

## 1. Product and company identification

### Product identifier

Trade name: Bevi Power sauer

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

General use: Cleaning agent for beer pipes

### Details of the supplier of the safety data sheet

Company name: BeviClean GmbH

Street/POB-No.: Carl-Benz-Straße 5

Postal Code, city: 56218 Mülheim-Kärlich

Germany

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: solid, Powder

Color: red

Odor: odorless

Classification: Skin Irritation - Category 2. Eye Irritation - Category 2A. Aquatic toxicity - chronic - Category 3.

Hazard symbols:



Signal word:

**Warning**

Hazard statements:

Causes skin irritation.

Causes serious eye irritation.

Harmful to aquatic life with long lasting effects.

Precautionary statements:

Wash hands and face thoroughly after handling.

Avoid release to the environment.

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

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

### Regulatory status

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

### Hazards not otherwise classified

see section 11: Toxicological information

## 3. Composition / Information on ingredients

Chemical characterization: NH<sub>2</sub>-SO<sub>3</sub>H, Sulfamic acid, Amidosulfuric acid, Amidosulfonic acid

CAS-Number: 5329-14-6

Relevant ingredients:

CAS No.	Designation	Concentration	Classification
CAS 5329-14-6	Amidosulfone acid	>= 80 %	Skin Irritation - Category 2. Eye Irritation - Category 2A. Aquatic toxicity - chronic - Category 3.

## 4. First aid measures

In case of inhalation:	Provide fresh air. Put victim at rest. If breathing becomes irregular or ceases, apply rescue breathing or artificial respiration immediately, where required supply oxygen. If victim is at risk of losing consciousness, position and transport on their side. Consult physician immediately.
Following skin contact:	After contact with skin, wash immediately with soap and plenty of water. Change contaminated clothing. In case of skin reactions, consult a physician.
After eye contact:	Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.
After swallowing:	Never give anything by mouth to an unconscious person. Drink large quantities of water. Do not induce vomiting. Seek medical attention.

### Most important symptoms/effects, acute and delayed

In case of inhalation: Cough, shortage of breath.  
In case of ingestion:  
Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

### Information to physician

Treat symptomatically. Product reacts acidic.

## 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

Hazardous vapors may form during fires.  
In case of fire may be liberated: sulphur oxides, nitrogen oxides (NO<sub>x</sub>), carbon monoxide and carbon dioxide.

Protective equipment and precautions for firefighters:	Wear self-contained breathing apparatus. Wear appropriate protective equipment.
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. Do not allow fire water to penetrate into surface or ground water. Fire water becomes acidic.

## 6. Accidental release measures

Personal precautions:	Avoid contact with skin, eyes, and clothing. Avoid generation of dust. Do not breathe dust. Wear personal protection equipment. Provide adequate ventilation.
Environmental precautions:	Do not allow to penetrate into soil, waterbodies or drains.
Methods for clean-up:	Collect dry and place in appropriate containers for disposal. Subsequent cleaning. To clean the floor and all object contaminated by this material, use water. Final cleaning: Use soda or another alkaline detergent for removal of residues.

## 7. Handling and storage

### Handling

Advices on safe handling: Whenever possible use closed equipment with this product.  
Provide adequate ventilation.  
Avoid contact with skin, eyes, and clothing.  
Avoid generation of dust. Do not breathe dust. Wear appropriate protective equipment.  
When using do not eat, drink or smoke.  
When diluting, always add the product to water. Never add water to the product.

### Storage

Requirements for storerooms and containers: Keep only in the original container. Keep container tightly closed and dry.  
storage temperature: No special measures are required.

Hints on joint storage: Not let come into contact with light metals.

## 8. Exposure controls / personal protection

### Exposure guidelines

Occupational exposure limit values:

Type	Limit value
USA: ACGIH: TWA	10 mg/m <sup>3</sup> (Dust limit value, inhalable fraction)
USA: ACGIH: TWA	3 mg/m <sup>3</sup> (Dust limit value, respirable fraction)
USA: OSHA: TWA	15 mg/m <sup>3</sup> (Dust limit value, inhalable fraction)
USA: OSHA: TWA	5 mg/m <sup>3</sup> (Dust limit value, respirable fraction)

### Engineering controls

Use acid resistant materials and devices.  
Inspect electric installations more frequently for corrosion damage.  
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: Light protective clothing  
Chemically resistant gloves according to OSHA Standard - 29 CFR: 1910.138.  
Glove material: rubber  
Breakthrough time: >480 min.  
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Respiratory protection: With the formation of dust, use a dust mask.  
Possible alternatives: filtering device (full mask or mouthpiece) with filter B-P2 according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2.

