

according to UK REACH Regulation

## Sodium Hypochlorite 10 % (Bleaching Solution)

Revision date: 01.06.2023 Product code: 15695.xxxxx Page 1 of 12

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

#### 1.1. Product identifier

Sodium Hypochlorite 10 % (Bleaching Solution)

UFI: 1GFD-Y1UV-500H-VA5N

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

#### Use of the substance/mixture

Use as laboratory reagent. Intended for scientific research and development.

#### Uses advised against

Any non-intended use.

## 1.3. Details of the supplier of the safety data sheet

Company name: MORPHISTO GmbH
Street: Schumannstr. 142/144
Place: D-63069 Offenbach

Telephone: +49 (0) 69 / 400 3019-60 Telefax: +49 (0) 69 / 400 3019-64

e-mail: info@morphisto.de
Contact person: Morphisto GmbH

e-mail: gefahrstoffmanagement@morphisto.de

Internet: http://www.morphisto.de

**1.4. Emergency telephone** Poison Information Center Mainz, Germany, Tel: +49(0)6131/19240

number:

### **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

## **GB CLP Regulation**

Met. Corr. 1; H290 Skin Corr. 1; H314 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

## 2.2. Label elements

#### **GB CLP Regulation**

# Hazard components for labelling

sodium hypochlorite, solution Sodium hydroxide

Signal word: Danger

Pictograms:





## **Hazard statements**

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.
H410 Very toxic to aquatic life with long lasting effects.

# **Precautionary statements**

P260 Do not breathe mist/vapours/spray.



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P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water or shower.

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/doctor.

Special labelling of certain mixtures

EUH031 Contact with acids liberates toxic gas.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:





### **Hazard statements**

H314

#### **Precautionary statements**

P303+P361+P353-P305+P351+P338-P310

## 2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulating and toxic (PBT) or very persistent and very bioaccumulating (vPvB) at levels of 0.1% or higher. Ecological information: The substance/mixture does not contain any components that are considered to be hazardous according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in amounts of 0.1 % or more have endocrine disrupting properties. Toxicological information: The substance/mixture does not contain any components that are to be classified according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1 % or more have endocrine disrupting properties.

## **SECTION 3: Composition/information on ingredients**

### 3.2. Mixtures

## **Chemical characterization**

aqueous solution

#### **Hazardous components**

CAS No	Chemical name					
	EC No Index No REACH No		REACH No			
	Classification (GB CLP Regulation)					
7681-52-9	sodium hypochlorite, solution					
	231-668-3	017-011-00-1	01-2119488154-34			
	Skin Corr. 1B, Eye Dam. 1, Aquation	kin Corr. 1B, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 1; H314 H318 H400 H410 EUH031				
1310-73-2	Sodium hydroxide					
	215-185-5	011-002-00-6	01-2119457892-27			
	Met. Corr. 1, Skin Corr. 1A, Eye Dam. 1; H290 H314 H318					

Full text of H and EUH statements: see section 16.



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#### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. I	Limits, M-factors and ATE	
7681-52-9	231-668-3	sodium hypochlorite, solution	5 - < 10 %
		= 20000 mg/kg; oral: LD50 = 1100 mg/kg   Aquatic Acute 1; H400: M=10 : 1; H410: M=1    EUH; EUH031: >= 5 - 100	
1310-73-2	215-185-5	Sodium hydroxide	< 1 %
		H314: >= 5 - 100 Skin Corr. 1B; H314: >= 2 - < 5 Skin Irrit. 2; H315: >= 0,5 - < ; H318: >= 2 - 100 Eye Irrit. 2; H319: >= 0,5 - < 2	

#### **Further Information**

This product contains no substances of very high concern (SVHC) (>0,1%) which are included in the Candidate List according to Article 59 of REACH.

# **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

#### General information

Remove affected person from the danger area and lay down. Remove person to fresh air and keep comfortable for breathing. First aider: Pay attention to self-protection! Take off immediately all contaminated clothing. If unconscious but breathing normally, place in recovery position and seek medical advice. Do not leave affected person unattended.

#### After inhalation

Provide fresh air. Medical treatment necessary. IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. When in doubt or if symptoms are observed, get medical advice.

#### After contact with skin

If skin irritation occurs: Get medical advice/attention. After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. When in doubt or if symptoms are observed, get medical advice.

