

# Safety Data Sheet

acc. to OSHA HCS

Printing date 08/19/2022

Reviewed on 08/19/2022

## 1 Identification

- **Product identifier**
- **Trade name:** MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4
- **Article number:** 11582-05, 11582-10
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Information department:** Product safety department
- **Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



Acute Toxicity - Oral 4      H302 Harmful if swallowed.  
Acute Toxicity - Inhalation 4      H332 Harmful if inhaled.  
Skin Irritation 2      H315 Causes skin irritation.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



- **Signal word** Warning
- **Hazard-determining components of labeling:**  
Sodium Phosphate Monobasic Monohydrate
- **Hazard statements**  
Harmful if swallowed or if inhaled.  
Causes skin irritation.
- **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.  
Wear protective gloves.  
If swallowed: Call a poison center/doctor if you feel unwell.  
Rinse mouth.  
If on skin: Wash with plenty of water.

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Specific treatment (see on this label).

**IF INHALED:** Remove person to fresh air and keep comfortable for breathing.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

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

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 1

Fire = 0

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 1

Fire = 0

Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

### 3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

7782-85-6	Disodium Orthophosphate Heptahydrate	>2.5-≤10%
10049-21-5	Sodium Phosphate Monobasic Monohydrate	>2.5-≤10%

### 4 First-aid measures

· **Description of first aid measures**

· **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

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.

· **After swallowing:** Immediately call a doctor.

· **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.

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**Trade name: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

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## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **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.
- **Protective Action Criteria for Chemicals**

· **PAC-1:**

None of the ingredients is listed.

· **PAC-2:**

None of the ingredients is listed.

· **PAC-3:**

None of the ingredients is listed.

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **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:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **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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**Trade name: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

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- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **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.  
Avoid contact with the skin.  
Avoid contact with the eyes and skin.
- **Breathing equipment:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **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:** Goggles recommended during refilling.

## 9 Physical and chemical properties

### · Information on basic physical and chemical properties

#### · General Information

##### · Appearance:

<b>Form:</b>	Liquid
<b>Color:</b>	Transparent
<b>Odor:</b>	Odorless
<b>Odor threshold:</b>	Not determined.

· **pH-value at 20 °C (68 °F):** 7.4

#### · Change in condition

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	100 °C (212 °F)

· **Flash point:** Not applicable.

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**Trade name: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

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· <b>Flammability (solid, gaseous):</b>	Not flammable.
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
· <b>Vapor pressure at 20 °C (68 °F):</b>	23 hPa (17.3 mm Hg)
· <b>Density at 20 °C (68 °F):</b>	1.0079 g/cm <sup>3</sup> (8.41093 lbs/gal)
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Not miscible or difficult to mix.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>Water:</b>	91.5 %
<b>VOC content:</b>	0.00 %
	0.0 g/l / 0.00 lb/gal
<b>Solids content:</b>	8.5 %
· <b>Other information</b>	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** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **Information on toxicological effects**
  - **Acute toxicity:**
  - **Primary irritant effect:**
  - **on the skin:** Irritant to skin and mucous membranes.
  - **on the eye:** No irritating effect.
  - **Sensitization:** No sensitizing effects known.
  - **Additional toxicological information:**
- The product shows the following dangers according to internally approved calculation methods for preparations:

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**Trade name: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

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Harmful

Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety Health Administration)**

None of the ingredients is listed.

## 12 Ecological information

· **Toxicity**

· **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.

· **Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Water hazard class 1 (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.

· **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.

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

· **UN-Number**

· **DOT, ADR, IMDG, IATA** Void

· **UN proper shipping name**

· **DOT, ADR, IMDG, IATA** Void

· **Transport hazard class(es)**

· **DOT, ADR, ADN, IMDG, IATA**

· **Class** Void

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- |                                                                                  |                 |
|----------------------------------------------------------------------------------|-----------------|
| · <b>Packing group</b>                                                           | Void            |
| · <b>DOT, ADR, IMDG, IATA</b>                                                    | Void            |
| · <b>Environmental hazards:</b>                                                  | Not applicable. |
| · <b>Special precautions for user</b>                                            | Not applicable. |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable. |
| · <b>UN "Model Regulation":</b>                                                  | Void            |

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**  
No further relevant information available.
- **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

7732-18-5	Deionized Water, Reagent Grade A.C.S.	ACTIVE
7647-14-5	sodium chloride	ACTIVE

· **Hazardous Air Pollutants**

None of the ingredients is listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

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**Trade name: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

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· **Hazard pictograms**



GHS07

· **Signal word** Warning

· **Hazard-determining components of labeling:**

Sodium Phosphate Monobasic Monohydrate

· **Hazard statements**

Harmful if swallowed or if inhaled.

Causes skin irritation.

· **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.

Wear protective gloves.

If swallowed: Call a poison center/doctor if you feel unwell.

Rinse mouth.

If on skin: Wash with plenty of water.

Specific treatment (see on this label).

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

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.

