

1. Product and company identification

Product identifier

Trade name: Bevi Liquid

This safety data sheet pertains to the following products:

Art. Nr. 88.307.001 for packages < 1 litres

Art. Nr. 88.307.002 for packages < 5 litres

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

General use: Cleaning agent
For professional use only.

Details of the supplier of the safety data sheet

Company name: BeviClean GmbH

Street/POB-No.: Carl-Benz-Straße 5

Postal Code, city: DE-56218 Mülheim-Kärlich

E-mail: info@beviclean.com

Telephone: +49 (0) 2630 / 966 30-0

Telefax: +49 (0) 2630 / 966 30-20

Department responsible for information:

Dirk Bersch, Telephone: +49 (0) 2630 / 966 30-0, info@beviclean.com

Emergency phone number

Dirk Bersch, Telephone: +49 (0) 2630 / 966 30-0

2. Hazards identification

Emergency overview

Appearance: Form: liquid

Color: blue

Odor: odorless

Classification: Corrosive to Metals - Category 1. Skin Corrosion - Category 1A.

Hazard symbols:



Signal word: **Danger**

Hazard statements: May be corrosive to metals.

Causes severe skin burns and eye damage.

Precautionary statements: Keep out of reach of children.

Do not breathe vapors.

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

IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/or shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER/doctor.

Store locked up.

Dispose of contents/container to hazardous or special waste collection point.

Regulatory status

This material is considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200).

Hazards not otherwise classified

Contains phosphates. May contribute to the eutrophication of water supplies.
see section 11: Toxicological information

3. Composition / Information on ingredients

Chemical characterization: Mixture of the substances listed below with non-hazardous additions.

Relevant ingredients:

CAS No.	Designation	Concentration	Classification
CAS 1310-73-2	Sodium hydroxide	< 10 %	Corrosive to Metals - Category 1. Skin Corrosion - Category 1A.
CAS 3794-83-0	Tetranatrium-(1-hydroxyethyliden) bisphosphonat	< 10 %	Acute Toxicity - oral - Category 4. Eye Irritation - Category 2A.
CAS 85409-22-9	Benzalkonium chloride (C12-C14)	< 10 %	Acute Toxicity - oral - Category 4. Skin Corrosion - Category 1B. Aquatic toxicity - acute - Category 1.

4. First aid measures

General information: First aider: Pay attention to self-protection!

In case of inhalation: Provide fresh air. Keep victim calm.
If breathing becomes irregular or ceases, apply rescue breathing or artificial respiration immediately, where required supply oxygen. Immediately get medical attention.

Following skin contact: Clean with plenty of water. If possible, also wash with polyethylene glycol 400. Cover with sterile dressing material to protect against infection. Immediately get medical attention.
Take off immediately all contaminated clothing.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses. Subsequently seek the immediate attention of an ophthalmologist.

After swallowing: Never give anything by mouth to an unconscious person. Rinse mouth immediately and drink plenty of water.
Do not induce vomiting. Risk of perforation! Do not try to neutralize.
Immediately get medical attention.

Most important symptoms/effects, acute and delayed

Causes severe skin burns and eye damage.

Information to physician

Treat symptomatically.

5. Fire fighting measures

Flash point/flash point range: No data available

Auto-ignition temperature: No data available

Suitable extinguishing media: Product is non-combustible. Extinguishing materials should therefore be selected according to surroundings.

Specific hazards arising from the chemical

Product is non-combustible.

Fires in the immediate vicinity may cause the development of dangerous vapors.

In case of fire may be liberated: Nitrogen oxides (NO_x), phosphorus oxides, carbon monoxide and carbon dioxide

Protective equipment and precautions for firefighters:

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

Additional information: Cool endangered containers with water spray and, if possible, remove from danger zone.
Use a water fog to control vapors. Do not breathe fumes.
Product reacts alkaline. Do not allow fire water to penetrate into surface or ground water.

6. Accidental release measures

Personal precautions: Avoid contact with the substance.
Do not breathe vapor or spray. Wear appropriate protective equipment.
When vapors form, use respiratory protection. Ensure adequate ventilation, especially in confined areas.

Environmental precautions: Do not allow to penetrate into soil, waterbodies or drains.

Methods for clean-up: Soak up with absorbent materials such as sand, siliceus earth, acid- or universal binder. Store in special closed containers and dispose of according to ordinance.
To clean the floor and all object contaminated by this material, use water.

7. Handling and storage

Handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed. Avoid contact with skin, eyes, and clothing.
Do not breathe vapor or spray. Wear suitable protective clothing. When using do not eat, drink or smoke.

Storage

Requirements for storerooms and containers: Keep container tightly closed and dry.

Hints on joint storage: Not let come into contact with light metals. Avoid contact with acids.
Keep away from food, drink and animal feedingstuffs.

Further details: Product reacts alkaline.

