

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Sodium periodate solution 30 g/l in water auxiliary solution for METROHM

Revision date: 21.11.2023

Product code: 21978

Page 1 of 10

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

1.1. Product identifier

Sodium periodate solution 30 g/l in water auxiliary solution for METROHM

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

Use of the substance/mixture

Laboratory chemical

Industrial uses: Uses of substances as such or in preparations at industrial sites

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Uses advised against

Do not use for private purposes (household).

1.3. Details of the supplier of the safety data sheet

| | | |
|-------------------------|----------------------------------|------------------------------|
| Company name: | AnalytiChem GmbH | |
| Street: | Stempelstraße 6 | |
| Place: | D-47167 Duisburg | |
| Telephone: | 0203/5194-0 | Telefax: 0203/5194-290 |
| E-mail: | info@analytichem.de | |
| Contact person: | Abteilung Produktsicherheit | Telephone: 0203/5194-107/117 |
| E-mail: | produktsicherheit@analytichem.de | |
| Internet: | www.analytichem.de | |
| Responsible Department: | Abteilung Produktsicherheit | |

1.4. Emergency telephone number:

For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

Further Information

This product is a mixture. REACH Registration Number see section 3.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin Irrit. 2; H315

Eye Irrit. 2; H319

STOT RE 2; H373

Full text of hazard statements: see SECTION 16.

2.2. Label elements

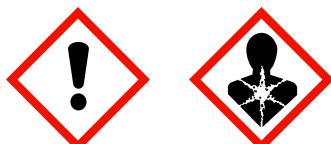
Regulation (EC) No 1272/2008

Hazard components for labelling

sodium periodate

Signal word: Warning

Pictograms:



Hazard statements

H315

Causes skin irritation.

H319

Causes serious eye irritation.

H373

May cause damage to organs through prolonged or repeated exposure.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Sodium periodate solution 30 g/l in water auxiliary solution for METROHM

Revision date: 21.11.2023

Product code: 21978

Page 2 of 10

Precautionary statements

- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
- P302+P352 IF ON SKIN: Wash with plenty of water.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337+P313 If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixtures in aqueous solution

Relevant ingredients

| CAS No | Chemical name | Quantity |
|-----------|---|-----------|
| | EC No | |
| | Index No | |
| | REACH No | |
| | Classification (Regulation (EC) No 1272/2008) | |
| 7790-28-5 | sodium periodate | 1 - < 5 % |
| | 232-197-6 | |
| | Ox. Sol. 1, Skin Corr. 1C, Eye Dam. 1, STOT RE 1, Aquatic Acute 1; H271 H314 H318 H372 H400 | |

Full text of H and EUH statements: see section 16.

Further Information

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

No data available

After inhalation

- Provide fresh air.
- Call a doctor if you feel unwell.

After contact with skin

- Wash immediately with: Water
- Take off immediately all contaminated clothing and wash it before reuse.
- In case of skin irritation, consult a physician.

After contact with eyes

- Rinse immediately carefully and thoroughly with eye-bath or water.
- In case of eye irritation consult an ophthalmologist.
- Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

- Rinse mouth immediately and drink plenty of water.
- Call a physician immediately.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Sodium periodate solution 30 g/l in water auxiliary solution for METROHM

Revision date: 21.11.2023

Product code: 21978

Page 3 of 10

4.2. Most important symptoms and effects, both acute and delayed

Irritant

4.3. Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

no restriction

5.2. Special hazards arising from the substance or mixture

Non-combustible liquids

Hazardous combustion products

5.3. Advice for firefighters

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

Additional information

Suppress gases/vapours/mists with water spray jet.

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Provide adequate ventilation.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.

Emergency procedures

Do not breathe dust/fume/gas/mist/vapours/spray.

For emergency responders

Precautionary statements For emergency responders : Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For containment

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Collect in closed and suitable containers for disposal.

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

Other information

Provide adequate ventilation.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

Sodium periodate solution 30 g/l in water auxiliary solution for METROHM

Revision date: 21.11.2023

Product code: 21978

Page 4 of 10

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Do not breathe vapour/aerosol.
Read label before use.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.
Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Further information on handling

Take off contaminated clothing.
Wash hands before breaks and after work.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.

Hints on joint storage

No data available

Further information on storage conditions

Store in a dry place.

