Regulation EC 1272/2008 (CLP)

Hazards Symbols



Signal word:     Danger

Hazard statements:     H315: Causes skin irritation.  
                              H318: Causes serious eye damage.  
                              H400: Very toxic to aquatic life.

- Precautions statements: P102: Keep out of reach of children.  
 P403/P235: Store in a well ventilated area / cool place.  
 P273: Avoid release to the environment.
- P501: Contents / box drains to local / regional / national / international regulations.
- P391: Leaked / spill clean up.
- P280: Wear protective gloves / protective clothing / eye / face protection.
- P302 + P352: IF ON SKIN: Wash with soap and water. "
- P332 + P313: If skin irritation occurs: get medical advice/attention. "
- P362 Take off contaminated clothing and wash before reuse
- P305 + P351: IF IN EYES: Rinse with water for continuously several minutes, remove contact lenses if present and easy to do continuous rinsing.  
 P338
- P310: Call a POISON CENTER or doctor.

Labelling EC 67/548 or EC1999/45

Symbols:



Xi; Irritant



N, Dangerous for the environment

### 3 Composition/Information Active Ingredients

#### Composition

	CHEMICAL NAME	CAS-NR	EEC-NR	ANNEX-1-NR	SYMBOL	% (W/W)	H-PHRASE(S)
1	Sodium hypochlorite	7681-52-9	231-668-3	017-011-00-1	N + C	4.4	H400 H315 H318 EUH031

For complete text of H-phrase(s): see Regulatory Information (page 10).

## 4 First Aid Measures

General:	In all cases of doubt, or when symptoms persists, seek medical attention
After eye contact:	Rinse thoroughly with plenty of water. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical advice if irritation develops.
After skin contact:	Wash off with soap and water
After inhalation:	N.A.
After ingestion:	Only when conscious, rinse mouth, give plenty of water to drink (approx. 500 ml.). Do not induce vomiting. Seek medical attention.
Advice for doctors:	Symptomatic treatment is advised

## 5 Fire-Fighting Measures

Hazardous combustion products:	In contact with heavy metals, their compounds and their alloys, sodium hypochlorite decomposes under the development of oxygen
Fire/explosion hazards:	If involved in a fire, it will support combustion
Extinguishing media:	All media

## 6 Accidental Release Measures

Containment technique:	Do not empty into environment.
Clean-up technique:	Collect as much as possible in a clean container for re-use or disposal. Rinse remaining chemical with plenty of water.

## 7 Handling and Storage

Handling:	The usual precautions for handling chemicals should be observed
Storage:	Do not store with acids, reducing agents and flammable substances. Store in a dry well ventilated place away from sources of heat and direct sunlight.
Fire & explosion prevention:	Keep away from combustible material.

## 8 Exposure Controls/Personal Protection

### *Exposure Controls*

Exposure limits: No exposure limit has been established

### *Personal Protection*

Skin protection: The usual precautions for handling chemicals should be observed

Eye protection: The usual precautions for handling chemicals should be observed

Inhalation protection: The usual precautions for handling chemicals should be observed

Hand protection: Wear suitable protective gloves. ( PVC or rubber recommended)

Other protection information: Keep locked up and out of reach for children

Other protection information: The usual precautions for handling chemicals should be observed

## 9 Physical and Chemical Properties

Appearance: Liquid

Color: Yellow (transparent)

Odor: Mild irritating

Boiling point/range: Not relevant (Decomposition under effect of heating)

Melting point/range: Not determined

Flash point: N.A.

Flammability: N.A.

Auto 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<sup>3</sup> (20 °C)

Bulk density: Not relevant

Solubility in water: 100%

Solubility in other solvents: Not determined

pH-value: Not determined

Partition coefficient n-octanol/water: N.A.

Relative vapor density: Not available

Viscosity: Not determined

## 10 Stability and Reactivity

Stability:	Decomposition starts at 10 °C
Conditions to avoid:	Strong acids Reducing agents Combustible substances Protect against heat and direct sunlight
Materials to avoid:	Most metals
Hazardous decomposition products:	Contact with heavy metals, their compounds and their alloys. Sodium hypochlorite decomposes under the development of oxygen.

## 11 Toxicological Information

Toxicity data:	Skin LD <sub>50</sub> : Rabbit: >5000 mg/kg bw Oral LD <sub>50</sub> : Rat: >10000 mg/kg bw Inhalation LC <sub>50</sub> : Rat: >10.5 mg/kg bw
Irritation data:	Skin: irritating to skin Eyes: severely irritating Respiratory: irritating to respiratory system Ingestion: irritating for mouth, throat, stomach and intestines
Reproductive effects data:	No evident of gene toxic effects in vivo
Ingredient toxicological data:	Not carcinogenic Not embryo toxic

## 12 Ecological Information

Environmental behavior:	Hadex <sup>®</sup> is based on a special formula with an additive 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-IC50: 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

UN-Number: 3082

### *Land transport*

ADR class: 9 Packing group: III  
Proper shipping name: Environmentally Hazardous substances Liquid,  
N.O.S. (sodium hypochlorite<5%)

### *Sea transport*

IMO/IMDG code: 9 Packing group: III  
Proper shipping name: Environmentally Hazardous substances Liquid,  
N.O.S. (sodium hypochlorite<5%) EMS: F-A, S-F N.A.  
Marine Pollutant: Yes MFAG: N.A.

### *Air transport*

IATA/ICAO-DGR Class: 9 Packing group: III  
Proper shipping name: Environmentally Hazardous substances  
Liquid, N.O.S. (sodium  
hypochlorite<5%)

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 organization.

## 15 Regulatory Information

HADEX with CTGB Allowance No.: 9574 N is classified with the following hazard symbols and safety recommendations:

Product label name: Hadex®  
 Labeling according to EC-directives.  
 Classification based on: Calculation  
 Symbol(s)



H(azard) phrase(s):  
 H315 : Causes skin irritation.  
 H318 : Causes serious eye damage.  
 H400 : Very toxic to aquatic life.

P(recautionary) phrase(s):  
 P102 : Keep out of reach of children.  
 P403/P235 : Store in a well ventilated place. Keep cool.  
 P273 : Avoid release to the environment.  
 P501 : Dispose of contents/container to dispose of the local/regional/national/international regulations.  
 P391 : Collect spillage.  
 P280 : Wear protective gloves/protective clothing/eye protection/face protection.  
 P302+P352 : IF ON SKIN: Wash with plenty of soap and water.  
 P332+P313 : If skin irritation occurs: Get medical advice/attention.  
 P362 : Take off contaminated clothing and wash before reuse.  
 P305+P351+P338 : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P310: Immediately call a POISON CENTER or doctor/physician.

R(isk) phrase(s):  
 R38: Irritating to skin.  
 R41: Risk of serious eye damage  
 R50: Very toxic to aquatic organisms

S(afety) phrase(s):                      S2:        Keep out of reach of children.  
   S3/7/9:    Keep container tightly closed in a cool, well ventilated place.  
   S24/25:    Avoid contact with skin and eyes.  
   S36/37/39:    Wear suitable protective clothing, gloves and eye/face protection.

Other information:                         Hadex® may cause spots upon clothing.

Signal word:                                "danger"

## 16 Other Information

Information compiled on: September 2011

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.

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