· **Contact:**

· **Date of preparation / last revision** 08/19/2022 / -

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international 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

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

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 Toxicity - Oral 4: Acute toxicity – Category 4**

**Skin Irritation 2: Skin corrosion/irritation – Category 2**



# Safety Data Sheet

## according to WHS Regulations

Printing date 19.08.2022

Revision: 19.08.2022

### 1 Identification

- **Product identifier**
- **Trade name:** MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4
- **Article number:** 11582-05, 11582-10
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- ProSciTech Pty Ltd  
11 Carlton Street, Kirwan QLD 4817 Australia  
Telephone Number: (07) 4773 9444 - 8:30am - 5:00pm, Monday to Friday (excluding Public Holidays)  
Emergency Contact: (07) 4773 9444 - 8:30am - 5:00pm, Monday to Friday (excluding Public Holidays)  
Website: [ems.proscitech.com](http://ems.proscitech.com)
- Emgrid Australia Pty. Ltd.  
P.O. Box 118  
The Patch VIC 3792  
Australia  
Tel: 03 9752 1785  
Fax: 03 9752 1784  
Website: [www.emgrid.com.au](http://www.emgrid.com.au)
- **Further information obtainable from:** Product safety department
- **Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2 Hazard(s) Identification

- **Classification of the substance or mixture**



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

- **Label elements**
- **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**



GHS07

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**Trade name: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

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- **Signal word** Warning
- **Hazard-determining components of labelling:**  
Sodium Phosphate Monobasic Monohydrate
- **Hazard statements**  
Harmful if swallowed.  
Harmful if inhaled.  
Causes skin irritation.
- **Precautionary statements**  
Avoid breathing dust/fume/gas/mist/vapours/spray.  
Wash thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves.  
**IF SWALLOWED:** Call a POISON CENTER/doctor if you feel unwell.  
Rinse mouth.  
**IF ON SKIN:** Wash with plenty of water.  
Specific treatment (see on this label).  
**IF INHALED:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
If skin irritation occurs: Get medical advice/attention.  
Take off contaminated clothing and wash it before reuse.  
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition and Information on Ingredients

- **Chemical characterisation:** Mixtures
- **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

7782-85-6	Disodium Orthophosphate Heptahydrate	>2.5-≤10%
10049-21-5	Sodium Phosphate Monobasic Monohydrate	>2.5-≤10%

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

### 4 First Aid Measures

- **Description of first aid measures**
- **General information:**  
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**  
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.  
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.
- **After swallowing:** Call for a doctor immediately.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

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- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Fire Fighting Measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

### 6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **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.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **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:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls and personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.

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Trade name: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4

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- **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.  
 Avoid contact with the skin.  
 Avoid contact with the eyes and skin.
- **Respiratory protection:**  
 In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **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:** Goggles recommended during refilling

### 9 Physical and Chemical Properties

#### · Information on basic physical and chemical properties

##### · General Information

##### · Appearance:

<b>Form:</b>	Liquid
<b>Colour:</b>	Transparent
<b>Odour:</b>	Odourless
<b>Odour threshold:</b>	Not determined.

· **pH-value at 20 °C:** 7.4

##### · Change in condition

<b>Melting point/freezing point:</b>	Undetermined.
<b>Initial boiling point and boiling range:</b>	100 °C

· **Flash point:** Not applicable.

· **Flammability (solid, gas):** Not applicable.

· **Decomposition temperature:** Not determined.

· **Auto-ignition temperature:** Product is not selfigniting.

· **Explosive properties:** Product does not present an explosion hazard.

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Trade name: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4

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· <b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
· <b>Vapour pressure at 20 °C:</b>	23 hPa
· <b>Density at 20 °C:</b>	1.0079 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with water:</b>	Not miscible or difficult to mix.
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>Water:</b>	91.5 %
<b>VOC (EC)</b>	0.00 %
<b>Solids content:</b>	8.5 %
· <b>Other information</b>	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** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological Information

- **Information on toxicological effects**
- **Acute toxicity**
- **Primary irritant effect:**
- **Skin corrosion/irritation** Irritant to skin and mucous membranes.
- **Serious eye damage/irritation** No irritating effect.
- **Respiratory or skin sensitisation** No sensitising effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Harmful  
Irritant

AU

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# Safety Data Sheet

## according to WHS Regulations

Printing date 19.08.2022

Revision: 19.08.2022

Trade name: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4

(Contd. of page 5)

### 12 Ecological Information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** 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.*
- **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 together with household garbage. Do not allow product to reach sewage system.*
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

· <b>UN-Number</b>	
· <b>ADG, IMDG, IATA</b>	<i>not regulated</i>
· <b>UN proper shipping name</b>	
· <b>ADG, IMDG, IATA</b>	<i>not regulated</i>
· <b>Transport hazard class(es)</b>	
· <b>ADG, ADN, IMDG, IATA</b>	
· <b>Class</b>	<i>not regulated</i>
· <b>Packing group</b>	
· <b>ADG, IMDG, IATA</b>	<i>not regulated</i>
· <b>Environmental hazards:</b>	<i>Not applicable.</i>
· <b>Special precautions for user</b>	<i>Not applicable.</i>
· <b>Transport in bulk according to Annex II of Marpol and the IBC Code</b>	<i>Not applicable.</i>
· <b>UN "Model Regulation":</b>	<i>not regulated</i>

AU

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# Safety Data Sheet

## according to WHS Regulations

Printing date 19.08.2022

Revision: 19.08.2022

Trade name: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4

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### 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Australian Inventory of Industrial Chemicals**

All ingredients are listed.

· **Standard for the Uniform Scheduling of Medicines and Poisons**

None of the ingredients is listed.

· **Australia: Priority Existing Chemicals**

None of the ingredients is listed.

· **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).

· **Hazard pictograms**



GHS07

· **Signal word** Warning

· **Hazard-determining components of labelling:**

Sodium Phosphate Monobasic Monohydrate

· **Hazard statements**

Harmful if swallowed.

Harmful if inhaled.

