

according to UK REACH Regulation

Sodium Hypochlorite 1.25 %

Revision date: 06.11.2023

Product code: 14389.xxxxx

Page 1 of 11

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

1.1. Product identifier

Sodium Hypochlorite 1.25 %

UFI:

5CU8-Y1EE-5006-YG4D

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

1.4. Emergency telephone	Poison Information Center Mainz, Ge	rmany, Tel: +49(0)6131/19240
Internet:	http://www.morphisto.de	
E-mail:	gefahrstoffmanagement@morphisto.c	de
Contact person:	Morphisto GmbH	
E-mail:	info@morphisto.de	
Telephone:	+49 (0) 69 / 400 3019-60	Telefax: +49 (0) 69 / 400 3019-64
Place:	D-63069 Offenbach	
Street:	Schumannstr. 142/144	
Company name:	MORPHISTO GmbH	

<u>number:</u>

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Skin Corr. 1; H314 Eye Dam. 1; H318 Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

The mixture was classified as corrosive precautionary due to an extreme pH-value.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

sodium hypochlorite

Signal word:

Pictograms:



Hazard statements

H314	Causes severe skin burns and eye damage.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P260	Do not breathe mist/vapours/spray.
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



according to UK REACH Regulation

Sodium Hypochlorite 1.25 %							
Revision date: 06.11.2023	Product code: 14389.xxxxx	Page 2 of 11					
P305+P351+P338	water or shower. 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.						
Labelling of packages v	where the contents do not exceed 125 ml						
Signal word:	Danger						
Pictograms:							
Harard statements	▼						

Hazard statements

H314-H412

Precautionary statements

P260-P280-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

Hazardous components

CAS No	Chemical name						
	EC No	EC No Index No REACH No					
	Classification (GB CLP Regulation)						
7681-52-9	sodium hypochlorite	sodium hypochlorite					
	231-668-3 017-011-00-1 01-2119488154-34						
	Skin Corr. 1B, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 1; H314 H318 H400 H410 EUH031						

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity		
	Specific Conc. L	Limits, M-factors and ATE			
7681-52-9	231-668-3	sodium hypochlorite	1 - < 5 %		
		20000 mg/kg; oral: LD50 = 1100 mg/kg Aquatic Acute 1; H400: M=10 1; H410: M=1 EUH; EUH031: >= 5 - 100			

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. First aider: Pay attention to self-protection! IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for



according to UK REACH Regulation

Sodium Hypochlorite 1.25 %

Revision date: 06.11.2023

Product code: 14389.xxxxx

Page 3 of 11

breathing. Take off immediately all contaminated clothing. If unconscious but breathing normally, place in recovery position and seek medical advice.

After inhalation

Medical treatment necessary. Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. If skin irritation occurs: Get medical advice/attention. Wash with plenty of water. Take off immediately all contaminated clothing and wash it before reuse. In all cases of doubt, or when symptoms persist, seek 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. Call a physician immediately.

After ingestion

Observe risk of aspiration if vomiting occurs. Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Do not allow a neutralisation agent to be drunk. Never give anything through the mouth to an unconscious person. Rinse mouth immediately and drink plenty of water. Call a physician immediately.

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

SECTION 11: Toxicological information

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings. Suitable: Carbon dioxide (CO2), alcohol-resistant foam, dry extinguishing agent, water spray.Adjust extinguishing measures to the environment.

Unsuitable extinguishing media

Unsuitable: Do not use water in full jet.

5.2. Special hazards arising from the substance or mixture

Non-flammable. 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

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

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.



Sodium Hypochlorite 1.25 %

according to UK REACH Regulation

Revision date: 06.11.2023

Product code: 14389.xxxxx

Page 4 of 11

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. 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.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

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. General protection and hygiene measures - see section 7.1

Further information on handling

Decomposes when heated, releasing oxygen, dichloroxide, chlorine or hydrogen chloride. Avoid release to the environment.

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. Due to gaseous decomposition products, overpressure can occur in tightly sealed containers. No metal containers. Keep only in the original container at temperature not exceeding 30 °C.Protect from light.

