

## Safety Data Sheet

# ORP Buffer 220 mV

According\_to\_Regulation\_CLP14

Version:1

Version date:28/06/2021

Language:EN

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

Trade name/designation : ORP Buffer 220 mV  
Article No (user) : P01700114

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

Relevant identified uses : Laboratory chemicals.  
Uses advised against : No additional information available.

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

Supplier : Name: Manumasure  
Street: 8 avenue du docteur Schweitzer  
Postal code/City: 69330 Meyzieu  
Country: FRANCE  
Telephone: 04 37 45 05 68  
E-mail: qualite@manumasure.fr

### 1.4. Emergency Telephone Number

United Kingdom: 0344 892 0111

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

This mixture is not classified as dangerous.

### 2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms -  
Signal word -  
Product identifiers -  
Hazard Statements -  
Supplemental Hazard information (EU) EUH210 - Safety data sheet available on request.  
Precautionary Statements - General -  
Precautionary Statements - Prevention -  
Precautionary Statements - Response -  
Precautionary Statements - Storage -  
Precautionary Statements - Disposal -

## 2.3. Other hazards

Adverse physicochemical effects : To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances

| Substance  | C (%)               | Classification   | Specific concentration limits | Note |
|--|---------------------|--|-------------------------------|------|
| water<br>CAS N°:7732-18-5<br>EC N°:231-791-2<br>IDX N°:                            | 95.0% <C≤<br>100.0% | -  | -                             | -    |
| tripotassium hexacyanoferrate<br>CAS N°:13746-66-2<br>EC N°:237-323-3<br>IDX N°:   | 1.0% ≤C≤<br>5.0%    | H319: Causes serious eye irritation<br>H335: May cause respiratory irritation<br>H412: Harmful to aquatic life with long lasting effects | -                             | -    |
| tetrapotassium hexacyanoferrate<br>CAS N°:13943-58-3<br>EC N°:237-722-2<br>IDX N°: | C< 1.0%             | H412: Harmful to aquatic life with long lasting effects  | -                             | -    |

### 3.2. Mixtures

Not available

### 3.3. Remark

Full text of H-statements: see section 16.

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

Following inhalation : Remove person to fresh air and keep comfortable for breathing.  
Following skin contact : Wash skin with plenty of water.  
Following eye contact : Rinse eyes with water as a precaution.  
Following ingestion : Call a poison center or a doctor if you feel unwell.

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

Symptoms : No additional information available.  
Effects : No additional information available.

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

Notes for the doctor : Treat symptomatically.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray.  
Dry powder.  
Foam.  
Carbon dioxide.

## 5.2. Special hazards arising from the substance or mixture

- Hazardous decomposition products in case of fire: Toxic fumes may be released.

## 5.3. Advice for firefighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## 5.4. Additional information

Not available

# SECTION 6: ACCIDENTAL RELEASE MEASURES

## 6.1. Personal precautions, protective equipment and emergency procedures

- 6.1.1. For non-emergency personnel.
- Emergency procedures : Ventilate spillage area.
- 6.1.2. For emergency responders.
- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

## 6.2. Environmental precautions

- Avoid release to the environment.
- 6.3. Methods and material.

## 6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Take up liquid spill into absorbent material.
- Other information : Dispose of materials or solid residues at an authorized site.

## 6.4. Reference to other sections

- For further information refer to section 13.

## 6.5. Additional information

Not available

# SECTION 7: HANDLING AND STORAGE

## 7.1. Precautions for safe handling

### PROTECTIVE MEASURES

- Ensure good ventilation of the work station. Wear personal protective equipment.

### Advices on general occupational hygiene

- Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

## 7.2. Conditions for safe storage, including any incompatibilities

### Further information on storage conditions

- Store in a well-ventilated place. Keep cool.

## 7.3. Specific end uses

- No additional information available.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

Does not contain substances above concentration limits fixing an occupational exposure limit.