Causes skin irritation.

· **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Wear protective gloves.

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

Rinse mouth.

IF ON SKIN: Wash with plenty of water.

Specific treatment (see on this label).

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

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

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **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.

· **Contact:**

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

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**Safety Data Sheet**  
according to WHS Regulations

Printing date 19.08.2022

Revision: 19.08.2022

**Trade name: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

(Contd. of page 7)

*IATA: International Air Transport Association**EINECS: European Inventory of Existing Commercial Chemical Substances**ELINCS: European List of Notified Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**VOC: Volatile Organic Compounds (USA, EU)**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Acute Tox. 4: Acute toxicity – Category 4**Skin Irrit. 2: Skin corrosion/irritation – Category 2*

-AU-



# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 08/19/2022

Reviewed on 08/19/2022

### 1 Identification

- **Product identifier**
- **Trade name:** MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4
- **Article number:** 11582-05, 11582-10
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Information department:** Product safety department
- **Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2 Hazard identification

- **Classification of the substance or mixture**



GHS07

Acute Toxicity (Oral) - Category 4      H302 Harmful if swallowed.  
 Acute Toxicity (Inhalation) - Category 4      H332 Harmful if inhaled.  
 Skin Irritation - Category 2      H315 Causes skin irritation.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labeling:**  
Sodium Phosphate Monobasic Monohydrate
- **Hazard statements**  
Harmful if swallowed or if inhaled.  
Causes skin irritation.
- **Precautionary statements**  
Avoid breathing dust/fume/gas/mist/vapours/spray.  
Wash thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves/protective clothing/eye protection/face protection.  
If swallowed: Call a poison center/doctor if you feel unwell.  
Rinse mouth.  
If on skin: Wash with plenty of water.

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# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 08/19/2022

Reviewed on 08/19/2022

**Trade name: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

(Contd. of page 1)

Specific treatment (see on this label).

**IF INHALED:** Remove person to fresh air and keep comfortable for breathing.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

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

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 1

Fire = 0

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 1

Fire = 0

Reactivity = 0

### 3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

7782-85-6	Disodium Orthophosphate Heptahydrate	1-5% w/w *
10049-21-5	Sodium Phosphate Monobasic Monohydrate	1-5% w/w *

\* Actual concentration ranges are withheld as a trade secret.

### 4 First-aid measures

· **Description of first aid measures**

· **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

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.

· **After swallowing:** Immediately call a doctor.

· **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:** Use fire fighting measures that suit the environment.

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

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# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 08/19/2022

Reviewed on 08/19/2022

**Trade name: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

(Contd. of page 2)

- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **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.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **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:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **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:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **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.  
Avoid contact with the skin.  
Avoid contact with the eyes and skin.
- **Breathing equipment:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

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# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 08/19/2022

Reviewed on 08/19/2022

Trade name: **MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

(Contd. of page 3)

· **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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **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:** Goggles recommended during refilling.

## 9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

<b>Form:</b>	Liquid
<b>Color:</b>	Transparent
· <b>Odor:</b>	Odorless
· <b>Odor threshold:</b>	Not determined.

· **pH-value at 20 °C:** 7.4

· **Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	100 °C

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not flammable.

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not selfigniting.

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

· **Explosion limits:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.

· **Vapor pressure at 20 °C:** 23 hPa

<b>Density at 20 °C:</b>	1.0079 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.

· **Solubility in / Miscibility with**

**Water:** Not miscible or difficult to mix.

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CA

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 08/19/2022

Reviewed on 08/19/2022

**Trade name: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

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- |                                                                       |
|-----------------------------------------------------------------------|
| · <b>Partition coefficient (n-octanol/water):</b> Not determined.     |
| · <b>Viscosity:</b>                                                   |
| <b>Dynamic:</b> Not determined.                                       |
| <b>Kinematic:</b> Not determined.                                     |
| · <b>Solvent content:</b>                                             |
| <b>Water:</b> 91.5 %                                                  |
| <b>Solids content:</b> 8.5 %                                          |
| · <b>Other information</b> 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** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Harmful  
Irritant
- **Carcinogenic categories**

· <b>IARC (International Agency for Research on Cancer)</b>
-------------------------------------------------------------

None of the ingredients is listed.
------------------------------------

· <b>NTP (National Toxicology Program)</b>
--------------------------------------------

None of the ingredients is listed.
------------------------------------

### 12 Ecological information

- **Toxicity**
- **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.
- **Mobility in soil** No further relevant information available.

(Contd. on page 6)

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 08/19/2022

Reviewed on 08/19/2022

**Trade name: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

(Contd. of page 5)

- **Additional ecological information:**
- **General notes:**  
*Water hazard class 1 (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.*
- **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.*
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

- |                                                                                  |                 |
|----------------------------------------------------------------------------------|-----------------|
| · <b>UN-Number</b>                                                               | Void            |
| · <b>DOT/TDG, ADR, IMDG, IATA</b>                                                | Void            |
| · <b>UN proper shipping name</b>                                                 | Void            |
| · <b>DOT/TDG, ADR, IMDG, IATA</b>                                                | Void            |
| · <b>Transport hazard class(es)</b>                                              | Void            |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>                                               | Void            |
| · <b>Class</b>                                                                   | Void            |
| · <b>Packing group</b>                                                           | Void            |
| · <b>DOT/TDG, ADR, IMDG, IATA</b>                                                | Void            |
| · <b>Environmental hazards:</b>                                                  | Not applicable. |
| · <b>Special precautions for user</b>                                            | Not applicable. |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable. |
| · <b>UN "Model Regulation":</b>                                                  | Void            |

