

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/02/2015

Reviewed on 05/28/2015

1 Identification

- **Product identifier**
- **Trade name:** Urinay Mets by Dual Column Oxidizing Reagent
- **Catalog or product number:** 189-6011, 193-5198
- **CAS Number:**
7790-28-5
- **EC number:**
232-197-6
- **Application of the substance / the mixture** In-vitro laboratory reagent or component
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Bio-Rad Laboratories, Diagnostic Group
4000 Alfred Nobel Drive
Hercules, California 94547
1(510)724-7000
- **Information department:**
TechsupportUSSD@bio-rad.com
Technical services, customer support
- **Emergency telephone number:**
1(800) 424-9300 Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION, or ACCIDENT.

2 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description:**
7790-28-5 sodium periodate
- **Identification number(s):**
- **EC number:** 232-197-6
- **Additional information:** For the wording of the listed risk phrases refer to section 15.

3 Hazard(s) identification

- **Classification of the substance or mixture**
Ox. Sol. 2 H272 May intensify fire; oxidizer.
Acute Tox. 2 H310 Fatal in contact with skin.
Skin Irrit. 2 H315 Causes skin irritation.
STOT SE 3 H335 May cause respiratory irritation.
- **Label elements**
- **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS03 GHS06 GHS07

- **Signal word** Danger

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- Hazard-determining components of labeling:**

sodium periodate

- Hazard statements**

H272 May intensify fire; oxidizer.

H310 Fatal in contact with skin.

H315 Causes skin irritation.

H335 May cause respiratory irritation.

- Precautionary statements**

P221 Take any precaution to avoid mixing with combustibles.

P210 Keep away from heat.

P310 Immediately call a poison center/doctor.

P321 Specific treatment (see on this label).

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- Classification system**

- NFPA ratings (scale 0-4)** The substance possesses oxidizing properties.

4 First-aid measures

- After inhalation** Supply fresh air; consult doctor in case of complaints.

- After eye contact** Rinse opened eye for several minutes under running water.

- After swallowing** Induce vomiting and call for medical help.

5 Fire-fighting measures

- Suitable extinguishing agents**

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- Special hazards arising from the substance or mixture** No further relevant information available.

- Protective equipment:** No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures** Wear protective clothing.

- Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

- Methods and material for containment and cleaning up:** Pick up mechanically.

- 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** No special precautions are necessary if used correctly.

- Information about protection against explosions and fires:** No special measures required.

- Storage**

- Requirements to be met by storerooms and receptacles:** According to product specification

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- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **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.
- **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.
- **Personal protective equipment**
- **General protective and hygienic measures** The usual precautionary measures for handling chemicals should be followed.
- **Protection of hands:** Protective gloves.
- **Material of gloves** Synthetic gloves
- **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.
- **Eye protection:** Safety glasses

9 Physical and chemical properties

| | |
|--|---|
| · General Information | |
| · Appearance: | |
| · Form: | Crystalline |
| · Color: | White |
| · Odor: | Odorless |
| · Odour threshold: | Not determined. |
| · pH-value: | Not applicable. |
| · Change in condition | |
| · Melting point/Melting range: | 300 °C |
| · Boiling point/Boiling range: | X °C |
| · Flash point: | Not applicable |
| · Flammability (solid, gaseous) | Product is not flammable. |
| · Ignition temperature: | |
| · Decomposition temperature: | Not determined. |
| · Auto igniting: | Not determined. |
| · Danger of explosion: | Product does not present an explosion hazard. |
| · Explosion limits: | |
| · Lower: | Not determined. |
| · Upper: | Not determined. |
| · Vapor pressure: | Not applicable. |
| · Density at 20 °C: | 3.865 g/cm ³ |
| · Relative density | Not determined. |
| · Vapour density | Not applicable. |

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| | |
|---|--|
| · Evaporation rate | Not applicable. |
| · Solubility in / Miscibility with Water: | Insoluble |
| · Partition coefficient (n-octanol/water): | Not determined. |
| · Viscosity: | |
| dynamic: | Not applicable. |
| kinematic: | Not applicable. |
| Organic solvents: | 0.0 % |
| · Solids content: | 100.0 % |
| · Other information | No further relevant information available. |

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known

11 Toxicological information

· Acute toxicity:

· LD/LC50 values for hazardous components per OSHA criteria:

7790-28-5 sodium periodate

| | | |
|--------|------|----------------|
| Dermal | LD50 | 58 mg/kg (rat) |
|--------|------|----------------|

· Primary irritant effect:

· on the skin:

Irritant to skin and mucous membranes.

Caustic effect on skin and mucous membranes.

· Sensitization:

No sensitizing effects known.

· Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

The substance is not subject to classification according to the latest version of the EU lists.

· 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.

· Target organs:

Not applicable.

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12 Ecological information

- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Hand over to hazardous waste disposers.
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Dispose of waste in accordance to applicable national, regional, or local regulations.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

| | |
|--|---|
| · UN-Number | UN1479 |
| · DOT, ADR, IMDG, IATA | |
| · UN proper shipping name | OXIDIZING SOLID, N.O.S. (sodium periodate) |
| · DOT, IMDG, IATA | 1479 OXIDIZING SOLID, N.O.S. (sodium periodate) |
| · ADR | |
| · Transport hazard class(es) | |
| · Label | 5.1 |
| · ADR, IMDG, IATA | |
| · Class | 5.1 Oxidizing substances |
| · Label | 5.1 |
| · Packing group | |
| · DOT, ADR, IMDG, IATA | II |
| · Environmental hazards: | |
| · Marine pollutant: | No |
| · Special precautions for user | Warning: Oxidizing substances |
| · Danger code (Kemler): | 50 |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |

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· Transport/Additional information:

· ADR

· Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 500 g

· IMDG

· Limited quantities (LQ)

· Excepted quantities (EQ)

1 kg

Code: E2

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 500 g

· UN "Model Regulation":

UN1479, Oxidizing solid, n.o.s. (sodium periodate), 5.1, II

15 Regulatory information

· SARA (Superfund Amendments and Reauthorization Act of 1986 - USA)

· Section 302/304 (40CFR355.30 / 40CFR355.40):

Substance not listed.

· Section 313 (40CFR372.65):

Substance is not listed.

· TSCA (Toxic Substances Control Act):

Substance is listed.

· National regulations

· Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

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: Environmental Health and Safety.

· Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

· Date of preparation / last revision 06/02/2015 / -

· Abbreviations and acronyms:

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

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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Ox. Sol. 2: Oxidising Solids, Hazard Category 2
Acute Tox. 2: Acute toxicity, Hazard Category 2
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
• * Data compared to the previous version altered.

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