### 8.2. Exposure controls

#### Appropriate engineering controls

See section 7. No additional measures necessary.

#### Personal protection equipment

Not available

|                        |   |  |
|------------------------|---|--|
| Eye/face protection    | : | Suitable eye protection: Safety glasses  |
| Skin protection        | : | Hand protection: Protective gloves<br>Body protection: Wear suitable protective clothing |
| Respiratory protection | : | In case of insufficient ventilation, wear suitable respiratory equipment                 |

#### Environmental exposure controls

Avoid release to the environment.

### 8.3. Additional information

Not available

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

|   |                   |
|---|-------------------|
| Physical state:                                   | Liquid            |
| Colour:   | Yellow.           |
| Odour:  | Odourless.        |
| Odour threshold:                                  | Not available     |
| pH:   | 7 @ 25°C          |
| Melting point/freezing point:                     | Not available     |
| Initial boiling point and boiling range:          | 100°C             |
| Flash point:                                      | Not available     |
| Evaporation rate:                                 | Not available     |
| Flammability:                                     | Not available     |
| Upper/lower flammability or explosive limits:     | Not available     |
| Vapour pressure:                                  | Not available     |
| Vapour density:                                   | Not available     |
| Relative density:                                 | Not available     |
| Solubility(ies):                                  | Soluble in Water. |
| Partition coefficient: n-octanol/water (Log KOC): | Not available     |
| Auto-ignition temperature:                        | Not available     |
| Decomposition temperature:                        | Not available     |
| Viscosity:  | Not available     |
| Explosive properties:                             | Not available     |
| Oxidising properties:                             | Not available     |

### 9.2. Other safety information

Not available

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### 10.7. Additional information

Not available

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Acute oral toxicity

#### Data for mixture

Not classified.

#### Substances

##### tetrapotassium hexacyanoferrate (CAS: 13943-58-3)

Species : Rat  
Sex : Not available  
Guideline : Not available

| Subendpoint | Operator | Value | Unit  |
|-------------|----------|-------|-------|
| LD50        | -        | 3613  | mg/kg |

Conclusion : Not available

##### tripotassium hexacyanoferrate (CAS: 13746-66-2)

Species : Mouse  
Sex : Not available  
Guideline : Not available

| Subendpoint | Operator | Value | Unit  |
|-------------|----------|-------|-------|
| LD50        | -        | 2970  | mg/kg |

Conclusion : Not available

### 11.2. Acute skin toxicity

#### Data for mixture

Not classified.

**Substances**

Not available

**11.3. Acute inhalation toxicity****Data for mixture**

Not classified.

**Substances**

Not available

**11.4. Skin corrosion****Data for mixture**

Not classified.

pH: 7 @ 25°C.

**Substances**

Not available

**11.5. Eye damage****Data for mixture**

Not classified.

pH: 7 @ 25°C.

**Substances**

Not available

**11.6. Skin sensitisation****Data for mixture**

Not classified.

**Substances**

Not available

**11.7. STOT RE****Data for mixture**

Not classified.

**Substances**

Not available

**11.8. STOT SE****Data for mixture**

Not classified.

**Substances**

Not available

**11.9. STOT RE****Data for mixture**

Not classified.

**Substances**

Not available

### 11.10. Carcinogenicity

#### Data for mixture

Not available

#### Substances

Not available

### 11.11. Reproductive and Developmental Toxicity

#### Data for mixture

Not available

#### Substances

Not available

### 11.12. Genotoxicity

#### Data for mixture

Not available

#### Substances

Not available

### 11.13. In vitro genotoxicity

#### Data for mixture

Not available

#### Substances

Not available

### 11.14. Respiratory sensitisation

#### Data for mixture

Not available

#### Substances

Not available

### 11.15. Additional information

Not available

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute) : Not classified.

Hazardous to the aquatic environment, long-term (chronic) : Not classified.

### 12.2. Persistence and degradability

No additional information available.

### 12.3. Bioaccumulative potential

No additional information available.