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**  
*No further relevant information available.*
- **Sara**

· **Section 355 (extremely hazardous substances):**

*None of the ingredients is listed.*

· **Section 313 (Specific toxic chemical listings):**

*None of the ingredients is listed.*

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CA

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 08/19/2022

Reviewed on 08/19/2022

**Trade name: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

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· <b>TSCA (Toxic Substances Control Act):</b>		
7732-18-5	Deionized Water, Reagent Grade A.C.S.	ACTIVE
7647-14-5	sodium chloride	ACTIVE
· <b>Canadian substance listings:</b>		
· <b>Canadian Domestic Substances List (DSL)</b>		
7732-18-5	Deionized Water, Reagent Grade A.C.S.	
7647-14-5	sodium chloride	
· <b>Canadian Non-Domestic Substances List (NDSL)</b>		
None of the ingredients is listed.		
· <b>Canadian Ingredient Disclosure list (limit 0.1%)</b>		
None of the ingredients is listed.		
· <b>Canadian Ingredient Disclosure list (limit 1%)</b>		
None of the ingredients is listed.		

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS07

· **Signal word** Warning

· **Hazard-determining components of labeling:**

Sodium Phosphate Monobasic Monohydrate

· **Hazard statements**

Harmful if swallowed or if inhaled.

Causes skin irritation.

· **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Call a poison center/doctor if you feel unwell.

Rinse mouth.

If on skin: Wash with plenty of water.

Specific treatment (see on this label).

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

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.

· **Contact:**

· **Date of the latest revision of the safety data sheet** 08/19/2022 / -

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**Safety Data Sheet**  
according to HPR, Schedule 1

Printing date 08/19/2022

Reviewed on 08/19/2022

**Trade name: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

(Contd. of page 7)

**· Abbreviations and acronyms:**

*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*  
*ELINCS: European List of Notified Chemical Substances*  
*CAS: Chemical Abstracts Service (division of the American Chemical Society)*  
*NFPA: National Fire Protection Association (USA)*  
*HMIS: Hazardous Materials Identification System (USA)*  
*PBT: Persistent, Bioaccumulative and Toxic*  
*vPvB: very Persistent and very Bioaccumulative*

CA



**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 19.08.2022

Revision: 19.08.2022

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

- **1.1 Product identifier**
- **Trade name:** MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4
- **Article number:** 11582-05, 11582-10
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Further information obtainable from:** Product safety department
- **1.4 Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the GB CLP regulation.
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labelling:**  
Sodium Phosphate Monobasic Monohydrate
- **Hazard statements**  
H302+H332 Harmful if swallowed or if inhaled.  
H315 Causes skin irritation.
- **Precautionary statements**  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P280 Wear protective gloves.  
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.  
P330 Rinse mouth.

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# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 19.08.2022

Revision: 19.08.2022

**Trade name: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

(Contd. of page 1)

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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.

### SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

7782-85-6	Disodium Orthophosphate Heptahydrate ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	>2.5-≤10%
10049-21-5	Sodium Phosphate Monobasic Monohydrate ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	>2.5-≤10%

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:**  
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**  
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.  
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.
- **After swallowing:** Call for a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.

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# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 19.08.2022

Revision: 19.08.2022

**Trade name: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

(Contd. of page 2)

- **6.4 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.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 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:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Additional information about design of technical facilities:** No further data; see item 7.
- **Ingredients with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making 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.  
Avoid contact with the skin.  
Avoid contact with the eyes and skin.
- **Respiratory protection:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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- **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:** Goggles recommended during refilling

### SECTION 9: Physical and chemical properties

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

##### · General Information

##### · Appearance:

Form:	Liquid
Colour:	Transparent
Odour:	Odourless
Odour threshold:	Not determined.

· pH-value at 20 °C: 7.4

##### · Change in condition

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	100 °C

· Flash point: Not applicable.

· Flammability (solid, gas): Not applicable.

· Decomposition temperature: Not determined.

· Auto-ignition temperature: Product is not selfigniting.

· Explosive properties: Product does not present an explosion hazard.

##### · Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

· Vapour pressure at 20 °C: 23 hPa

Density at 20 °C:	1.0079 g/cm <sup>3</sup>
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.

##### · Solubility in / Miscibility with water:

Not miscible or difficult to mix.

· Partition coefficient: n-octanol/water: Not determined.

##### · Viscosity:

Dynamic:	Not determined.
Kinematic:	Not determined.

##### · Solvent content:

Water:	91.5 %
VOC (EC)	0.00 %

Solids content: 8.5 %

· 9.2 Other information: No further relevant information available.