#### After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

#### After ingestion

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink 1 glass of of water. Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Do not allow a neutralisation agent to be drunk. Rinse mouth immediately and drink plenty of water. Call a physician immediately.

## 4.2. Most important symptoms and effects, both acute and delayed

May cause irritation. Mucous membrane irritation after eye contact or inhalation. Irritation and etching Frequently or prolonged contact with skin may cause dermal irritation.

## 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically. No specific antidote known.

# **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

#### Suitable extinguishing media

Water spray jet, Carbon dioxide (CO2), Foam, Extinguishing powder. Co-ordinate fire-fighting measures to the fire surroundings.

# Unsuitable extinguishing media

Strong water jet



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#### 5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Chlorine (Cl2). Hydrogen chloride (HCl).

#### 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit. Move undamaged containers from immediate hazard area if it can be done safely.

#### **Additional information**

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Dispose of waste according to applicable legislation.

# **SECTION 6: Accidental release measures**

## 6.1. Personal precautions, protective equipment and emergency procedures

#### General advice

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Avoid all contact with the substance. Avoid: generation/formation of aerosols

# For non-emergency personnel

Clear danger zone. Follow emergency plan. Consult an expert.

## For emergency responders

Move undamaged containers from immediate hazard area if it can be done safely.

#### 6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Avoid release to the environment. Do not allow to enter into surface water or drains.

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

#### For containment

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

#### For cleaning up

Take up carefully when dry. Treat the recovered material as prescribed in the section on waste disposal.

# Other information

Clear contaminated areas thoroughly.

### 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

## **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

#### Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Wear personal protection equipment (refer to section 8).

### Advice on protection against fire and explosion

Usual measures for fire prevention.

## Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

## Further information on handling

The usual precautions for handling chemicals should be considered. Avoid contact with skin, eyes and clothes. Take off contaminated clothing and wash it before reuse. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Draw up and observe skin protection programme.



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## 7.2. Conditions for safe storage, including any incompatibilities

## Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations. Keep cool. No metal containers.

#### Hints on joint storage

Do not store together with: Oxidizing agent. Pyrophoric or self-heating substances. Do not store together with: food and feed. pharmaceuticals. Infectious substances. Radioactive substances. Explosive substances. Oxidizing substances. Oxidizing liquids. Organic peroxides. Self-reactive substances and mixtures. Pyrophoric solids. Substances which in contact with water form flammable gases. Ammonium nitrate and preparations containing ammonium nitrate.

## Further information on storage conditions

Protect from light. Keep away from heat. storage temperature 15-25 °C

## 7.3. Specific end use(s)

Use as laboratory reagent.

# **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

#### **Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
1310-73-2	Sodium hydroxide	-	2		STEL (15 min)	WEL

## **DNEL/DMEL values**

CAS No	Substance				
DNEL type		Exposure route	Effect	Value	
7681-52-9	sodium hypochlorite, solution				
Worker DNEL,	long-term	inhalation	systemic	1,55 mg/m³	
Worker DNEL,	acute	inhalation	systemic	3,1 mg/m³	
Worker DNEL, long-term		dermal	local	0,5 %	
Consumer DNEL, long-term		inhalation	local	1,55 mg/m³	
Consumer DNEL, acute		inhalation	systemic	3,1 mg/m³	
Consumer DNEL, long-term		oral	systemic	0,26 mg/kg bw/day	
1310-73-2 Sodium hydroxide					
Worker DNEL, long-term inhalation local 1 mg/m³			1 mg/m³		
Consumer DN	EL, long-term	inhalation	local	1 mg/m³	

### **PNEC values**

CAS No	Substance		
Environmental compartment Value			
7681-52-9	681-52-9 sodium hypochlorite, solution		
Freshwater 0,0		0,00021 mg/l	
Marine water		0,000042 mg/l	
Secondary poisoning		11,1 mg/kg	
Micro-organisms in sewage treatment plants (STP) 4,69 mg/l		4,69 mg/l	

## 8.2. Exposure controls



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#### Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Provide adequate ventilation as well as local exhaustion at critical locations. Provide washing facilities at the workplace, provide an eye shower or eyewash bottle and mark them.

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

#### Eve/face protection

Suitable eye protection: goggles.Safety goggles with side protection. In case of increased risk add protective face shield. Safety glasses according to EN 166.

