

Safety Data Sheet

according to UK REACH Regulation

Sodium hypochlorite 12-14 %

Revision date: 22.05.2023

Product code: 16692.xxxxx

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

1.1. Product identifier

Sodium hypochlorite 12-14 %

UFI: C37G-M10N-H00W-DP4Y

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

Use of the substance/mixture

Use as laboratory reagent. The product is intended for research, analysis and scientific education.

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 number:

Poison Information Center Mainz, Germany, Tel: +49(0)6131/19240

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; caustic soda

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.
P391	Collect spillage.

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

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			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
7681-52-9	sodium hypochlorite, solution			10 - < 15 %
	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			
1310-73-2	Sodium hydroxide; caustic soda			< 1 %
	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. Limits, M-factors and ATE	
7681-52-9	231-668-3	sodium hypochlorite, solution	10 - < 15 %
		dermal: LD50 = 20000 mg/kg; oral: LD50 = 1100 mg/kg Aquatic Acute 1; H400: M=10 Aquatic Chronic 1; H410: M=1 EUH; EUH031: >= 5 - 100	
1310-73-2	215-185-5	Sodium hydroxide; caustic soda	< 1 %
		Skin Corr. 1A; H314: >= 5 - 100 Skin Corr. 1B; H314: >= 2 - < 5 Skin Irrit. 2; H315: >= 0,5 - < 2 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. Provide fresh air. First aider: Pay attention to self-protection! Remove contaminated, saturated clothing immediately. Symptoms of poisoning may develop several hours following exposure. Victim should be under medical observation for at least 48 hours after exposure.

After inhalation

If breathing is irregular or stopped, administer artificial respiration. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator. Call a physician immediately. Provide fresh air. In case of breathing difficulties administer oxygen.

After contact with skin

After contact with skin, wash immediately with:Water. Take off immediately all contaminated clothing and wash it before reuse. Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.

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

Adverse human health effects and symptoms: Gastric perforation. Do not allow a neutralisation agent to be drunk. Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink plenty of water. Call a physician immediately. By swallowing danger of perforation of the esophagus and the stomach exists (strong corrosive effects).

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

Corrosion Cough Danger of blindness! Gastric perforation Risk of serious damage to eyes. shortage of breath.

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. Atomized water. Foam. Dry extinguishing powder. Carbon dioxide (CO2).

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Non-flammable. In case of fire may be liberated: Oxygen. Chlorine (Cl2). Hydrogen chloride (HCl). Carbon

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monoxide (CO).

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
Suppress gases/vapours/mists with water spray jet. Use water spray jet to protect personnel and to cool endangered containers.

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. Provide adequate ventilation as well as local exhaust at critical locations. (See section 8.)

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Retain contaminated washing water and dispose it.

6.3. Methods and material for containment and cleaning up**Other information**

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. Cover drains. Ventilate affected area.

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. Avoid dust formation. Avoid contact with skin, eyes and clothes. Provide adequate ventilation as well as local exhaust at critical locations.

Advice on protection against fire and explosion

Contact with combustible material may cause fire. Keep away from heat.

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. Personal protective equipment must be determined according to the quantity and concentration of hazardous substances at the workplace. Wear solvent-resistant protective clothing. Material, alkali-resistant. Always close containers tightly after the removal of product. Street clothing should be stored separately from work clothing.

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.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed. Keep locked up. No metal containers. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaust at critical locations. Suitable material for floor covering: Material, leachate-proof. Due to gaseous decomposition products, overpressure can occur in tightly sealed containers. Keep only in the original container at temperature not exceeding 15 °C.

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Hints on joint storage

Do not store together with: Acids Food and fodder, Oxidizing substances. Explosives

Further information on storage conditions

 Keep container tightly closed in a cool, well-ventilated place. Store in a dry place. Protect from direct sunlight. 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/m ³	fibres/ml	Category	Origin
1310-73-2	Sodium hydroxide	-	2		STEL (15 min)	WEL

DNEL/DMEL values

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

PNEC values

CAS No	Substance	Value
7681-52-9	sodium hypochlorite, solution	
Freshwater		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

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe

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gas/fumes/vapour/spray. Ensure adequate ventilation. Use extractor hood (laboratory). 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. Tightly sealed safety glasses. 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 0,7mm NBR (Nitrile rubber) Layer thickness 0,4mm CR (polychloroprene, chloroprene rubber) Layer thickness 0,5mm Butyl caoutchouc (butyl rubber) Layer thickness 0,7mm fluoroelastomer (FKM). Layer thickness 0,7mm Breakthrough time (maximum wearing time): >480 min.

Skin protection

Use of protective clothing Material, leachate-proof.

Respiratory protection

Respiratory protection necessary at:
 Insufficient ventilation.