8. Exposure controls / personal protection

Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
1310-73-2	Sodium hydroxide	USA: ACGIH: Ceiling	2 mg/m ³
		USA: IDLH: TWA	10 mg/m ³
		USA: NIOSH: Ceiling	2 mg/m ³
		USA: OSHA: TWA	2 mg/m ³

Engineering controls

Provide good ventilation and/or an exhaust system in the work area.
See also information in chapter 7, section storage.

Personal protection equipment (PPE)

Eye/face protection: Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.

Skin protection: Wear suitable protective clothing.
Protective gloves according to OSHA Standard - 29 CFR: 1910.138.
Glove material: nitrile rubber ($\geq 0,35$ mm) or butyl caoutchouc (butyl rubber) ($\geq 0,35$ mm)
Breakthrough time: >480 min.
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Respiratory protection: Use a breathing protection against vapors/aerosol. Use combination filter type A/P according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2.

The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

General hygiene considerations: Avoid contact with skin, eyes, and clothing. Take off immediately all contaminated clothing.

Do not breathe vapor or spray. Wear appropriate protective equipment.

Work place should be equipped with a shower and an eye rinsing apparatus.

After work, wash hands and face.

When using do not eat, drink or smoke.

Environmental exposure controls

Refer to 6.: Section "Environmental precautions".

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance:	Form: liquid Color: blue
Odor:	odorless
Odor threshold:	No data available
pH:	>= 14
Melting point/freezing point:	approx. 41 - 44.6 °F
Initial boiling point and boiling range:	approx. 275 °F
Flash point/flash point range:	No data available
Evaporation rate:	No data available
Flammability:	No data available
Explosion limits:	No data available
Vapor pressure:	at 68 °F: approx. 5 hPa
Vapor density:	No data available
Density:	at 68 °F: approx. 1.3 g/mL
Water solubility:	at 68 °F: complete miscible
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Thermal decomposition:	No data available
Additional information:	No data available

10. Stability and reactivity

Reactivity:	May be corrosive to metals.
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	Exothermic reactions with acids.
Conditions to avoid:	heating
Incompatible materials:	Light metals, acids
Hazardous decomposition products:	In case of fire may be liberated: Nitrogen oxides (NOx), phosphorus oxides, carbon monoxide and carbon dioxide
Thermal decomposition:	No data available

11. Toxicological information

Toxicological tests

Toxicological effects: The statements are derived from the properties of the single components. No toxicological data is available for the product as such.

Acute toxicity (oral): Based on available data, the classification criteria are not met.
ATEmix (calculated): 2000 mg/kg > ATE ≤ 5000 mg/kg.

Information about Tetrasodium (1-hydroxyethylidene)bisphosphonate:
LD50 Rat, oral: 990 mg/kg.
Harmful if swallowed.

Information about Benzalkonium chloride (C12-C14):
LD50 Rat, oral: 400 mg/kg.
Harmful if swallowed.

Acute toxicity (dermal): Lack of data.
Acute toxicity (inhalative): Lack of data.
Skin corrosion/irritation: Skin Corrosion -
Category 1A = Causes severe skin burns and eye damage.
Serious eye damage/irritation: Lack of data.
Sensitisation to the respiratory tract: Lack of data.
Skin sensitisation: Lack of data.
Germ cell mutagenicity/Genotoxicity: Lack of data.
Carcinogenicity: Lack of data.
Reproductive toxicity: Lack of data.
Effects on or via lactation: Lack of data.
Specific target organ toxicity (single exposure): Lack of data.
Specific target organ toxicity (repeated exposure): Lack of data.
Aspiration hazard: Lack of data.

Symptoms

In case of ingestion: Burns in the mouth, pharynx, oesophagus, and gastrointestinal tract.
Risk of perforation in the oesophagus and stomach.
After contact with skin: causes poorly healing wounds
After eye contact: Danger of loss of sight

12. Ecological information

Ecotoxicity

Aquatic toxicity: Harmful effects on water organisms by modification of pH-value.

Information about Sodium hydroxide:
Forms corrosive mixtures with water even if diluted.

Fish toxicity:
LC50 *Oncorhynchus mykiss*: 45.4 mg/L/96h.
LC50 *Lepomis macrochirus* (bluegill): 99 mg/L/48h.

Daphnia toxicity:
EC50 *Daphnia magna* (Big water flea): 76 mg/L/24h.

Mobility in soil

No data available

Persistence and degradability

Further details: Information about Sodium hydroxide: Methods for the determination of biodegradability are not applicable to inorganic substances.
Information about Tetrasodium (1-hydroxyethylidene)bisphosphonate: not easily degradable.
Information about Benzalkonium chloride (C12-C14): 95%/28d, readily degradable (OECD 301 B).

Additional ecological information

General information: Contains phosphates. May contribute to the eutrophication of water supplies.
Do not allow to enter into ground-water, surface water or drains.

13. Disposal considerations

Product

Recommendation: Special waste. Dispose of waste according to applicable legislation.

Package

Recommendation: Dispose of waste according to applicable legislation.
Non-contaminated packages may be recycled.