## **Hand protection**

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Protective gloves according to EN 374.Suitable glove material also for longer, direct contact:

PVC (Polyvinyl chloride). Layer thickness 0,7

NBR (Nitrile rubber). Layer thickness 0,4

CR (polychloroprenes, Chloroprene rubber). Layer thickness0,5

Butyl rubber.Layer thickness0,7

fluoroelastomer (FKM).Layer thickness0,7

Breakthrough time (maximum wearing time): >480 min.

#### Skin protection

Use of protective clothing. Personal protective equipment must be determined according to the quantity and concentration of hazardous substances at the workplace. Wear solvent-resistant protective clothing. Safety shoes according to EN 345-347.

#### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Recommended material: Combination filtering device (EN 14387), Type A/ABEK2-P2.

## **Environmental exposure controls**

Do not allow uncontrolled discharge of product into the environment.

### **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Physical state: Liquid

Colour: colourless, clear

Odour: weak nach Chlorine (Cl2).

Melting point/freezing point:

Boiling point or initial boiling point and

not determined

100 °C

boiling range:

Flammability: not applicable Lower explosion limits: not determined Upper explosion limits: not determined Flash point: not determined Auto-ignition temperature: not determined Decomposition temperature: not determined pH-Value (at 20 °C): 12-13 Viscosity / kinematic: not determined



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Water solubility: easily soluble

Solubility in other solvents

not determined

Partition coefficient n-octanol/water: not determined Vapour pressure: 23 hPa

(at 20 °C)

Density (at 20 °C): 1,01 g/cm³
Relative vapour density: not determined

#### 9.2. Other information

#### Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive.

Sustaining combustion: Not sustaining combustion

Self-ignition temperature

Solid: not applicable
Gas: not applicable

Oxidizing properties Not oxidising.

Other safety characteristics

Evaporation rate: not determined

# **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

Decomposes when heated, releasing oxygen, dichloroxide, chlorine or hydrogen chloride. Corrosive to metals.

## 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

Decomposes when heated, releasing oxygen, dichloroxide, chlorine or hydrogen chloride.

## 10.3. Possibility of hazardous reactions

Exothermic reaction with: Acid, Peroxides, Oxidizing agent.

## 10.4. Conditions to avoid

Keep away from: Heat. UV-radiation/sunlight. Frost

## 10.5. Incompatible materials

Protect against: Contact with air/oxygen. Keep away from: Acid, Oxidizing agent, Peroxides.

#### 10.6. Hazardous decomposition products

Resulting from the use of the product: Chlorine. Decomposes when heated, releasing oxygen, dichloroxide, chlorine or hydrogen chloride.

# **SECTION 11: Toxicological information**

#### 11.1. Information on hazard classes as defined in GB CLP Regulation

### **Acute toxicity**

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



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CAS No	Chemical name						
	Exposure route	Dose		Species	Source	Method	
7681-52-9	sodium hypochlorite, solution						
	l - · - · ·	LD50 mg/kg	1100	Rat	suppliers SDS.		
		LD50 mg/kg	20000	Rabbit	suppliers SDS.		

#### Irritation and corrosivity

Causes severe skin burns and eye damage. (On basis of test data)

Causes serious eye damage. (On basis of test data)

#### Sensitising effects

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

#### Carcinogenic/mutagenic/toxic effects for reproduction

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.

#### **Practical experience**

In case of inhalation May cause respiratory irritation. Causes burns. In case of ingestionIngestion causes burns of the upper digestive and Respiratory tract. Following skin contact Causes burns. After eye contact Causes serious eye damage.

## 11.2. Information on other hazards

# **Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

#### Further information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

# **SECTION 12: Ecological information**

### 12.1. Toxicity

Very toxic to aquatic life.

Toxic to aquatic life with long lasting effects.



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CAS No	Chemical name						
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method
7681-52-9	sodium hypochlorite, solution						
	Acute fish toxicity	LC50 mg/l	0,06		Oncorhynchus mykiss (Rainbow trout)	suppliers SDS.	
	Acute algae toxicity	ErC50 mg/l	0,036	72 h		suppliers SDS.	
	Acute crustacea toxicity	EC50 mg/l	0,141		Daphnia magna (Big water flea)	suppliers SDS.	
	Fish toxicity	NOEC mg/l	0,04	1	Menidia peninsulae (tidal silverside)	suppliers SDS.	
	Crustacea toxicity	NOEC mg/l	0,007	15 d	American oyster (Crassostrea virginica)	suppliers SDS.	
	Acute bacteria toxicity	(EC50	>3 mg/l)	3 h	Activated sludge	suppliers SDS.	
1310-73-2	Sodium hydroxide						
	Acute fish toxicity	LC50	196 mg/l	96 h		Adema, D.M.M. 1985., GESTIS.	
	Acute crustacea toxicity	EC50 mg/l	40,4	48 h	Ceriodaphnia sp.	Warne and Schifko, 1999; ECHA Dossier.	