Suitable respiratory protective equipment:

Combination filtering device (EN 14387) TYP: B-P2 Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties
9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	light yellow
Odour:	stinging Chlorine (Cl ₂)
Melting point/freezing point:	-25 °C
Boiling point or initial boiling point and boiling range:	98 °C
Flammability:	not determined
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	not determined
Auto-ignition temperature:	not determined
Decomposition temperature:	>111 °C
pH-Value (at 20 °C):	12-13
Viscosity / kinematic: (at 20 °C)	2,222 mm ² /s
Water solubility: (at 20 °C)	completely miscible
Solubility in other solvents	not determined
Partition coefficient n-octanol/water:	-3,42
Vapour pressure: (at 20 °C)	23 hPa
Density (at 20 °C):	~1,24-1,26 g/cm ³
Relative vapour density:	not determined

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9.2. Other information

Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive.

Self-ignition temperature

Solid:

not applicable

Gas:

not applicable

Oxidizing properties

Not oxidising.

Corrosive to metals, Category 1

Other safety characteristics

Evaporation rate:

not determined

Sublimation point:

not determined

Softening point:

not determined

Pour point:

not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

Possibility of hazardous reactions. Reaction with: Acid. Corrosive to metals

10.2. Chemical stability

Stable under normal storage and handling conditions. May cause decomposition by long-term light influence.

10.3. Possibility of hazardous reactions

Exothermic reaction with: Acid, Peroxides, Oxidizing agent. Violent reaction with: Amines. Ammonia. Oxidizing agents. Reducing agent Formic acid acetic Anhydride. Methanol. Contact with acids liberates very toxic gas.

Release of: Chlorine (Cl₂).

10.4. Conditions to avoid

UV-radiation/sunlight. heat.

10.5. Incompatible materials

Keep away from: Acid, Oxidizing agent, Peroxides. Do not mix with: Acids. metals. Reducing agent Alkaline earth metals. Alkali metals. Acid. Ammonia. amines. Water. Combustible substance. Metalloxid.

10.6. Hazardous decomposition products

Resulting from the use of the product: Chlorine. Contact with acids liberates toxic gas. Oxygen. Chlorine (Cl₂). Hydrochloric gas.

Further information

Contact with acids: release of chlorine. Fire Danger: Avoid contact with combustible materials. On contact with nitrogen compounds: release of NCl₃ (explosion hazard)

SECTION 11: Toxicological information

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

Toxicokinetics, metabolism and distribution

No information available.

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				
	oral	LD50 mg/kg 1100	Rat	suppliers SDS.	
	dermal	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.

Additional information on tests

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

Practical experience

Following inhalation Corrosive to the respiratory tract. May cause respiratory irritation. In case of ingestion Ingestion causes burns of the upper digestive and Respiratory tract. Following skin contact Causes severe 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.

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	96 h	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	48 h	Daphnia magna (Big water flea)	suppliers SDS.
	Fish toxicity	NOEC mg/l	0,04	28 d	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; caustic soda					
	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: 2h In water, light-induced degradation occurs in the near-surface layer.

12.3. Bioaccumulative potential

No information available.

Partition coefficient n-octanol/water

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

12.4. Mobility in soil

No information available.

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. hazardous to water (WGK 2)

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Danger to drinking water is already existing with extremely small quantities leaking into the ground. Harmful to aquatic life.

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. Must not be disposed with household waste. Contents / container can be disposed of in accordance with national regulations. Environmental properties

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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

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: UN 1791
14.2. UN proper shipping name: HYPOCHLORITE SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: II
 Hazard 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

Other applicable information (land transport)

Excepted quantity: E2

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): 8
14.4. Packing group: II
 Marine pollutant: P
 Special Provisions: 223, 274, 900
 Limited quantity: 1 L
 Excepted quantity: E1
 EmS: F-A, S-B

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): 8
14.4. Packing group: II
 Hazard label: 8

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Special Provisions:	A3	
Limited quantity Passenger:	0,5 L	
Passenger LQ:	Y841	
Excepted quantity:	E2	
IATA-packing instructions - Passenger:		852
IATA-max. quantity - Passenger:		5 L
IATA-packing instructions - Cargo:		856
IATA-max. quantity - Cargo:		60 L

Other applicable information (air transport)

Excepted quantity: E2
Passenger-LQ: Y841

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes



Danger releasing substance: HYPOCHLORITE SOLUTION

14.6. Special precautions for user

Warning: strongly corrosive.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

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 (SEVESO III):

41 Mixtures of sodium hypochlorite classified as Aquatic Acute Category 1 [H400] containing less than 5 % active chlorine and not classified under any of the other hazard categories in Part 1 of Annex I. (-)

National regulatory information

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe employment restrictions for women of child-bearing age.

Water hazard class (D):

2 - obviously hazardous to water

Skin resorption/Sensitization:

Permeates easily through outer skin and causes poisoning. Causes allergic hypersensitivity reactions.

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; caustic soda

SECTION 16: Other information

Changes

Rev. 2,0; 22.05.2023; Recreation from collect_SDB 15695

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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>

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

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for adhering to existing laws and regulations. The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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