General hygiene considerations: Avoid contact with skin, eyes, and clothing. Change contaminated clothing.  
Do not breathe dust. Wear appropriate protective equipment.  
Have eye wash bottle or eye rinse ready at work place.  
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: solid, Powder Color: red
Odor:	odorless
Odor threshold:	No data available
pH:	at 68 °F, 10 g/L: 1.0
Melting point/freezing point:	401 °F
Initial boiling point and boiling range:	No data available
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: 0.0080 hPa at 212 °F: 0.025 hPa
Vapor density:	No data available
Density:	at 77 °F: 2.06 g/cm <sup>3</sup>
Water solubility:	at 68 °F: 213 g/L at 176 °F: 470 g/L
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Thermal decomposition:	408.2 °F
Bulk density:	800 - 1200 kg/m <sup>3</sup>
Additional information:	Molar mass: 97.09 g/mol

## 10. Stability and reactivity

Reactivity:	May be corrosive to metals.
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	At high temperatures, will react with alkali nitrites and nitrates as well as with other metal nitrates in explosive fashion and develop nitrogen. The product develops hydrogen in an aqueous solution in contact with metals. Reacts with alkalis with development of heat.
Conditions to avoid:	Keep away from heat. Avoid generation of dust.
Incompatible materials:	halogens, bases, oxidizing agents (nitrates, nitrites, nitric acid), metals with water.
Hazardous decomposition products:	In case of fire may be liberated: sulphur oxides, nitrogen oxides (NO <sub>x</sub> ).
Thermal decomposition:	408.2 °F

## 11. Toxicological information

### Toxicological tests

Acute toxicity:	LD50 Rat, oral: > 2000 mg/kg
	LD0 Rat, oral: 100 mg/kg
	LD50 Rat, dermal: > 2000 mg/kg

Toxicological effects:

- Acute toxicity (oral): Based on available data, the classification criteria are not met.
- Acute toxicity (dermal): Based on available data, the classification criteria are not met.
- Acute toxicity (inhalative): Lack of data.
- Skin corrosion/irritation: Skin Irritation - Category 2 = Causes skin irritation.
- Serious eye damage/irritation: Eye Irritation - Category 2A = Causes serious eye irritation.
- Sensitisation to the respiratory tract: Lack of data.
- Skin sensitisation: Lack of data.
- Germ cell mutagenicity/Genotoxicity: Based on available data, the classification criteria are not met.
- Carcinogenicity: Lack of data.
- Reproductive toxicity: Lack of data.
- Effects on or via lactation: Lack of data.
- Specific target organ toxicity (single exposure): Based on available data, the classification criteria are not met.
- Specific target organ toxicity (repeated exposure): Based on available data, the classification criteria are not met.
- Aspiration hazard: Based on available data, the classification criteria are not met.

### Symptoms

In case of inhalation: Cough, shortage of breath.  
In case of ingestion:  
Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

## 12. Ecological information

### Ecotoxicity

Aquatic toxicity: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Harmful effects on water organisms by modification of pH-value.

Effects in sewage plants: Before discharge into sewage plants the product normally needs to be neutralised.

### Mobility in soil

No data available

### Persistence and degradability

Further details: No data available

### Additional ecological information

General information: Do not allow to penetrate into soil, waterbodies or drains.

## 13. Disposal considerations

### Product

Recommendation: Dispose of waste according to applicable legislation.

### Package

Recommendation: Non-contaminated packages may be recycled.  
Single packs can be disposed of together with household waste.  
Large amounts:  
Waste key number EU: 150110 = Packings containing harmful residue.