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### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**  
Harmful if swallowed or if inhaled.
- **Primary irritant effect:**
- **Skin corrosion/irritation**  
Causes skin irritation.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** 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** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** 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.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

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

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- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information

- |                                                                                             |                 |
|---------------------------------------------------------------------------------------------|-----------------|
| · <b>14.1 UN-Number</b><br>· <b>ADR, IMDG, IATA</b>                                         | not regulated   |
| · <b>14.2 UN proper shipping name</b><br>· <b>ADR, IMDG, IATA</b>                           | not regulated   |
| · <b>14.3 Transport hazard class(es)</b><br>· <b>ADR, ADN, IMDG, IATA</b><br>· <b>Class</b> | not regulated   |
| · <b>14.4 Packing group</b><br>· <b>ADR, IMDG, IATA</b>                                     | not regulated   |
| · <b>14.5 Environmental hazards:</b>                                                        | Not applicable. |
| · <b>14.6 Special precautions for user</b>                                                  | Not applicable. |
| · <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>            | Not applicable. |
| · <b>UN "Model Regulation":</b>                                                             | not regulated   |

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 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.*

- **Relevant phrases**  
H302 Harmful if swallowed.  
H312 Harmful in contact with skin.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H332 Harmful if inhaled.  
H335 May cause respiratory irritation.
- **Abbreviations and acronyms:**  
ADR: Accord relatif au transport international 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 Harmonised 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 (division of the American Chemical Society)

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*VOC: Volatile Organic Compounds (USA, EU)**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Acute Tox. 4: Acute toxicity – Category 4**Skin Irrit. 2: Skin corrosion/irritation – Category 2**Eye Irrit. 2: Serious eye damage/eye irritation – Category 2**STOT SE 3: Specific target organ toxicity (single exposure) – Category 3*

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# Veiligheidsinformatieblad

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## RUBRIEK 1: Identificatie van de stof of het mengsel en van de vennootschap/onderneming

- **1.1 Productidentificatie**
- **Handelsnaam:** MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4
- **Artikelnummer:** 11582-05, 11582-10
- **UFI:** UC01-W0PX-U006-8N9X
- **1.2 Relevant geïdentificeerd gebruik van de stof of het mengsel en ontraden gebruik**  
Geen verdere relevante informatie verkrijgbaar.
- **Toepassing van de stof / van de bereiding** Laboratoriumchemicaliën
- **1.3 Details betreffende de verstrekker van het veiligheidsinformatieblad**
- **Fabrikant/leverancier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- Aurion  
Binnenhaven 5  
6709 PD Wageningen  
The Netherlands  
Tel: 31 317 415094  
Fax: 31 317 415955  
email: info@aurion.nl
- **Inlichtingengevende sector:** Product safety department
- **1.4 Telefoonnummer voor noodgevallen:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## RUBRIEK 2: Identificatie van de gevaren

- **2.1 Indeling van de stof of het mengsel**
- **Indeling overeenkomstig Verordening (EG) nr. 1272/2008**



Acute Tox. 4 H302 Schadelijk bij inslikken.  
Acute Tox. 4 H332 Schadelijk bij inademing.  
Skin Irrit. 2 H315 Veroorzaakt huidirritatie.

- **2.2 Etiketteringselementen**
- **Etikettering overeenkomstig Verordening (EG) nr. 1272/2008**  
Het product is geclassificeerd en geëtiketteerd volgens de CLP-verordening.
- **Gevarenpictogrammen**



- **Signaalwoord** Waarschuwing
- **Gevaaraanduidende componenten voor de etikettering:**  
Sodium Phosphate Monobasic Monohydrate

(Vervolg op blz. 2)



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(Vervolg van blz. 1)

- **Gevarenaanduidingen**

H302+H332 Schadelijk bij inslikken en bij inademing.

H315 Veroorzaakt huidirritatie.

- **Veiligheidsaanbevelingen**

P261 Inademing van stof/rook/gas/nevel/damp/spuitnevel vermijden.

P280 Draag beschermende handschoenen.

P301+P312 NA INSLIKKEN: bij onwel voelen een ANTIGIFCENTRUM/arts raadplegen.

P330 De mond spoelen.

P304+P340 NA INADEMING: de persoon in de frisse lucht brengen en ervoor zorgen dat deze gemakkelijk kan ademen.

P501 De inhoud en de verpakking verwerken volgens de plaatselijke/regionale/nationale/internationale voorschriften.

- **2.3 Andere gevaren**

- **Resultaten van PBT- en zPzB-beoordeling**

- **PBT:** Niet bruikbaar.

- **zPzB:** Niet bruikbaar.

## RUBRIEK 3: Samenstelling en informatie over de bestanddelen

- **3.2 Chemische karakterisering: Mengsels**

- **Beschrijving:** Mengsel van na elkaar aangevoerde stoffen met ongevaarlijke bijmengingen.

- **Gevaarlijke inhoudstoffen:**

7782-85-6	Disodium Orthophosphate Heptahydrate ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	>2,5-≤10%
10049-21-5	Sodium Phosphate Monobasic Monohydrate ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	>2,5-≤10%

- **Aanvullende gegevens:**

De woordelijke inhoud van de opgegeven aanwijzingen inzake de mogelijke gevaren is te vinden in hoofdstuk 16.

## RUBRIEK 4: Eerstehulpmaatregelen

- **4.1 Beschrijving van de eerstehulpmaatregelen**

- **Algemene informatie:**

Het is mogelijk dat vergiftigingssymptomen pas na vele uren optreden. Om deze reden is medische controle gedurende minstens 48 uur na een ongeval noodzakelijk.

- **Na het inademen:**

Frisse lucht toedienen, eventueel beademing, warmte. Wanneer de klachten niet ophouden, een arts raadplegen.

Bij bewusteloosheid ligging en vervoer in stabiele zijligging.

- **Na huidcontact:** Onmiddellijk met water en zeep afwassen en goed naspoelen.

- **Na oogcontact:** Ogen bij geopend ooglid meerdere minuten met stromend water spoelen

- **Na inslikken:** Onmiddellijk arts raadplegen.

- **4.2 Belangrijkste acute en uitgestelde symptomen en effecten** Geen verdere relevante informatie verkrijgbaar.

