

1. Product and company identification

Product identifier

Trade name: Bevi Power Plus

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

General use: Cleaning agent

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

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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: Physical state at 68 °F and 101.3 kPa: solid

Form: Powder

Color: white

Odor: characteristic

Classification: Corrosive to Metals - Category 1; Acute Toxicity - oral - Category 4; Skin Corrosion - Category 1A;

Hazard symbols:



Signal word:

Danger

Hazard statements:

May be corrosive to metals.

Harmful if swallowed.

Causes severe skin burns and eye damage.

Precautionary statements:

Keep out of reach of children.
Keep only in original container.
Do not breathe dust.
Do not eat, drink or smoke when using this product.
Wear protective gloves/protective clothing/eye protection/face protection.
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.
Absorb spillage to prevent material damage.

Regulatory status

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

Hazards not otherwise classified

May form explosible dust-air mixture if dispersed.
Special danger of slipping by leaking/spilling product.
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 70693-62-8	Pentapotassium bis(peroxymonosulphate) bis(sulphate)	25 - 50 %	Acute Toxicity - oral - Category 4. Skin Corrosion - Category 1B.
CAS 1310-73-2	Sodium hydroxide	25 - 50 %	Corrosive to Metals - Category 1. Skin Corrosion - Category 1A.
CAS 7320-34-5	Tetrapotassium pyrophosphate	10 - 25 %	Eye Irritation - Category 2A.
CAS -	Sodium phosphonate	< 2.5 %	Corrosive to Metals - Category 1. Acute Toxicity - oral - Category 4.

4. First aid measures

General information: First aider: Pay attention to self-protection!
Take off immediately all contaminated clothing.
Symptoms of poisoning may develop several hours following exposure. Victim should be under medical observation for at least 48 hours after exposure.
If victim is at risk of losing consciousness, position and transport on their side.

In case of inhalation: Move victim to fresh air; if necessary, provide artificial respiration or 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.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Subsequently seek the immediate attention of an ophthalmologist.

After swallowing: Rinse mouth immediately and drink plenty of water.
Do not induce vomiting. Risk of perforation in case of vomiting!
Immediately get medical attention. Do not try to neutralize.

Most important symptoms/effects, acute and delayed

Harmful if swallowed.
Causes severe skin burns and eye damage.

Information to physician

Treat symptomatically.
Do not use sodium hydrogencarbonate (NaHCO₃) or calcium carbonate (CaCO₃) for neutralization, because forming carbon dioxide can cause stomach perforation.. Have the person slowly drink magnesium oxide suspended in water.

5. Fire fighting measures

Flash point/flash point range:

Not applicable

Auto-ignition temperature: Not self-igniting

Suitable extinguishing media:

Product is non-combustible. Extinguishing materials should therefore be selected according to surroundings. Extinguishing powder, carbon dioxide, water spray jet.
In case of large fires: Water spray jet or foam.

Extinguishing media which must not be used for safety reasons:

Full water jet

Specific hazards arising from the chemical

Fires in the immediate vicinity may cause the development of dangerous vapors.
In case of fire may be liberated: sulphur oxides, phosphorus compounds, carbon monoxide and carbon dioxide.

Protective equipment and precautions for firefighters:

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

Additional information:

Contaminated fire-fighting water must be collected separately.
Do not allow water used to extinguish fire to enter drains, ground or waterways.

6. Accidental release measures

Personal precautions: Do not breathe dust. Avoid generation of dust. Take off contaminated clothing and wash it before reuse. Avoid contact with the substance. Provide adequate ventilation.
Wear appropriate protective equipment. Keep unprotected people away.

Environmental precautions:

Do not allow to enter into ground-water, surface water or drains.
If necessary notify appropriate authorities.

Methods for clean-up:

Avoid generation of dust. Knock down dust with water spray jet.
Take up mechanically, placing in appropriate containers for disposal.
Wash spill area with plenty of water.
Never return spills in original containers for re-use.
Absorb spillage to prevent material damage.

Additional information: Special danger of slipping by leaking/spilling product.

7. Handling and storage

Handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed. Do not breathe dust. Avoid dust formation.

Do not get in eyes, on skin, or on clothing. Wear appropriate protective equipment.

Do not eat, drink or smoke when using this product.

Take off contaminated clothing and wash it before reuse. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

When diluting, always add the product to water. Never add water to the product. Work place should be equipped with a shower and an eye rinsing apparatus.

Precautions against fire and explosion:

May form explosible dust-air mixture if dispersed..

Take precautionary measures against static discharge.

Take standard precautions to prevent fire.

Storage

Requirements for storerooms and containers:

Store in a well-ventilated place. Keep container tightly closed.

Keep cool. Keep container dry. Keep only in original container.

Protect against heat /sun rays. Protect from humidity and water.

Hints on joint storage:

Keep away from strong acids, leachates, heavy metal salts and reducing materials. Keep away from food, drink and animal feedingstuffs.

Further details:

May be corrosive to metals. Hydrogen may form upon contact with metals (danger of explosion!).