7.3. Specific end use(s)

Laboratory chemicals

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

| CAS No | Substance | Exposure route | Effect | Value |
|--------------------------|------------------|----------------|----------|------------------------|
| 7790-28-5 | sodium periodate | | | |
| Worker DNEL, long-term | | inhalation | systemic | 0,1 mg/m ³ |
| Worker DNEL, acute | | inhalation | systemic | 0,3 mg/m ³ |
| Worker DNEL, long-term | | dermal | systemic | 0,06 mg/kg bw/day |
| Worker DNEL, acute | | dermal | systemic | 0,2 mg/kg bw/day |
| Consumer DNEL, long-term | | inhalation | systemic | 0,03 mg/m ³ |
| Consumer DNEL, acute | | inhalation | systemic | 0,09 mg/m ³ |
| Consumer DNEL, long-term | | dermal | systemic | 0,03 mg/kg bw/day |
| Consumer DNEL, acute | | dermal | systemic | 0,09 mg/kg bw/day |
| Consumer DNEL, acute | | oral | systemic | 0,03 mg/kg bw/day |

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Sodium periodate solution 30 g/l in water auxiliary solution for METROHM

Revision date: 21.11.2023

Product code: 21978

Page 5 of 10

PNEC values

| CAS No | Substance | |
|--|------------------|-------------|
| Environmental compartment | | Value |
| 7790-28-5 | sodium periodate | |
| Freshwater | | 0 mg/l |
| Freshwater (intermittent releases) | | 0,002 mg/l |
| Marine water | | 0 mg/l |
| Freshwater sediment | | 0,001 mg/kg |
| Marine sediment | | 0 mg/kg |
| Micro-organisms in sewage treatment plants (STP) | | 2,2 mg/l |
| Soil | | 0 mg/kg |

8.2. Exposure controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: goggles.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: vertrieb@kcl.de With specification (test according to EN374):

By long-term hand contact

Trade name/designation: KCL 741 Dermatril® L
Recommended material: NBR (Nitrile rubber) 0,11 mm
Wearing time with permanent contact: > 480 min

By short-term hand contact

Trade name/designation: KCL 741 Dermatril® L
Recommended material: NBR (Nitrile rubber) 0,11 mm
Wearing time with occasional contact (splashes): > 480 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Skin protection

Wear suitable protective clothing.

Respiratory protection

Respiratory protection necessary at: aerosol or mist formation

Environmental exposure controls

Do not allow to enter into surface water or drains.

Sodium periodate solution 30 g/l in water auxiliary solution for METROHM

Revision date: 21.11.2023

Product code: 21978

Page 6 of 10

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | | |
|---|-------------------|--------------------------|
| Physical state: | Liquid | |
| Colour: | colourless | |
| Odour: | odourless | |
| Odour threshold: | No data available | |
| Melting point/freezing point: | | No data available |
| Boiling point or initial boiling point and boiling range: | | No data available |
| Flammability: | | No data available |
| Lower explosion limits: | | No data available |
| Upper explosion limits: | | No data available |
| Flash point: | | No data available |
| Auto-ignition temperature: | | No data available |
| Decomposition temperature: | | No data available |
| pH-Value: | | No data available |
| Viscosity / kinematic: | | No data available |
| Water solubility: | | No data available |
| Solubility in other solvents | | |
| not determined | | |
| Dissolution rate: | | No data available |
| Partition coefficient n-octanol/water: | | No data available |
| Dispersion stability: | | No data available |
| Vapour pressure: | | not determined |
| Vapour pressure: | | not determined |
| Density: | | 1,0196 g/cm ³ |
| Relative density: | | No data available |
| Bulk density: | | No data available |
| Relative vapour density: | | No data available |
| Particle characteristics: | | No data available |

9.2. Other information

Information with regard to physical hazard classes

| | | |
|---------------------------|--|-------------------|
| Explosive properties | | |
| No data available | | |
| Sustaining combustion: | | No data available |
| Self-ignition temperature | | |
| Solid: | | No data available |
| Gas: | | No data available |
| Oxidizing properties | | |
| Not oxidising. | | |

Other safety characteristics

| | | |
|--------------------------|--|-------------------|
| Evaporation rate: | | No data available |
| Solvent separation test: | | No data available |
| Solvent content: | | No data available |
| Solid content: | | No data available |
| Sublimation point: | | No data available |
| Softening point: | | No data available |
| Pour point: | | No data available |
| No data available: | | |
| Viscosity / dynamic: | | No data available |
| Flow time: | | No data available |

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Sodium periodate solution 30 g/l in water auxiliary solution for METROHM

Revision date: 21.11.2023

Product code: 21978

Page 7 of 10

Further Information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

No data available

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to avoid

No data available

10.5. Incompatible materials

No data available

10.6. Hazardous decomposition products

In case of fire may be liberated: Sulphur oxides

Further information

No data available

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicokinetics, metabolism and distribution

There are no data available on the mixture itself.

Acute toxicity

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

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

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

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure. (sodium periodate)

Aspiration hazard

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

Information on likely routes of exposure

There are no data available on the mixture itself.

Specific effects in experiment on an animal

There are no data available on the mixture itself.