- **4.3 Vermelding van de vereiste onmiddellijke medische verzorging en speciale behandeling**

Geen verdere relevante informatie verkrijgbaar.

## RUBRIEK 5: Brandbestrijdingsmaatregelen

- **5.1 Blusmiddelen**

- **Geschikte blusmiddelen:** Brandblusmaatregelen op omgeving afstemmen.

(Vervolg op blz. 3)

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(Vervolg van blz. 2)

- **5.2 Speciale gevaren die door de stof of het mengsel worden veroorzaakt**  
Geen verdere relevante informatie verkrijgbaar.
- **5.3 Advies voor brandweelieden**
- **Speciale beschermende kleding:** Ademhalingstoestel aantrekken.

### RUBRIEK 6: Maatregelen bij het accidenteel vrijkomen van de stof of het mengsel

- **6.1 Persoonlijke voorzorgsmaatregelen, beschermingsmiddelen en noodprocedures** Niet nodig.
- **6.2 Milieuvoorzorgsmaatregelen:** Niet in de riolering/het oppervlaktewater/het grondwater laten terechtkomen.
- **6.3 Insluitings- en reinigingsmethoden en -materiaal:**  
Met vloeistofbindend materiaal (zand, bergmeel, zuurbinder, universele binder, zaagmeel) opnemen.  
Besmet materiaal zoals afval volgens punt 13 verwijderen.  
Voor voldoende ventilatie zorgen.
- **6.4 Verwijzing naar andere rubrieken**  
Informatie inzake veilig gebruik - zie hoofdstuk 7.  
Informatie inzake persoonlijke beschermingsuitrusting - zie hoofdstuk 8.  
Informatie inzake berging - zie hoofdstuk 13.

### RUBRIEK 7: Hantering en opslag

- **7.1 Voorzorgsmaatregelen voor het veilig hanteren van de stof of het mengsel**  
Voor goede ventilatie/afzuiging op de werkplaatsen zorgen.  
Aërosolvorming vermijden.
- **Informatie m.b.t. brand- en ontploffingsgevaar:** Geen bijzondere maatregelen noodzakelijk.
- **7.2 Voorwaarden voor een veilige opslag, met inbegrip van incompatibele producten**
- **Opslag:**
- **Eisen ten opzichte van opslagruimte en tanks:** Geen bijzondere eisen.
- **Informatie m.b.t. gezamenlijke opslag:** Niet noodzakelijk.
- **Verdere inlichtingen over eisen m.b.t. de opslag:** Tanks ondoordringbaar gesloten houden.
- **7.3 Specifiek eindgebruik** Geen verdere relevante informatie verkrijgbaar.

### RUBRIEK 8: Maatregelen ter beheersing van blootstelling/persoonlijke bescherming

- **8.1 Controleparameters**
- **Aanvullende gegevens m.b.t. de inrichting van technische installaties:** Geen aanvullende gegevens. Zie 7.
- **Bestanddelen met grenswaarden die m.b.t. de werkruimte in acht genomen moeten worden:**  
Het produkt bevat geen relevante hoeveelheden van stoffen, die met betrekking tot de werkplaatsen, qua grenswaarden gecontroleerd moeten worden.
- **Aanvullende gegevens:** Als basis dienden lijsten die bij opstelling geldig waren.
- **8.2 Maatregelen ter beheersing van blootstelling**
- **Persoonlijke beschermingsvoorzieningen:**
- **Algemene beschermings- en gezondheidsmaatregelen:**  
Verwijderd houden van eet- en drinkwaren.  
Verontreinigde kleding onmiddellijk uittrekken.  
Vóór de pauze en aan het einde van werktijd handen wassen.  
Aanraking met de huid vermijden.  
Aanraking met de ogen en de huid vermijden.
- **Ademhalingsbescherming:**  
Bij korte of geringe belasting ademfiltertoestel; bij intensieve resp. langdurige expositie een van de omringende lucht onafhankelijk ademhalingstoestel gebruiken.

(Vervolg op blz. 4)

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### · Handbescherming:



Veiligheidshandschoenen

Het handschoenmateriaal moet ondoorlatend en bestand zijn tegen het product / de stof / de bereiding.

Op grond van falende testen kan geen aanbeveling voor handschoenmateriaal voor het product / de bereiding / het chemicaliënmengsel afgegeven worden.

Kies handschoenmateriaal rekening houdend met de penetratietijden, de permeatiegraden en de degradatie.

### · Handschoenmateriaal

De keuze van een geschikte handschoen is niet alleen afhankelijk van het materiaal, maar ook van andere kwaliteitskenmerken en verschilt van fabrikant tot fabrikant. Aangezien het product uit meerdere stoffen is samengesteld, is de duurzaamheid van de handschoenmaterialen niet vooraf berekenbaar en moet derhalve vóór het gebruik worden getest.

### · Doordringingstijd van het handschoenmateriaal

De precieze penetratietijd kunt u te weten komen bij de handschoenfabrikant; houd er rekening mee.

### · Oogbescherming: Bij het omgieten is het gebruik van een veiligheidsbril aan te bevelen.

## RUBRIEK 9: Fysische en chemische eigenschappen

### · 9.1 Informatie over fysische en chemische basiseigenschappen

#### · Algemene gegevens

#### · Voorkomen:

Vorm:	Vloeistof
Kleur:	Doorschijnend
Geur:	Reukloos
Geurdrempelwaarde:	Niet bepaald.