## 12.4. Mobility in soil

No additional information available.

## 12.5. Results of PBT and vPvB assessment

No additional information available.

## 12.6. Other adverse effects

No additional information available.

## 12.7. Additional ecotoxicological information

Not available

# SECTION 13: DISPOSAL CONSIDERATIONS

## 13.1. Product/Packaging disposal

### Waste treatment options

- Dispose of contents/container in accordance with licensed collector's sorting instructions.

# SECTION 14: TRANSPORT INFORMATION

|                                  | Land transport (ADR/RID) | Inland waterway transport (ADN) | Sea transport (IMDG) | Air transport (ICAO-TI/IATA-DGR) |
|----------------------------------|--------------------------|---------------------------------|----------------------|----------------------------------|
| 14.1. UN number                  | -                        | -                               | -                    | -                                |
| 14.2. UN proper shipping name    | -                        | -                               | -                    | -                                |
| 14.3. Transport hazard class(es) |                          |                                 |                      |                                  |
| Class or Division                | -                        | -                               | -                    | -                                |
| Hazard label(s)                  |                          |                                 |                      |                                  |
| 14.4. Packing group              | -                        | -                               | -                    | -                                |

## 14.5. Environmental hazards

Not regulated.

## 14.6. Special precautions for user

Not regulated.

## 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not regulated.

## 14.8. Additional information

Not available

# SECTION 15: REGULATORY INFORMATION

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

This SDS has been established in accordance with REACH regulation, including its amendments: REACH Regulation (EC) No 1907/2006.

This SDS has been established in accordance with CLP regulation, including its amendments: CLP Regulation EC No. 1272/2008.

Not available

## 15.2. Chemical Safety Assessment

For this substance/mixture a chemical safety assessment is not required.

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.



For this substance/mixture a chemical safety assessment has been elaborated.

For this mixture, the relevant data of the Substances' Chemical safety assessment are integrated in the sections of the SDS.

### 15.3. Additional information

Not available

## SECTION 16: OTHER INFORMATION

Creation date: 28/06/2021

Version date: 28/06/2021

Printing date: 10/07/2021

### 16.1. Indication of changes

Not applicable (first edition of the MSDS).

### 16.2. Abbreviations and acronyms

CAS: Chemical Abstract Service Number.

IATA: International Air Transport Association.

IMDG: International Maritime Dangerous Goods Code.

DPD Dangerous Preparation Directive.

UN number: United Nations number.

No EC: European Commission Number.

ADN/ADNR: Regulations concerning the transport of dangerous substances in barges on the waterways.

ADR/RID: European Agreement concerning the International Carriage of Dangerous Goods by Road/Regulations concerning the international carriage of dangerous goods by rail.

CLP: Classification, labeling and packaging.

VPvB: very persistent and very bioaccumulative substances.

### 16.3. Key literature references and sources for data

No data available.

### 16.4. Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]

Classification of the mixture is in accordance with the evaluation method described in Regulation (EC) No 1272/2008.

### 16.5. Relevant R-, H- and EUH-phrases (Number and full text)

|      |                   |   |
|------|-------------------|---|
| H319 | Eye Irrit. 2      | Causes serious eye irritation                     |
| H335 | STOT SE 3 H335    | May cause respiratory irritation                  |
| H412 | Aquatic Chronic 3 | Harmful to aquatic life with long lasting effects |

### 16.6. Training advice

Refer to Sections 4, 5, 6, 7 and 8 of this safety data sheet.

### 16.7. Additional information

Not available

The information given in this Safety Data Sheet is based on our present knowledge and on european and national regulations. This Safety Data Sheet describes safety requirements relative to identified uses, it doesn't guarantee all the product properties particularly in the case of non identified uses. The product mustn't be used for any uses other than those identified under heading 1. Since the user's working conditions are not known by us, it is the responsibility of the user to take all necessary measures to comply with legal requirements for specific uses and avoid negative health effects.