

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/03/2018

Reviewed on 05/03/2018

1 Identification

- **Product identifier**
- **Trade name:** Cacodylic acid-Na-salt-3H₂O
- **Article number:** 15540
- **CAS Number:**
6131-99-3
- **EC number:**
204-708-2
- **Index number:**
033-002-00-5
- **Application of the substance / the mixture** Laboratory chemicals
- **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
- **Emergency telephone number:**
Medical Emergency Information in case of poisoning:
Poison Information Center Mainz - Phone: +49 (0) 6131 19240
(advisory service in German or English language)



2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS06

Acute Tox. 3 H301 Toxic if swallowed.

Acute Tox. 3 H331 Toxic if inhaled.

- **Label elements**
- **GHS label elements**
The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms** GHS06
- **Signal word** Danger
- **Hazard statements**
Toxic if swallowed or if inhaled.
- **Precautionary statements**
Avoid breathing dust/fume/gas/mist/vapors/spray
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER/doctor.
Specific treatment (see on this label).
Rinse mouth.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

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- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 2
Fire = 0
Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



Health = 1
Fire = 0
Reactivity = 0

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** PBT - assessment not available.
- **vPvB:** vPvB - assessment not available.

3 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description**
6131-99-3 sodium dimethylarsinate trihydrate
- **Identification number(s)**
- **EC number:** 204-708-2
- **Index number:** 033-002-00-5
- **Description:**
- **Empirical formula:** $C_2H_6AsO_2Na \cdot 3H_2O$
- **MW:** 214.0

4 First-aid measures

- **Description of first aid measures**
- **General information:**
Immediately remove any clothing soiled by the product.
Remove breathing apparatus only after contaminated clothing have been completely removed.
- **After inhalation:** Provide fresh air. Call for doctor immediately.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. Remove present contact lenses, if easy to do, and continue rinsing. Consult ophthalmologist In case of complaints.
- **After swallowing:** Wash out mouth. Call a doctor immediately.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
 CO_2 extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**
In case of fire formation of toxic vapours and gases is possible.

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- **Advice for firefighters**
- **Protective equipment:** *Wear self-contained respiratory protective device.*

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective clothing.
Ensure adequate ventilation
- **Environmental precautions:**
Do not allow to enter sewers/ surface or ground water.
Inform respective authorities in case of seepage into water course or sewage system.
- **Methods and material for containment and cleaning up:**
Pick up mechanically.
Dispose contaminated material as waste according to item 13.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about protection against explosions and fires:** *Keep respiratory protective device available.*
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** *No special requirements.*
- **Information about storage in one common storage facility:** *Store away from oxidizing agents.*
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store under lock and key and with access restricted to technical experts or their assistants only.
This product is hygroscopic.
- **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.*
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:** *Not required.*
- **Additional information:** *The lists that were valid during the creation were used as basis.*
- **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.
Store protective clothing separately.
- **Breathing equipment:**
Short term filter device:
Filter P3
- **Protection of hands:**
Protective gloves

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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:**

Natural rubber, NR

Nitrile rubber, NBR

- **Eye protection:** Safety glasses

- **Body protection:** Protective work clothing

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form: Crystalline

Color: White

- **Odor:** Odorless

- **pH-value (50 g/l) at 20 °C (68 °F):** 8.7

- **Change in condition**

Melting point/Melting range: 77 - 80 °C (171 - 176 °F)

Boiling point/Boiling range: Undetermined.

- **Flash point:** Not applicable.

- **Flammability (solid, gaseous):** Product is not flammable.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Density at 20 °C (68 °F):** 0.58 g/cm³ (4.84 lbs/gal)

- **Bulk density at 20 °C (68 °F):** 870 kg/m³

- **Solubility in / Miscibility with**

Water at 20 °C (68 °F): 880 g/l

- **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.

- **Chemical stability**

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

- **Possibility of hazardous reactions** Reacts with reducing agents.