· pH-waarde bij 20 °C: 7,4

#### · Toestandsverandering

Smelt-/vriespunt:	Niet bepaald.
Beginkookpunt en kooktraject:	100 °C

· Vlampunt: Niet bruikbaar.

· Ontvlambaarheid (vast, gas): Niet bruikbaar.

· Ontledingstemperatuur: Niet bepaald.

· Zelfontbrandingstemperatuur: Het produkt ontbrandt niet uit zichzelf.

· Ontploffingseigenschappen: Het produkt is niet ontploffingsgevaarlijk.

#### · Ontploffingsgrenzen:

Onderste:	Niet bepaald.
Bovenste:	Niet bepaald.

· Dampspanning bij 20 °C: 23 hPa

· Dichtheid bij 20 °C: 1,0079 g/cm<sup>3</sup>

· Relatieve dichtheid: Niet bepaald.

· Dampdichtheid: Niet bepaald.

· Verdampingssnelheid: Niet bepaald.

#### · Oplosbaarheid in/mengbaarheid met

Water: Niet resp. gering mengbaar.

(Vervolg op blz. 5)

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(Vervolg van blz. 4)

- |                                                  |                                                 |
|--------------------------------------------------|-------------------------------------------------|
| · <b>Verdelingscoëfficiënt: n-octanol/water:</b> | Niet bepaald.                                   |
| · <b>Viscositeit</b>                             |                                                 |
| <b>Dynamisch:</b>                                | Niet bepaald.                                   |
| <b>Kinematisch:</b>                              | Niet bepaald.                                   |
| · <b>Oplosmiddelgehalte:</b>                     |                                                 |
| <b>Water:</b>                                    | 91,5 %                                          |
| <b>VOC (EG)</b>                                  | 0,00 %                                          |
| <b>Gehalte aan vaste bestanddelen:</b>           | 8,5 %                                           |
| · <b>9.2 Overige informatie</b>                  | Geen verdere relevante informatie verkrijgbaar. |

### RUBRIEK 10: Stabiliteit en reactiviteit

- **10.1 Reactiviteit** Geen verdere relevante informatie verkrijgbaar.
- **10.2 Chemische stabiliteit**
- **Thermische afbraak / te vermijden omstandigheden:** Geen afbraak bij gebruik volgens voorschrift.
- **10.3 Mogelijke gevaarlijke reacties** Geen gevaarlijke reacties bekend.
- **10.4 Te vermijden omstandigheden** Geen verdere relevante informatie verkrijgbaar.
- **10.5 Chemisch op elkaar inwerkende materialen:** Geen verdere relevante informatie verkrijgbaar.
- **10.6 Gevaarlijke ontledingsproducten:** Geen gevaarlijke ontbindingsproducten bekend.

### RUBRIEK 11: Toxicologische informatie

- **11.1 Informatie over toxicologische effecten**
- **Acute toxiciteit**  
Schadelijk bij inslikken en bij inademing.
- **Primaire aandoening:**
- **Huidcorrosie/-irritatie**  
Veroorzaakt huidirritatie.
- **Ernstig oogletsel/oogirritatie** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Sensibilisatie van de luchtwegen/de huid**  
Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Aanvullende toxicologische informatie:**
- **CMR-effecten (kankerverwekkendheid, mutageniteit en giftigheid voor de voortplanting)**
- **Mutageniteit in geslachtscellen** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Kankerverwekkendheid** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Giftigheid voor de voortplanting** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **STOT bij eenmalige blootstelling** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **STOT bij herhaalde blootstelling** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Gevaar bij inademing** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.

### RUBRIEK 12: Ecologische informatie

- **12.1 Toxiciteit**
- **Aquatische toxiciteit:** Geen verdere relevante informatie verkrijgbaar.
- **12.2 Persistentie en afbreekbaarheid** Geen verdere relevante informatie verkrijgbaar.
- **12.3 Bioaccumulatie** Geen verdere relevante informatie verkrijgbaar.
- **12.4 Mobiliteit in de bodem** Geen verdere relevante informatie verkrijgbaar.

(Vervolg op blz. 6)

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(Vervolg van blz. 5)

- **Verdere ecologische informatie:**
- **Algemene informatie:**
  - Waterbezwaarlijkheid (NL): B(4) Weinig schadelijk voor in water levende organismen
  - Gevaar voor water klasse 1 (D) (Zelfclassificatie): gevaar voor water klein
  - Niet onverdund of in grote hoeveelheden lozen in grondwater, in oppervlaktewater of in de riolering.
- **12.5 Resultaten van PBT- en zPzB-beoordeling**
- **PBT:** Niet bruikbaar.
- **zPzB:** Niet bruikbaar.
- **12.6 Andere schadelijke effecten** Geen verdere relevante informatie verkrijgbaar.

### RUBRIEK 13: Instructies voor verwijdering

- **13.1 Afvalverwerkingsmethoden**
- **Aanbeveling:** Mag niet tesamen met huisvuil gestort worden of in de riolering terechtkomen.
- **Niet gereinigde verpakkingen:**
- **Aanbeveling:** Afvalverwijdering volgens overheidsbepalingen.