## 12.2. Persistence and degradability

Inorganic product, cannot be eliminated from the water by biological cleaning processes. The product can be degraded by abiotic, e.g. chemical or photolytic processes. Information on stability in water (hydrolysis): Half-life time: 2hln water, light-induced degradation occurs in the near-surface layer.

#### 12.3. Bioaccumulative potential

The product has not been tested.

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
7681-52-9	sodium hypochlorite, solution	-3,42

# 12.4. Mobility in soil

The product has not been tested.

### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

### 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

# 12.7. Other adverse effects

Adsorbable organic bound halogen (AOX):The mixture does not contain any organically bound halogen, but can have a halogenating effect and thus contribute to AOX.

#### **Further information**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

#### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

## **Disposal recommendations**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.



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#### Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

# **SECTION 14: Transport information**

## Land transport (ADR/RID)

14.1. UN number or ID number: UN 1791

14.2. UN proper shipping name: HYPOCHLORITE SOLUTION

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8



Classification code: C9
Special Provisions: 521
Limited quantity: 1 L
Excepted quantity: E2
Transport category: 2
Hazard No: 80
Tunnel restriction code: E

## Marine transport (IMDG)

14.1. UN number or ID number: UN 1791

14.2. UN proper shipping name: HYPOCHLORITE SOLUTION

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8



Marine pollutant:

Special Provisions:

Limited quantity:

Excepted quantity:

EXCEPTED F-A, S-B

Segregation group:

P
274 900

1 L

EXCEPTED F-A, S-B

8 - hypochlorites

#### Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 1791

14.2. UN proper shipping name: HYPOCHLORITE SOLUTION

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8



Special Provisions:

Limited quantity Passenger:

Passenger LQ:

Excepted quantity:

A3 A803

0.5 L

Y840

Excepted quantity:

E2

IATA-packing instructions - Passenger: 851
IATA-max. quantity - Passenger: 1 L

Print date: 01.06.2023



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IATA-packing instructions - Cargo: 855 IATA-max. quantity - Cargo: 30 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes



Danger releasing substance: sodium hypochlorite, solution

14.6. Special precautions for user

Warning:strongly corrosive.

14.7. Maritime transport in bulk according to IMO instruments

No information available.

# **SECTION 15: Regulatory information**

## 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

## **EU** regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

Information according to 2012/18/EU

E1 Hazardous to the Aquatic Environment

(SEVESO III):

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile

work protection guideline' (94/33/EC).

Water hazard class (D): 2 - obviously hazardous to water

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

sodium hypochlorite, solution

Sodium hydroxide

# **SECTION 16: Other information**

## Changes

This data sheet contains changes from the previous version in section(s): 2,9,14,15,16.

Rev. 2,0; 25.05.2023; Individual safety data sheet based on 14395 collect

Rev. 2,1; 01.06.2023; general revision / adjustment section 14

#### Abbreviations and acronyms

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

**UN: United Nations** 

CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate LC50: Lethal concentration, 50%

LD50: Lethal dose, 50% LL50: Lethal loading, 50% EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate

NOEC: No Observed Effect Concentration



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BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic vPvB: very persistent, very bioaccumulative

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Regulations concerning the international carriage of dangerous goods by rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

IMDG: International Maritime Code for Dangerous Goods

EmS: Emergency Schedules MFAG: Medical First Aid Guide

IATA: International Air Transport Association ICAO: International Civil Aviation Organization

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container SVHC: Substance of Very High Concern

For abbreviations and acronyms, see table at http://abbrev.esdscom.eu

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety

assessment, chapter R.20 (Table of terms and abbreviations).

### Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Met. Corr. 1; H290	On basis of test data
Skin Corr. 1; H314	On basis of test data
Eye Dam. 1; H318	On basis of test data
Aquatic Acute 1; H400	Calculation method
Aquatic Chronic 2; H411	Calculation method

#### Relevant H and EUH statements (number and full text)

H290	May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage. H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
EUH031 Contact with acids liberates toxic gas.

## **Further Information**

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations. The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations. The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)