8. Exposure controls / personal protection

Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
	Bevi Power Plus	USA: ACGIH: TWA	10 mg/m ³ (Dust limit value, inhalable fraction)
		USA: ACGIH: TWA	3 mg/m ³ (Dust limit value, respirable fraction)
		USA: OSHA: TWA	15 mg/m ³ (Dust limit value, inhalable fraction)
		USA: OSHA: TWA	5 mg/m ³ (Dust limit value, respirable fraction)
1310-73-2	Sodium hydroxide	USA: ACGIH: Ceiling	2 mg/m ³
		USA: NIOSH: Ceiling	2 mg/m ³
		USA: OSHA: TWA	2 mg/m ³

Engineering controls

Provide adequate ventilation, and local exhaust as needed.

Dust should be exhausted directly at the point of origin. Do not breathe dust.

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 or butyl caoutchouc (butyl rubber)
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.
- Respiratory protection: In case of dust formation: Dust mask or Particulates filter P2 according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2.
- General hygiene considerations:
Do not breathe dust. Do not get in eyes, on skin, or on clothing.
Contaminated work clothing should not be allowed out of the workplace.
Take off contaminated clothing and wash it before reuse.
Do not eat, drink or smoke when using this product.
Wash hands thoroughly after handling.
Work place should be equipped with a shower and an eye rinsing apparatus.

9. Physical and chemical properties

Information on basic physical and chemical properties

- Appearance: Physical state at 68 °F and 101.3 kPa: solid
Form: Powder
Color: white
- Odor: characteristic
- Odor threshold: No data available
- pH: Not applicable
- Melting point/freezing point: No data available
- Initial boiling point and boiling range: No data available
- Flash point/flash point range: Not applicable
- Evaporation rate: No data available
- Flammability: No data available
- Explosion limits: No data available
- Vapor pressure: No data available
- Vapor density: No data available
- Density: No data available
- Water solubility: at 68 °F: soluble
- Partition coefficient: n-octanol/water: No data available
- Auto-ignition temperature: Not self-igniting
- Thermal decomposition: No data available
- Explosive properties: May form explosible dust-air mixture if dispersed..

10. Stability and reactivity

- Reactivity: May be corrosive to metals.
- Chemical stability: Hygroscopic.
Stable under recommended storage conditions.



Possibility of hazardous reactions:

Reacts with light metals: Formation of hydrogen.
Reacts with water with development of heat.

Conditions to avoid: Humidity. To avoid thermal decomposition, do not overheat.

Incompatible materials: Strong acids, alkalis, reducing agent, heavy metal salts, Water, light metals.

Hazardous decomposition products:

No known hazardous decomposition products.

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): Acute Toxicity - oral - Category 4 = Harmful if swallowed.

ATEmix (calculated): 1000 mg/kg < ATE ≤ 2000 mg/kg

Information about Pentapotassium bis(peroxymonosulphate) bis(sulphate):

LD50 Rat, oral: 1000 - 2000 mg/kg.

Acute toxicity (dermal): Based on available data, the classification criteria are not met.

Information about Pentapotassium bis(peroxymonosulphate) bis(sulphate):

LD50 Rabbit, dermal: >2000 mg/kg.

Acute toxicity (inhalative): Based on available data, the classification criteria are not met.

Information about Pentapotassium bis(peroxymonosulphate) bis(sulphate):

LD50 Rabbit, inhalative: >5 mg/L/4h.

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

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

Germ cell mutagenicity/Genotoxicity: Based on available data, the classification criteria are not met.

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

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

Effects on or via lactation: Based on available data, the classification criteria are not met.

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.

12. Ecological information

Ecotoxicity

Aquatic toxicity: Harmful effects on water organisms by modification of pH-value.
Information about Pentapotassium bis(peroxymonosulphate) bis(sulphate)
Bacterial toxicity: EC50 Pseudomonas putida: 179 mg/L/ 18 h.
Daphnia toxicity: Daphnia magna (Big water flea) (OECD 202):
NOEC: 1.8 mg/L/ 24 h.
LC50 5.3 mg/L/ 24 h.
LC100: 10 mg/L/ 24 h.
Fish toxicity: Danio rerio (zebrafish) (OECD 203):
NOEC: 32 mg/L/ 96 h.
LC50:> 32 mg/L/ 96 h.
LC100: 56 mg/L/ 96 h.
Information about Sodium hydroxide:
Daphnia toxicity: EC50 Daphnia magna (Big water flea): 40.4 mg/L/24 h.
Fish toxicity: LC50: 33 - 196 mg/L /96 h.

Further details: Information about Sodium phosphonate
Biodegradability: ~ 50% (OECD 302 B)

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.
Do not dispose of with household waste. Do not empty into drains.

Package

Recommendation: Dispose of waste according to applicable legislation.