Additional information on tests

There are no data available on the mixture itself.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Sodium periodate solution 30 g/l in water auxiliary solution for METROHM

Revision date: 21.11.2023

Product code: 21978

Page 8 of 10

Practical experience

There are no data available on the mixture itself.

11.2. Information on other hazards

Endocrine disrupting properties

There are no data available on the mixture itself.

Other information

There are no data available on the mixture itself.

Further information

There are no data available on the mixture itself.

SECTION 12: Ecological information

12.1. Toxicity

There are no data available on the mixture itself.

| CAS No | Chemical name | | | | | |
|-----------|--------------------------|-------------------|-----------|---|----------------------------|--------------------|
| | Aquatic toxicity | Dose | [h] [d] | Species | Source | Method |
| 7790-28-5 | sodium periodate | | | | | |
| | Acute fish toxicity | LC50 > 0,17 mg/l | 96 h | Oncorhynchus mykiss | REACH Registration Dossier | OECD Guideline 203 |
| | Acute algae toxicity | ErC50 1,1 mg/l | 72 h | Pseudokirchneriella subcapitata | REACH Registration Dossier | OECD Guideline 201 |
| | Acute crustacea toxicity | EC50 0,18 mg/l | 48 h | Daphnia magna | REACH Registration Dossier | OECD Guideline 202 |
| | Acute bacteria toxicity | EC50 220 mg/l () | 3 h | activated sludge of a predominantly domestic sewage | REACH Registration Dossier | OECD Guideline 209 |

12.2. Persistence and degradability

There are no data available on the mixture itself.

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

12.4. Mobility in soil

There are no data available on the mixture itself.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

Do not allow to enter into surface water or drains.

Further information

Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.
Send to a physico-chemical treatment facility under observation of official regulations.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Sodium periodate solution 30 g/l in water auxiliary solution for METROHM

Revision date: 21.11.2023

Product code: 21978

Page 9 of 10

There are no data available on the mixture itself.

Contaminated packaging

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

SECTION 14: Transport information

Land transport (ADR/RID)

| | |
|--|--|
| 14.1. UN number or ID number: | No dangerous good in sense of this transport regulation. |
| 14.2. UN proper shipping name: | No dangerous good in sense of this transport regulation. |
| 14.3. Transport hazard class(es): | No dangerous good in sense of this transport regulation. |
| 14.4. Packing group: | No dangerous good in sense of this transport regulation. |

Inland waterways transport (ADN)

| | |
|--|--|
| 14.1. UN number or ID number: | No dangerous good in sense of this transport regulation. |
| 14.2. UN proper shipping name: | No dangerous good in sense of this transport regulation. |
| 14.3. Transport hazard class(es): | No dangerous good in sense of this transport regulation. |
| 14.4. Packing group: | No dangerous good in sense of this transport regulation. |

Marine transport (IMDG)

| | |
|--|--|
| 14.1. UN number or ID number: | No dangerous good in sense of this transport regulation. |
| 14.2. UN proper shipping name: | No dangerous good in sense of this transport regulation. |
| 14.3. Transport hazard class(es): | No dangerous good in sense of this transport regulation. |
| 14.4. Packing group: | No dangerous good in sense of this transport regulation. |

Air transport (ICAO-TI/IATA-DGR)

| | |
|--|--|
| 14.1. UN number or ID number: | No dangerous good in sense of this transport regulation. |
| 14.2. UN proper shipping name: | No dangerous good in sense of this transport regulation. |
| 14.3. Transport hazard class(es): | No dangerous good in sense of this transport regulation. |
| 14.4. Packing group: | No dangerous good in sense of this transport regulation. |

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3

Information according to Directive 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Water hazard class (D): 2 - obviously hazardous to water

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 12.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Sodium periodate solution 30 g/l in water auxiliary solution for METROHM

Revision date: 21.11.2023

Product code: 21978

Page 10 of 10

Abbreviations and acronyms

- Ox. Sol: Oxidising solid
- Skin Corr: Skin corrosion
- Skin Irrit: Skin irritation
- Eye Dam: Eye damage
- Eye Irrit: Eye irritation
- STOT RE: Specific target organ toxicity - repeated exposure
- Aquatic Acute: Acute aquatic hazard
- 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
- IATA: International Air Transport Association
- GHS: Globally Harmonized System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service
- LC50: Lethal concentration, 50%
- LD50: Lethal dose, 50%

Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

| Classification | Classification procedure |
|---------------------|--------------------------|
| Skin Irrit. 2; H315 | Calculation method |
| Eye Irrit. 2; H319 | Calculation method |
| STOT RE 2; H373 | Calculation method |

Relevant H and EUH statements (number and full text)

- H271 May cause fire or explosion; strong oxidiser.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H372 Causes damage to organs through prolonged or repeated exposure.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)