Hints on joint storage

Do not store together with acids. Recommended 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



according to UK REACH Regulation

Sodium Hypochlorite 1.25 %

Revision date: 06.11.2023

Product code: 14389.xxxxx

Page 5 of 11

DNEL/DMEL values

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

PNEC values

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

8.2. Exposure controls



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

Eye/face protection

Suitable eye protection: goggles. Wear eye/face protection.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). NBR (Nitrile rubber). CR (polychloroprenes, Chloroprene rubber). Butyl rubber. fluoroelastomer (FKM).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. Take off immediately all contaminated clothing and wash it before reuse.



according to UK REACH Regulation Sodium Hypochlorite 1.25 %

Revision date: 06.11.2023

Product code: 14389.xxxx

Page 6 of 11

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

No special measures are necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid	
Colour:	colourless slightly yellowish	
Odour:	weak nach Chlorine (Cl2).	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and		not determined
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):		11-12
Viscosity / kinematic:		not determined
Water solubility:		easily soluble
(at 20 °C)		
Solubility in other solvents		
not determined		
Partition coefficient n-octanol/water:		not determined
Vapour pressure:		not determined
Density (at 20 °C):		1,00 g/cm³
Relative vapour density:		not determined
Particle characteristics:		not applicable
9.2. Other information		
Information with regard to physical ha	zard classes	
Explosive properties		
The product is not: Explosive.		
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

Possibility of hazardous reactions. No hazardous reaction when handled and stored according to provisions. Decomposes when heated, releasing oxygen, dichloroxide, chlorine or hydrogen chloride.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Acid, Peroxides, Oxidizing agent. Exothermic reaction with: Acids Oxidizing agents.



according to UK REACH Regulation

Sodium Hypochlorite 1.25 %

Revision date: 06.11.2023

Product code: 14389.xxxx

Page 7 of 11

10.4. Conditions to avoid

UV-radiation/sunlight.

10.5. Incompatible materials

Keep away from: Acid, Oxidizing agent, Peroxides. Information is given in subsection 10.3.

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.

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No Chemical name

CASINU										
	Exposure route	Dose		Species	Source	Method				
7681-52-9	sodium hypochlorite									
		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.

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.

Other information

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

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.



according to UK REACH Regulation

Sodium Hypochlorite 1.25 %

Revision date: 06.11.2023

Product code: 14389.xxxxx

Page 8 of 11

CAS No	Chemical name								
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method		
7681-52-9	sodium hypochlorite								
	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		Menidia peninsulae (tidal silverside)	suppliers SDS.			
	Crustacea toxicity	NOEC mg/l	0,007		American oyster (Crassostrea virginica)	suppliers SDS.			
	Acute bacteria toxicity	(EC50	>3 mg/l)	3 h	Activated sludge	suppliers SDS.			

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

Bioaccumulation is not expected.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
7681-52-9	sodium hypochlorite	-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

The product has not been tested.

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.

List of Wastes Code - residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - contaminated packaging



according to UK REACH Regulation

Sodium Hypochlorite 1.25 %

Revision date: 06.11.2023

Product code: 14389.xxxxx

No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation.

Page 9 of 11

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

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:14.2. UN proper shipping name:14.3. Transport hazard class(es):14.4. Packing group:

Inland waterways transport (ADN) 14.1. UN number or ID number:

14.2. UN proper shipping name: 14.3. Transport hazard class(es):

14.4. Packing group:

Marine transport (IMDG)

14.1. UN number or ID number: 14.2. UN proper shipping name: 14.3. Transport hazard class(es): 14.4. Packing group:

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:14.2. UN proper shipping name:14.3. Transport hazard class(es):

14.4. Packing group:

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS:

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

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

No

EU regulatory information	
Restrictions on use (REACH, annex XVII):	
Entry 3, Entry 75	
Information according to 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (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:



according to UK REACH Regulation

Sodium Hypochlorite 1.25 %

Revision date: 06.11.2023

Product code: 14389.xxxx

Page 10 of 11

sodium hypochlorite

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,2,3,4,5,6,7,8,9,10,11,12,13,15,16. Rev. 2,0, 11.02.2023, Individual safety data sheet based on 18545_collect Rev. 2,1; 06.11.2023; general adjustment(s)

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 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). Met. Corr: Corrosive to metals Skin Corr: Skin corrosion Eye Dam: Eye damage Aquatic Acute: Acute aquatic hazard Aquatic Chronic: Chronic aquatic hazard



according to UK REACH Regulation

Sodium Hypochlorite 1.25 %

Revision date: 06.11.2023

Product code: 14389.xxxxx

Page 11 of 11

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

Classification	Classification procedure
Skin Corr. 1; H314	On basis of test data
Eye Dam. 1; H318	On basis of test data
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

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.
H412	Harmful 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 data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)