

# EC Safety Data Sheet

according to UK REACH Regulation

## CERTDOS 5780

Print date: 25. 03. 2024

Product code: 5780

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

#### 1.1 Product identifier

CERTDOS 5780

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

##### Use of the substance/the mixture

Combination product for boiler water treatment

Boiler descaling agent, oxygen binding agent

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

Company name: CERTUSS Dampfautomaten GmbH & Co. KG  
Street: Hafenstr. 65  
City: D-47809 Krefeld  
Phone: +49 (0) 2151 578-0  
Contact partner: Mr. Hamacher  
E-mail: t.hamacher@certuss.com  
Informing department: Technical Director  
Monday to Thursday from 9 – 16 (9 a.m. to 4 p.m.), Friday 9 – 14 (9 a.m. to 2 p.m.)  
Emergency number +49 (0)2151 578-123 outside business hours

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture GB CLP Regulation

Skin Corr. 1; H314

Eye Dam. 1; H318

Full text of hazard statements: see SECTION 16.

#### 2.2. Label elements

##### GB CLP Regulation

##### Hazard components for labelling

sodium metabisulphite sodium hydroxide;  
caustic soda**Signal word:** Danger**Pictograms:**

##### Hazard statements

H314 Causes severe skin burns and eye damage.

##### Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P264 Wash Hände thoroughly after handling.  
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
P363 Wash contaminated clothing before reuse.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P310 Immediately call a POISON CENTER/doctor.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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P310 Immediately call a POISON CENTER/doctor.  
P405 Store locked up.  
P501 Dispose of contents/container to geregelter Entsorgung.

### 2.3. Other hazards

No information available.

## 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)			
7681-57-4	sodium metabisulphite			5 – 10 %
	231-673-0	016-063-00-2		
	Acute Tox. 4, Eye Dam. 1; H302 H318 EUH301			
1310-73-2	sodium hydroxide; caustic soda			1 – 5 %
	215-185-5	011-002-00-6	01-2119457892-27	
	Met. Corr. 1, Skin Corr. 1A; H290 H314			

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

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
7681-57-4	231-673-0	sodium metabisulphite	5 – 10 %
		oral: LD50 = 1130 mg/kg	
1310-73-2	215-185-5	sodium hydroxide; caustic soda	1 – 5 %
		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	

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down.

#### After inhalation

Provide fresh air. Medical treatment necessary.

#### After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

#### 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

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

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

No information available.

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

Treat symptomatically.

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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

##### **Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

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

Non-flammable.

#### 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.

### 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.

#### 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.

#### 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.

##### **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.

#### 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 exhaust at critical locations.

##### **Hints on joint storage**

No special measures are necessary.

#### 7.3. Specific end use(s)

Kombinationsprodukt zur Kesselwasserbehandlung Kesselsteingegenmittel, Sauerstoffbinder

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

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

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### DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
1310-73-2	odium hydroxide; caustic soda			
Worker DNEL, long-term		inhalation	local	1 mg/m <sup>3</sup>
Consumer DNEL, langfristig		inhalation	local	1 mg/m <sup>3</sup>

### PNEC values

CAS No	Substance	Environmental compartment
1310-73-2	sodium hydroxide; caustic soda	
Freshwater		

### 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.

#### Individual protection measures, such as personal protective equipment Eye/face protection

Suitable eye protection: goggles.

#### 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.

#### Skin protection

Use of protective clothing.

#### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	yellow
Odour:	odourless
Melting point/freezing point:	-4 °C
Boiling point or initial boiling point and boiling range:	100 °C
Flammability:	not determined
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
pH-Value (at 20 °C):	12,3
Water solubility:	completely miscible
Solubility in other solvents	not determined
Partition coefficient n-octanol/water:	not determined
Vapour pressure:	not determined
Density:	1,19 g/cm.
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.

Oxidizing properties

The product is not: oxidising.

#### Other safety characteristics

Evaporation rate:

not determined

Solvent content:

0,0 %

Solid content:

not determined

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Possibility of hazardous reactions.

### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions

Exothermic reaction with: Acid, Peroxides, Oxidizing agent.

### 10.4. Conditions to avoid

none

### 10.5. Incompatible materials

Keep away from: Acid, Oxidizing agent, Peroxides.

### 10.6. Hazardous decomposition products

No known hazardous decomposition products.

## 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) 12840,9 mg/kg

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7681-57-4	sodium metabisulphite;				
	oral	LD50 1130 mg/kg	Rat	GESTIS	

#### 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

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

### 11.2. Information on other hazards

#### Further information

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

## SECTION 12: Ecological information

### 12.1. Toxicity

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

CAS No	Chemical name						
	Aquatic toxicity	Dose	[h]	[d]	Species	Source	Method
7681-57-4	sodium metabisulphite						
	Acute fish toxicity	LC50	150 - 220 mg/l	96 h	Onchorhynchus mykiss		
1310-73-2	sodium hydroxide; caustic soda						
	Acute fish toxicity	LC50	45,4 mg/l	96 h	Onchorhynchus mykiss		
	Acute crustacea toxicity	EC50	40,4 mg/l	48 h	Ceriodaphnia sp.	Ecotoxicology and Environmental Safety,4	other: acute 48-h immobilization test ac

### 12.2. Persistence and degradability

The product has not been tested.

### 12.3. Bioaccumulative potential

The product has not been tested.

### 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. The product has not been tested.

### 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

No information available.

#### Further information

Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

#### List of Wastes Code - residues/unused products

070799 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fine chemicals and chemical products not otherwise specified; wastes not otherwise specified

#### 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

Wash with plenty of water. Completely emptied packages can be recycled.

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### SECTION 14: Transport information

#### Land transport (ADR/RID)

<b>14.1. UN number or ID number:</b>	UN 1760
<b>14.2. UN proper shipping name:</b>	CORROSIVE LIQUID, N.O.S. (sodium hydroxide; caustic soda)
<b>14.3. Transport hazard class(es):</b>	8
<b>14.4. Packing group:</b>	II
Hazard label:	8



Classification code:	C9
Special Provisions:	274
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	80
Tunnel restriction code:	E

#### **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

Not subject to 2012/18/EU (SEVESO III)  
(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): 1 - slightly hazardous to water

#### **15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

### SECTION 16: Other information

#### 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

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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
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: 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
Skin Corr. 1; H314	On basis of test data
Eye Dam. 1; H318	On basis of test data

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

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
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 data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)

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