- **Conditions to avoid moisture**

- **Incompatible materials:**

Avoid contact with:

heavy metal salts

reducing agents

mildly corrosive to steel

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- **Hazardous decomposition products:**
In case of fire: See Section 5
Arsenic compounds

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· LD/LC50 values that are relevant for classification:

Oral	LD50	2600 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rabbit)
Inhalative	LC50/4h	2.04 mg/l (rat)
	LC50/96h	> 152 mg/l (Forelle)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)** Substance is not listed.
- **NTP (National Toxicology Program)** Substance is not listed.
- **OSHA-Ca (Occupational Safety & Health Administration)** Substance is not listed.

12 Ecological information

- **Toxicity**

· **Aquatic toxicity:**

EC50/48h	> 61.6 mg/l (Daphnia magna)
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- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 3 (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Very toxic for aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

· UN-Number	
· DOT, ADR, IMDG, IATA	UN1688
· UN proper shipping name	
· ADR	1688 SODIUM CACODYLATE
· IMDG, IATA	SODIUM CACODYLATE
· Transport hazard class(es)	
· DOT	
	
· Class	6.1 Toxic substances
· Label	6.1
· ADR	
 	
· Class	6.1 Toxic substances
· Label	6.1
· IMDG, IATA	
	
· Class	6.1 Toxic substances
· Label	6.1
· Packing group	
· DOT, ADR, IMDG, IATA	II
· Environmental hazards:	Environmentally hazardous substance, solid; Marine Pollutant
· Special marking (ADR):	Symbol (fish and tree)
· Special precautions for user	Warning: Toxic substances
· Danger code (Kemler):	60
· EMS Number:	F-A,S-A
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Excepted quantities (EQ)	Code: E4 Maximum net quantity per inner packaging: 1 g Maximum net quantity per outer packaging: 500 g

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- | | |
|-----------------------------------|---|
| · IMDG | |
| · Limited quantities (LQ) | 500 g |
| · Excepted quantities (EQ) | Code: E4 |
| | Maximum net quantity per inner packaging: 1 g |
| | Maximum net quantity per outer packaging: 500 g |
| · UN "Model Regulation": | UN1688, SODIUM CACODYLATE, 6.1, II |

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Section 355 (extremely hazardous substances):** Substance is listed.
- **Section 313 (Specific toxic chemical listings):** Substance is not listed.
- **TSCA (Toxic Substances Control Act):** Substance is listed.
- **Proposition 65** Substance is not listed.
- **Chemicals known to cause cancer:** Substance is not listed.
- **Chemicals known to cause reproductive toxicity for females:** Substance is not listed.
- **Chemicals known to cause reproductive toxicity for males:** Substance is not listed.
- **Chemicals known to cause developmental toxicity:** Substance is not listed.
- **Carcinogenicity categories**
- **EPA (Environmental Protection Agency)** Substance is not listed.
- **TLV (Threshold Limit Value established by ACGIH)** Substance is not listed.
- **NIOSH-Ca (National Institute for Occupational Safety and Health)** Substance is not listed.
- **GHS label elements**
- The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms** GHS06
- **Signal word** Danger
- **Hazard statements**
- Toxic if swallowed or if inhaled.
- **Precautionary statements**
- Avoid breathing dust/fume/gas/mist/vapors/spray
- Wash thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- Call a POISON CENTER/doctor.
- Specific treatment (see on this label).
- Rinse mouth.
- Store in a well-ventilated place. Keep container tightly closed.
- Store locked up.
- Dispose of contents/container in accordance with local/regional/national/international regulations.
- **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 SDS:** Product safety department
- **Contact:** +49 6221 13840-35
- **Date of preparation / last revision** 05/03/2018 / 3
- **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 ICAO: International Civil Aviation Organisation

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*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)**IMDG: International Maritime Code for Dangerous Goods**DOT: US Department of Transportation**IATA: International Air Transport Association**ACGIH: American Conference of Governmental Industrial Hygienists**EINECS: European Inventory of Existing Commercial Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**NFPA: National Fire Protection Association (USA)**HMIS: Hazardous Materials Identification System (USA)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**NIOSH: National Institute for Occupational Safety**OSHA: Occupational Safety & Health**TLV: Threshold Limit Value**PEL: Permissible Exposure Limit**REL: Recommended Exposure Limit**Acute Tox. 3: Acute toxicity – Category 3***. * Data compared to the previous version altered.**

US