14. Transport information

14.2 UN proper shipping name

ADR/RID, IMDG, IATA-DGR: UN 1824, SODIUM HYDROXIDE SOLUTION

Transport hazard class(es)

ADR/RID: Class 8, Code: C5
IMDG: Class 8, Subrisk -
IATA-DGR: Class 8



Packing group

ADR/RID: II

Environmental hazards

Marine pollutant: no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

USA: Department of Transportation (DOT)

Identification number: UN1824
Proper shipping name: UN 1824, SODIUM HYDROXIDE SOLUTION
Hazard class or Division: 8
Labels: 8
Special Provisions: B2, IB2, N34, T7, TP2
Packaging – Exceptions: 154
Packaging – Non-bulk: 202
Packaging – Bulk: 242
Quantity limitations – Passenger aircraft / rail: 1 L
Quantity limitations – Cargo only: 30 L
Vessel stowage – Location: A
Vessel stowage – Other: 52



Sea transport (IMDG)

UN number:	UN 1824
Proper shipping name:	UN 1824, SODIUM HYDROXIDE SOLUTION
Class or division, Subsidiary risk:	Class 8, Subrisk -
EmS:	F-A, S-B
Special Provisions:	-
Limited quantities:	1 L
Excepted quantities:	E2
Package - Instructions:	P001
Package - Provisions:	-
IBC - Instructions:	IBC02
IBC - Provisions:	-
Tank instructions - IMO:	-
Tank instructions - UN:	T7
Tank instructions - Provisions:	TP2
Stowage and handling:	Category A.
Segregation:	SG35
Properties and observations:	Colourless liquid. Corrosive to aluminium, zinc and tin. Reacts with ammonium salts, evolving ammonia gas. Causes burns to skin, eyes and mucous membranes. Reacts violently with acids.
Marine pollutant:	no
Segregation group:	18

Air transport (IATA)

UN/ID number:	UN 1824
Proper shipping name:	UN 1824, SODIUM HYDROXIDE SOLUTION
Class or division, Subsidiary risk:	Class 8
Hazard label:	Corrosive
Excepted Quantity Code:	E2
Passenger and Cargo Aircraft: Ltd.Qty.:	Pack.Instr. Y840 - Max. Net Qty/Pkg. 0.5 L
Passenger and Cargo Aircraft:	Pack.Instr. 851 - Max. Net Qty/Pkg. 1 L
Cargo Aircraft only:	Pack.Instr. 855 - Max. Net Qty/Pkg. 30 L
Special Provisions:	A3 A803
Emergency Response Guide-Code (ERG):	8L

15. Regulatory information**National regulations - U.S. Federal Regulations**

Sodium hydroxide:	TSCA Inventory: listed TSCA HPVC: not listed
Tetranatrium-(1-hydroxyethyliden)bisphosphonat:	TSCA Inventory: listed TSCA HPVC: not listed
Benzalkonium chloride (C12-C14):	TSCA: listed - UVCB

National regulations - Great Britain

Hazchem-Code: 2R

16. Other information

Text for labeling: Contains < 10 % Sodium hydroxide, < 10 % Tetranatrium-(1-hydroxyethyliden)bisphosphonat, < 10 % Benzalkonium chloride (C12-C14). Safety data sheet available on request.
Contains Sodium hydroxide.

- Cationic surfactants 5 % or over but less than 15%.
- phosphates 5 % or over but less than 15%.
- Dyestuff.

Hazard rating systems:



NFPA Hazard Rating:

Health: 3 (Serious)

Fire: 0 (Minimal)

Reactivity: 0 (Minimal)

HMIS Version III Rating:

Health: 3 (Serious)

Flammability: 0 (Minimal)

Physical Hazard: 0 (Minimal)

Personal Protection: X = Consult your supervisor

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	0
	X

Abbreviations and acronyms:

Acute Toxicity: Acute toxicity
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
Aquatic toxicity - acute: Hazardous to the aquatic environment - acute
AS/NZS: Australian Standards/New Zealand Standards
CAS: Chemical Abstracts Service
CFR: Code of Federal Regulations
CLP: Classification, Labelling and Packaging
Corrosive to Metals: Corrosive to metals
DMEL: Derived minimal effect level
DNEL: Derived no-effect level
EC: European Community
EC50: Effective Concentration 50%
EN: European Standard
EQ: Exceeded quantities
Eye Irritation: Eye irritation
IATA: International Air Transport Association
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IMDG Code: International Maritime Dangerous Goods Code
LC50: Median lethal concentration
LD50: Lethal dose 50%
MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
OSHA: Occupational Safety and Health Administration
PBT: Persistent, bioaccumulative and toxic
PNEC: Predicted no-effect concentration
RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
Skin Corrosion: Skin corrosion
TRGS: Technical Rules for Hazardous Substances
UN: United Nations
vPvB: Very persistent and very bioaccumulative

Reason of change:

ADR/RID 2019

Date of first version:

5/18/2003

Department issuing data sheet

Contact person:

see section 1: Department responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.

Most recent product information is available at
<http://sumdat.net/69k89dw>

