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

1.1. Product identifier

Trade name

Chemtec NaOH (Sodium hydroxide)
REACH-Registration no. 01-2119457892-27-XXXX

Use of the substance/mixture

Cleaning additive

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

Identified Uses

At the moment we have no information available for the identified uses. In the presence of these data will be included in the safety data sheet.

Uses advised against

There are no uses have been identified, advised against.

1.3. Details of the supplier of the safety data sheet

Address

Chemtec Chemicals GmbH
August-Siemsen-Straße 13
21521 Dassendorf / Germany
phone. +49 4104 91897-99
e-mail. info@ctc-chemtec.de
Information provided by / telephone Department product safety

1.4. Emergency telephone number

Medical Emergency information in case of poisoning: Poison Information Center Mainz – 24h –
Phone: +49 (0) 6131 19240 *(advisory service in German or English language)*

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (Regulation (EC) No. 1272/2008)

Skin Corr. 1A H314
Met. Corr. 1 H290

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms

Signal word

Danger

Hazard statements

H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.

Precautionary statements

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face 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/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.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310	Immediately call a POISON CENTER or doctor.

Labelling in accordance with EC directives 1999/45/EC and 67/548/EEC

SECTION 3: Composition/information on ingredients

3.1. Substances

Hazardous ingredients

Sodium hydroxide

CAS No.	1310-73-2			
EINECS no.	215-185-5			
REACH-Registration no.	01-2119457892-27-XXXX			
Concentration		>=	99	%

Skin Corr. 1A	H314
Met. Corr. 1	H290

Complete text of H-phrases in Chapter 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove affected person from danger area, lay him down. Remove contaminated, soaked clothing immediately and dispose of safely. Irregular breathing/no breathing: artificial respiration. If the patient is likely to become unconscious, place and transport in stable sideways position.

After inhalation

Remove the casualty into fresh air and keep him calm. Summon a doctor immediately.

After skin contact

Wash immediately with plenty of water for several minutes. Summon a doctor immediately. Take off contaminated clothing and wash before reuse.

After eye contact

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Summon a doctor immediately.

After ingestion

Rinse out mouth and give plenty of water to drink. Do not induce vomiting. Summon a doctor immediately.

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

The following symptoms may occur: Coughing, Nausea, Vomiting, Abdominal pains, Causes burns. Causes serious eye irritation.

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

Product itself is non-combustible; adapt fire extinguishing measures to surrounding areas.

Non suitable extinguishing media

Full water jet, Carbon dioxide

5.2. Special hazards arising from the substance or mixture

In case of combustion evolution of dangerous gases possible. Reacts violently with water. Reactions with metals, with evolution of hydrogen.

5.3. Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing.

Collect contaminated fire-fighting water separately, must not be discharged into the drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use breathing apparatus if exposed to vapours/dust/aerosol.

6.2. Environmental precautions

Do not allow to enter drains or waterways. Do not discharge into the subsoil/soil.

6.3. Methods and material for containment and cleaning up

Pick up mechanically. Avoid raising dust. When picked up, treat material as prescribed under Section 13 "Disposal".

6.4. Reference to other sections

Information regarding personal protective measures, see Section 8. Information regarding waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Keep container tightly closed. Handle and open container with care. Avoid dust formation. When diluting, always stir product into water.

Take off immediately all contaminated clothing. Avoid contact with skin and eyes. Keep seperated from food-stuffs and feed-stocks. At work do not eat, drink, smoke or take drugs. Wash hands before breaks and after work. Do not breathe dust.

Advice on protection against fire and explosion

No special measures required.

7.2. Conditions for safe storage, including any incompatibilities

Do not use metal containers. Use containers made of Polyethylene.

Do not store together with: Acids, Halogenated hydrocarbons

storage category TRGS 510	8 B	Not combustible corrosive hazardous substances

Keep container in a cool, well-ventilated place. Store in a dry place. Product is hygroscopic.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Derived No/Minimal Effect Levels (DNEL/DMEL)

Sodium hydroxide

Conditions	Worker	Long term	inhalative	Local effects
Concentration	1	mg/m³		
Conditions	General Population	Long term	inhalative	Local effects
Concentration	1	mg/m³		

8.2. Exposure controls

Respiratory protection

Use breathing apparatus in dust-laden atmosphere. Short term: filter apparatus, Filter P2

Hand protection

Appropriate Material	nitrile		
Material thickness	>=	0,4	mm
Breakthrough time	>=	480	min

Eye protection

Tightly fitting safety glasses

Body protection

Alkali-resistant protective clothing

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Form	Flakes
Colour	white

Odour odourless

Form	Lumps
Form	Beads

Odour threshold

Remarks	No data available

pH value

Value	14	
Temperature	20	°C

Melting point/freezing point

Value	319	°C

Initial boiling point and boiling range

Value	1390	°C

Flash point

Remarks	Not applicable

Evaporation rate

Remarks	No data available

Flammability (solid, gas)