14. Transport information

14.2 UN proper shipping name

ADR/RID, IMDG, IATA-DGR:

UN 3262, CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.
(Sodium hydroxide and Pentapotassium bis(peroxymonosulphate) bis(sulphate))

Transport hazard class(es)

ADR/RID: Class 8, Code: C6
IMDG: Class 8, Subrisk -
IATA-DGR: Class 8



Packing group

ADR/RID, IMDG, IATA-DGR:
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: UN3262
Proper shipping name: UN 3262, CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.
(Sodium hydroxide and Pentapotassium bis(peroxymonosulphate) bis(sulphate))
Hazard class or Division: 8
Packing Group: II
Labels: 8
Symbols: G
Special provisions: IB8, IP2, IP4, T3, TP33
Packaging – Exceptions: 154
Packaging – Non-bulk: 212
Packaging – Bulk: 240
Quantity limitations – Passenger aircraft / rail: 15 kg
Quantity limitations – Cargo only: 50 kg
Vessel stowage – Location: B
Vessel stowage – Other: 52



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Sea transport (IMDG)

UN number: UN 3262
Proper shipping name: UN 3262, CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.
(Sodium hydroxide and Pentapotassium bis(peroxymonosulphate) bis(sulphate))
Class or division, Subsidiary risk: Class 8, Subrisk -
Packing Group: II
EmS: F-A, S-B
Special provisions: 274
Limited quantities: 1 kg
Excepted quantities: E2
Package - Instructions: P002
Package - Provisions: -
IBC - Instructions: IBC08
IBC - Provisions: B4, B21
Tank instructions - IMO: -
Tank instructions - UN: T3
Tank instructions - Provisions: TP33
Stowage and handling: Category B.
Segregation: SG35
Properties and observations: Reacts violently with acids. Causes burns to skin, eyes and mucous membranes.
Marine pollutant: no
Segregation group: 18

Air transport (IATA)

UN/ID number: UN 3262
Proper shipping name: UN 3262, CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.
(Sodium hydroxide and Pentapotassium bis(peroxymonosulphate) bis(sulphate))
Class or division, Subsidiary risk: Class 8
Packing Group: II
Hazard label: Corrosive
Excepted Quantity Code: E2
Passenger and Cargo Aircraft: Ltd.Qty.: Pack.Instr. Y844 - Max. Net Qty/Pkg. 5 kg
Passenger and Cargo Aircraft: Pack.Instr. 859 - Max. Net Qty/Pkg. 15 kg
Cargo Aircraft only: Pack.Instr. 863 - Max. Net Qty/Pkg. 50 kg
Special provisions: A3 A803
Emergency Response Guide-Code (ERG): 8L



15. Regulatory information

National regulations - U.S. Federal Regulations

Pentapotassium bis(peroxymonosulphate) bis(sulphate): TSCA Inventory: listed
TSCA HPVC: not listed

Sodium hydroxide: TSCA Inventory: listed
TSCA HPVC: not listed
Clean Water Act:
Hazardous Substances: RQ 1000 lbs.
Other Environmental Laws:
CERCLA: RQ 1000 lbs.
NIOSH Recommendations:
Occupational Health Guideline: 0565

Tetrapotassium pyrophosphate: TSCA Inventory: listed
TSCA HPVC: not listed

National regulations - U.S. State Regulations

Sodium hydroxide: Delaware Air Quality Management List:
DRQ: 1000 - RQ State: Federal Regulations Apply
Idaho Air Pollutant List:
Title 585: AAC: 0,1 - EL: 0,133 - OEL: 2 - Title 586: AAAC: - EL: - OEF: -
Massachusetts Haz. Substance codes: 2,4,5 F8 F9
Minnesota Haz. Substance:
Codes: AO - Ratings: - Status: Title III.
New York List of Hazardous Substances:
RQ-Air: 1000 - RQ-Land: 100 - Note: No Note Associated with this chemical.
Pennsylvania Haz. Substance code: E
Washington Air Contaminant: Ceiling: 2 mg

National regulations - Great Britain

Hazchem-Code: 2X

16. Other information

Text for labeling: Contains 25 - 50 % Pentapotassium bis(peroxymonosulphate) bis(sulphate), 25 - 50 % Sodium hydroxide, 10 - 25 % Tetrapotassium pyrophosphate, < 2.5 % Sodium phosphonate. Safety data sheet available on request.
Contains Pentapotassium bis(peroxymonosulphate) bis(sulphate), Sodium hydroxide, Sodium phosphonate.
Labeling for contents according to regulation (EC) No 648/2004, annex VII:
- 30 % and more oxygen-based bleaching agents.
- 15% or over but less than 30% phosphates
- less than 5% phosphonates

Hazard rating systems:



NFPA Hazard Rating:

Health: 3 (Serious)

Fire: 0 (Minimal)

Reactivity: 2 (Moderate)

HMIS Version III Rating:

Health: 3 (Serious)

Flammability: 0 (Minimal)

Physical Hazard: 2 (Moderate)

Personal Protection: X = Consult your supervisor

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	2
	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

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

EC50: Effective Concentration 50%

EC: European Community

EN: European Standard

IATA: International Air Transport Association

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

UN: United Nations

vPvB: Very persistent and very bioaccumulative

Reason of change: General revision

Date of first version: 1/28/2009

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/gibgkfa9>

