

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 28.11.2011

Version number 2

Revision: 28.11.2011

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

· 1.1. Product identifier

· Trade name: Sodium azide

· Article number: 30175

· CAS Number:

26628-22-8

· EC number:

247-852-1

· Index number:

011-004-00-7

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

· Application of the substance / the preparation Laboratory chemicals

· 1.3. Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

SERVA Electrophoresis GmbH

Carl-Benz-Str. 7

D-69115 Heidelberg

Tel.: +49 6221 13840-0

FAX: +49 6221 13840-10

msds.info@serva.de

· Information department: Product Safety department Tel.: +49 6221 13840-35

· 1.4. Emergency telephone number: +49 6131 19240 (university hospital Mainz)

SERVA

Electrophoresis

2 Hazards identification

· 2.1. Classification of the substance or mixture

· Classification according to Regulation (EC) No 1272/2008



GHS06

Acute Tox. 2

H300 Fatal if swallowed.



GHS09

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC



T+; Very toxic

R28: Very toxic if swallowed.



N; Dangerous for the environment

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R32: Contact with acids liberates very toxic gas.

· Classification system:

The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.

· 2.2. Label elements

· Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

· Hazard pictograms GHS06, GHS09

· Signal word Danger

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- **Hazard statements**
- H300+EUH032 *Fatal if swallowed. Contact with acids liberates very toxic gas.*
- H410 *Very toxic to aquatic life with long lasting effects.*
- **Precautionary statements**
- P273 *Avoid release to the environment.*
- P264 *Wash thoroughly after handling.*
- P301+P310 *IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.*
- P330 *Rinse mouth.*
- P405 *Store locked up.*
- P501 *Dispose of contents/container in accordance with local/regional/national/international regulations.*
- **2.3. Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **3.1. Chemical characterization: Substances**
- **CAS No. Description:**
26628-22-8 sodium azide
- **Identification number(s):**
- **EC number:** 247-852-1
- **Index number:** 011-004-00-7
- **Description:**
- **Empirical formula:** Na N₃
- **MW:** 65,0

4 First aid measures

- **4.1. Description of first aid measures**
- **General information**
Remove contaminated clothing.
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **After inhalation**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact** *Immediately wash with water and soap and rinse thoroughly.*
- **After eye contact** *Rinse opened eye for several minutes under running water. Then consult doctor.*
- **After swallowing** *Drink copious amounts of water and provide fresh air. Call for doctor immediately.*
- **Information for doctor**
- **4.2. Most important symptoms and effects, both acute and delayed**
Headache
Dizziness
- **4.3. Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **5.1. Extinguishing media**
- **Suitable extinguishing agents**
Special powder for metal fires. Do not use water.
Dry sand
- **For safety reasons unsuitable extinguishing agents**
Water.
Alcohol-resistant foam.

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- **5.2. Special hazards arising from the substance or mixture**
Can form explosive gas-air mixtures.
In case of fire, the following can be released:
Nitrogen oxides (NOx)
- **5.3. Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**
Collect contaminated fire fighting water separately. It must not enter the sewage system.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- **6.1. Personal precautions, protective equipment and emergency procedures**
Use respiratory protective device against the effects of fumes/dust/aerosol.
Avoid formation of dust.
Wear protective clothing.
- **6.2. Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3. Methods and material for containment and cleaning up:**
Pick up mechanically.
Dispose contaminated material as waste according to item 13.
- **6.4. Reference to other sections** See Section 8 for information on personal protection equipment.

7 Handling and storage

- **Handling**
- **7.1. Precautions for safe handling**
Prevent formation of dust.
Thorough dedusting.
Ensure good ventilation/exhaustion at the workplace.
Work only in fume cupboard.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Dust can combine with air to form an explosive mixture.
- **7.2. Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
Use only receptacles specifically permitted for this substance/product.
- **Information about storage in one common storage facility:** Do not store together with acids.
- **Further information about storage conditions:**
Store under lock and key and with access restricted to technical experts or their assistants only.
Protect from heat and direct sunlight.
Keep receptacle tightly sealed.
Store in dry conditions.
- **7.3. Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

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· 8.1. Control parameters**· Components with limit values that require monitoring at the workplace:****26628-22-8 sodium azide (80-100%)**

WEL ()	Short-term value: 0.3 mg/m ³ Long-term value: 0.1 mg/m ³ (as NaN ₃) Sk
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· Additional information: The lists that were valid during the creation were used as basis.**· 8.2. Exposure controls****· Personal protective equipment****· General protective and hygienic measures**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

· Breathing equipment:

Short term filter device:

Filter P3.