## 14. Transport information

### UN number

ADR/RID, IMDG, IATA-DGR: UN 2967

### UN proper shipping name

ADR/RID, IMDG, IATA-DGR: UN 2967, SULPHAMIC ACID

### Transport hazard class(es)

ADR/RID: Class 8, Code: C2

IMDG: Class 8, Subrisk -

IATA-DGR: Class 8



### Packing group

ADR/RID: III

### 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: UN2967  
Proper shipping name: UN 2967, SULFAMIC ACID  
Hazard class or Division: 8  
Labels: 8  
Special Provisions: IB8, IP3, T1, TP33  
Packaging – Exceptions: 154  
Packaging – Non-bulk: 213  
Packaging – Bulk: 240  
Quantity limitations – Passenger aircraft / rail: 25 kg  
Quantity limitations – Cargo only: 100 kg  
Vessel stowage – Location: A  
Vessel stowage – Other: 53, 58



### Sea transport (IMDG)

UN number: UN 2967  
Proper shipping name: UN 2967, SULPHAMIC ACID  
Class or division, Subsidiary risk: Class 8, Subrisk -  
EmS: F-A, S-B  
Special Provisions: -  
Limited quantities: 5 kg  
Excepted quantities: E1  
Package - Instructions: P002, LP02  
Package - Provisions: -  
IBC - Instructions: IBC08  
IBC - Provisions: B3  
Tank instructions - IMO: -  
Tank instructions - UN: T1  
Tank instructions - Provisions: TP33  
Stowage and handling: Category A.  
Segregation: SG36 SG49  
Properties and observations: White crystalline powder. Soluble in water. Decomposes when heated, evolving toxic fumes. Causes burns to skin, eyes and mucous membranes.  
Marine pollutant: no  
Segregation group: 1

**Air transport (IATA)**

UN/ID number:	UN 2967
Proper shipping name:	UN 2967, SULPHAMIC ACID
Class or division, Subsidiary risk:	Class 8
Hazard label:	Corrosive
Excepted Quantity Code:	E1
Passenger and Cargo Aircraft: Ltd.Qty.:	Pack.Instr. Y845 - Max. Net Qty/Pkg. 5 kg
Passenger and Cargo Aircraft:	Pack.Instr. 860 - Max. Net Qty/Pkg. 25 kg
Cargo Aircraft only:	Pack.Instr. 864 - Max. Net Qty/Pkg. 100 kg
Special Provisions:	A803
Emergency Response Guide-Code (ERG):	8L

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

Product:	OSHA: None of the ingredients are considered Extremely Hazardous by OSHA.
	Sara Title III:
	- Section 302/304 Extremely Hazardous Substances: None
	- Section 311: Hazard Categorization: Acute Health
	- Section 313 Toxic Chemicals: NDA
	TSCA Inventory: listed
	TSCA HPVC: not listed
Amidosulfone acid:	TSCA Inventory: listed
	TSCA HPVC: not listed

**National regulations - U.S. State Regulations**

Sulfamic acid is on the New Jersey list.  
California Proposition 65 Status:  
This product does not contain chemicals currently on the California list of known carcinogens and/or reproductive toxins

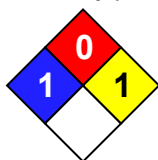
**National regulations - Great Britain**

Hazchem-Code: 2X

**16. Other information**

Text for labeling: Contains  $\geq$  80 % Amidosulfone acid. Safety data sheet available on request.

Hazard rating systems:



NFPA Hazard Rating:

Health: 1 (Slight)

Fire: 0 (Minimal)

Reactivity: 1 (Slight)

HMIS Version III Rating:

Health: 1 (Slight)

Flammability: 0 (Minimal)

Physical Hazard: 1 (Slight)

Personal Protection: X = Consult your supervisor

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	1
	X

Abbreviations and acronyms: 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 - chronic: Hazardous to the aquatic environment - chronic  
AS/NZS: Australian Standards/New Zealand Standards  
CAS: Chemical Abstracts Service  
CFR: Code of Federal Regulations  
CLP: Classification, Labelling and Packaging  
DMEL: Derived minimal effect level  
DNEL: Derived no-effect level  
EC: European Community  
EN: European Standard  
EQ: Excepted 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  
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 Irritation: Skin irritation  
TRGS: Technical Rules for Hazardous Substances  
UN: United Nations  
vPvB: Very persistent and very bioaccumulative

Reason of change: Changes in section 1: UFI

Date of first version: 8/14/2003

### 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/hhxue2w>