Not ignitable

Upper/lower flammability or explosive limits

Remarks	No data available			

Vapour pressure

Value		3,5		hPa
Temperature		800	°C	

Vapour density

Remarks	No data available			

Relative density

Value		2,13		g/cm³
Temperature		20	°C	

Bulk density

Value	appr.	1,14		g/cm³
Temperature		20	°C	

Solubility(ies)

Medium	Water			
Value		1090		g/l
Temperature		20	°C	

Partition coefficient: n-octanol/water

Remarks	Not applicable

Auto-ignition temperature

Remarks	not determined

Decomposition temperature

Remarks	No data available

Viscosity

Remarks	Not applicable

Explosive properties

Remarks	This product is not potentially explosive.

Oxidising properties

evaluation	not oxidizing

SECTION 10: Stability and reactivity

10.1. Reactivity

Exotherms reaction. Corrosive to metals.

10.2. Chemical stability

Under normal conditions of storage and use is the product stable.

10.3. Possibility of hazardous reactions

Reactions with metals, with evolution of hydrogen. Strong exothermic reaction with acids. Reacts violently with water.

10.4. Conditions to avoid

Protect from atmospheric moisture and water.

10.5. Incompatible materials

Product reacts with: Aluminium, Zinc, tin, Acids, Nitriles, Cyanide, Ammonium compounds, Nitro compounds, Reducing agents

10.6. Hazardous decomposition products

Hydrogen, Corrosive gases/vapours

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity (Components)

Sodium hydroxide

Species	rat		
LD50	500		mg/kg

Skin corrosion/irritation

evaluation: strongly corrosive

Serious eye damage/irritation

evaluation: strongly corrosive

Sensitization

No sensitizing effect known.

Mutagenicity

No indications of genotoxicity are available.

Carcinogenicity

Indications of possible carcinogenic effects are not available.

Reproductive toxicity

No indications of reproduction toxicity are available.

Specific Target Organ Toxicity (STOT)

Single exposure

No data available

Repeated exposure

No data available

Aspiration hazard

No information available.

Other information

Strong caustic effect in the mouth and throat and danger of perforation of the esophagus and stomach.

SECTION 12: Ecological information

Do not discharge into the drains/surface waters/groundwater. The product is an alkaline solution. Neutralization is normally necessary before a waste water is discharged into sewage treatment plants.

12.1. Toxicity

Harmful effect due to pH shift.

Fish toxicity (Components)

Sodium hydroxide

Species	rainbow trout (Oncorhynchus mykiss)		
LC50	45,4		mg/l
Duration of exposure	96	h	
Species	goldfish (Carassius auratus)		
LC50	160		mg/l
Duration of exposure	24	h	
Species	golden orfe (Leuciscus idus)		
LC50	189		mg/l
Duration of exposure	48	h	
Species	Gambusia affinis		
LC50	125		mg/l
Duration of exposure	24	h	

Daphnia toxicity (Components)

Sodium hydroxide

Species	Daphnia magna			
EC50	40	to	240	mg/l

Bacteria toxicity (Components)

Sodium hydroxide

Species	Photobacterium phosphoreum		
EC50	22		mg/l
Duration of exposure	15	min	

12.2. Persistence and degradability

Biodegradability

evaluation	not degradable
Remarks	Inorganic product, cannot be eliminated from the water by biological purification processes.

12.3. Bioaccumulative potential

Partition coefficient: n-octanol/water

Remarks	Not applicable

12.4. Mobility in soil

Mobile in soils

12.5. Results of PBT and vPvB assessment

Evaluation of persistance and bioaccumulation potential

The Substance do not meets PBT-criterions. The Substance do not meets vPvB-criterions.

12.6. Other adverse effects

Behaviour in sewers [waste treatment plants]

The product is an alkaline solution. Neutralization is normally necessary before a waste water is discharged into sewage treatment plants.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations for the product

Allocation of a waste code number, according to the European Waste Catalogue (EWC), should be carried out in agreement with the regional waste disposal company.

Disposal recommendations for packaging

Packaging that cannot be cleaned should be disposed off in agreement with the regional waste disposal company.

SECTION 14: Transport information

Land transport ADR/RID

14.1. UN number	1823
14.2. UN proper shipping name	SODIUM HYDROXIDE, SOLID
14.3. Transport hazard class(es)	8
Label	8
14.4. Packing group	II
14.5. Environmental hazards	-
Tunnel restriction code	E

14.6. Special precautions for user	No information available.
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	No information available.

SECTION 15: Regulatory information

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

The product is classified and labelled in accordance with EC directives/the relevant national laws.

SVHC

The product does not contain substances of very high concern (SVHC).

15.2. Chemical safety assessment

For this substance a chemical safety assessment has been carried out.

SECTION 16: Other information

Hazard statements listed in Chapter 3

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.

Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: ***
This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.