· Protection of hands:

Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:

Chloroprene rubber, CR

Nitrile rubber, NBR

· Eye protection: Safety glasses**· Body protection:** Protective work clothing.**9 Physical and chemical properties****· 9.1. Information on basic physical and chemical properties****· General Information****· Appearance:****Form:** Crystalline**Colour:** White**· Odour:** Odourless**· pH-value (410 g/l) at 15°C:** > 7**· Change in condition****Melting point/Melting range:** 300°C**Boiling point/Boiling range:** undetermined**· Flash point:** Not applicable**· Flammability (solid, gaseous)** Product is not flammable.**· Ignition temperature:** > 300°C

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| · Danger of explosion: | Product does not present an explosion hazard. |
| · Vapour pressure at 20°C: | 0.01 hPa |
| · Density at 20°C: | 1.846 g/cm ³ |
| · Bulk density at 20°C: | ca. 800 kg/m ³ |
| · Solubility in / Miscibility with Water at 20°C: | 420 g/l |
| · Alcohols at 20°C: | 3.1 g/l |
| · 9.2. Other information | No further relevant information available. |

10 Stability and reactivity

- **10.1. Reactivity**
- **10.2. Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
Decomposes before melting.
Auto-catalytic thermal decomposition
- **10.3. Possibility of hazardous reactions** Contact with acids releases toxic gases
- **10.4. Conditions to avoid** No further relevant information available.
- **10.5. Incompatible materials:** No further relevant information available.
- **10.6. Hazardous decomposition products:**
HN₃
In case of contact with heavy metals or heavy metal compounds the formation of potentially explosive azides is possible.

11 Toxicological information

- **11.1. Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**

Oral	LD50	27 mg/kg (rat)
Dermal	LD50	20 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

12 Ecological information

- **12.1. Toxicity**
- **Acquatic toxicity:** No further relevant information available.
- **12.2. Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **12.3. Bioaccumulative potential** No further relevant information available.
- **12.4. Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:**
Very toxic for fish
LC 50 / 96 h (Salmo gaidneri): 0.8 mg / l
- **Additional ecological information:**
- **General notes:**
Also poisonous for fish and plankton in water bodies.

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- Very toxic for aquatic organisms
Water hazard class 2 (German Regulation) (Assessment by list): hazardous for water.
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
- **12.5. Results of PBT and vPvB assessment**
 - **PBT:** PBT - assessment not available.
 - **vPvB:** vPvB - assessment not available.
 - **12.6. Other adverse effects** No further relevant information available.

13 Disposal considerations

- **13.1. Waste treatment methods**
- **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **14.1. UN-Number**
· **ADR, IMDG, IATA** 1687
- **14.2. UN proper shipping name**
· **ADR** 1687 SODIUM AZIDE
· **IMDG** SODIUM AZIDE
· **IATA** Sodium azide
- **14.3. Transport hazard class(es)**
· **ADR**

 - **Class** 6.1 Toxic substances.
 - **Label** 6.1
- **IMDG, IATA**

 - **Class** 6.1 Toxic substances.
 - **Label** 6.1
- **14.4. Packing group**
· **ADR, IMDG, IATA** II
- **14.5. Environmental hazards:** Environmentally hazardous substance, solid; Marine Pollutant
- **Special marking (ADR):** Symbol (fish and tree)
- **14.6. Special precautions for user** Warning: Toxic substances.
- **Danger code (Kemler):** -
- **EMS Number:** F-A,S-A

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| · 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · Transport/Additional information: | |
| · ADR | |
| · Tunnel restriction code | E |
| · UN "Model Regulation": | UN1687, SODIUM AZIDE, 6.1, II |

15 Regulatory information

- **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations**
- **Water hazard class:** Water hazard class 2 (Assessment by list): hazardous for water.
- **15.2. Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing MSDS:** Product safety department
- **Contact:** +49 6221 13840-35
- **Abbreviations and acronyms:**
 - PBT: persistent, bioaccumulative, toxic substance (REACH)
 - vPvB: very persistent, very bioaccumulative substance (REACH)
 - REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
 - CLP: Regulation on classification, labelling and packaging of substances and mixtures
 - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 - RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 - IMDG: International Maritime Code for Dangerous Goods
 - IATA: International Air Transport Association
 - ICAO: International Civil Aviation Organization
 - GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 - EINECS: European Inventory of Existing Commercial Chemical Substances
 - CAS: Chemical Abstracts Service (division of the American Chemical Society)
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
- *** Data compared to the previous version altered.**