### RUBRIEK 14: Informatie met betrekking tot het vervoer

- |                                                                                   |                     |
|-----------------------------------------------------------------------------------|---------------------|
| · <b>14.1 VN-nummer</b>                                                           |                     |
| · <b>ADR, IMDG, IATA</b>                                                          | Niet van toepassing |
| · <b>14.2 Juiste ladingnaam overeenkomstig de modelreglementen van de VN</b>      |                     |
| · <b>ADR, IMDG, IATA</b>                                                          | Niet van toepassing |
| · <b>14.3 Transportgevarenklasse(n)</b>                                           |                     |
| · <b>ADR, ADN, IMDG, IATA</b>                                                     |                     |
| · <b>klasse</b>                                                                   | Niet van toepassing |
| · <b>14.4 Verpakkingsgroep:</b>                                                   |                     |
| · <b>ADR, IMDG, IATA</b>                                                          | Niet van toepassing |
| · <b>14.5 Milieugevaren:</b>                                                      | Niet bruikbaar.     |
| · <b>14.6 Bijzondere voorzorgen voor de gebruiker</b>                             | Niet bruikbaar.     |
| · <b>14.7 Vervoer in bulk overeenkomstig bijlage II bij Marpol en de IBC-code</b> | Niet bruikbaar.     |
| · <b>VN "Model Regulation":</b>                                                   | Niet van toepassing |

### RUBRIEK 15: Regelgeving

- **15.1 Specifieke veiligheids-, gezondheids- en milieureglementen en -wetgeving voor de stof of het mengsel**
- **SZW-lijst van kankerverwekkende stoffen**  
geen der bestanddelen staat op de lijst.
- **SZW-lijst van mutagene stoffen**  
geen der bestanddelen staat op de lijst.
- **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Vruchtbaarheid**  
geen der bestanddelen staat op de lijst.

(Vervolg op blz. 7)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 19.08.2022

Herziening van: 19.08.2022

**Handelsnaam: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

(Vervolg van blz. 6)

· **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Ontwikkeling**

geen der bestanddelen staat op de lijst.

· **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Borstvoeding**

geen der bestanddelen staat op de lijst.

· **Lijst Zeer Zorgwekkende Stoffen (ZZS)**

geen der bestanddelen staat op de lijst.

· **Lijst van Potentieel Zeer Zorgwekkende Stoffen**

geen der bestanddelen staat op de lijst.

· **Richtlijn 2012/18/EU**

· **Gevaarlijke stoffen die met naam genoemd worden - BIJLAGE I** geen der bestanddelen staat op de lijst.

· **Verordening (EG) nr. 1907/2006 BIJLAGE XVII** Beperkingsvoorwaarden: 3

· **Richtlijn 2011/65/EU betreffende beperking van het gebruik van bepaalde gevaarlijke stoffen in elektrische en elektronische apparatuur - Bijlage II**

geen der bestanddelen staat op de lijst.

· **VERORDENING (EU) 2019/1148**

· **Bijlage I - PRECURSOREN VOOR EXPLOSIEVEN WAARVOOR EEN BEPERKING GELDT (Bovengrenswaarde ten behoeve van vergunningverlening op grond van artikel 5, lid 3)**

geen der bestanddelen staat op de lijst.

· **Bijlage II - PRECURSOREN VOOR EXPLOSIEVEN DIE MOETEN WORDEN GEMELD**

geen der bestanddelen staat op de lijst.

· **Verordening (EG) nr. 273/2004 inzake drugsprecursoren**

geen der bestanddelen staat op de lijst.

· **Verordening (EG) Nr. 111/2005 houdende voorschriften voor het toezicht op de handel tussen de Gemeenschap en derde landen in drugsprecursoren**

geen der bestanddelen staat op de lijst.

· **Nationale voorschriften:**

· **Gevaarklasse v. water:** Waterbezwaarlijkheid (NL): B(4) Weinig schadelijk voor in water levende organismen

· **15.2 Chemischeveiligheidsbeoordeling:** Een chemische veiligheidsbeoordeling is niet uitgevoerd.

### RUBRIEK 16: Overige informatie

Deze gegevens zijn gebaseerd op de huidige stand van onze kennis. Zij beschrijven echter geen garantie van producteigenschappen en vestigen geen contractuele rechtsbetrekking.

· **Relevante zinnen**

H302 Schadelijk bij inslikken.

H312 Schadelijk bij contact met de huid.

H315 Veroorzaakt huidirritatie.

H319 Veroorzaakt ernstige oogirritatie.

H332 Schadelijk bij inademing.

H335 Kan irritatie van de luchtwegen veroorzaken.

· **Afkortingen en acroniemen:**

ADR: Accord relatif au transport international 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 Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

(Vervolg op blz. 8)

**Veiligheidsinformatieblad**  
volgens 1907/2006/EG, Artikel 31

datum van de druk: 19.08.2022

Herziening van: 19.08.2022

**Handelsnaam: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

CAS: Chemical Abstracts Service (division of the American Chemical Society)  
VOC: Volatile Organic Compounds (USA, EU)  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Acute Tox. 4: Acute toxiciteit – Categorie 4  
Skin Irrit. 2: Huidcorrosie/-irritatie – Categorie 2  
Eye Irrit. 2: Ernstig oogletsel/oogirritatie – Categorie 2  
STOT SE 3: Specifieke doelorgaantoxiciteit bij eenmalige blootstelling – Categorie 3

(Vervolg van blz. 7)

NL

# Käyttöturvallisuustiedote

## 1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 19.08.2022

Tarkistus: 19.08.2022

### KOHTA 1: Aineen tai seoksen ja yhtiön tai yrityksen tunnistetiedot

- **1.1 Tuotetunniste**
- **Kauppanimike:** MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4
- **Artikkelinumero:** 11582-05, 11582-10
- **UFI:** UC01-W0PX-U006-8N9X
- **1.2 Aineen tai seoksen merkitykselliset tunnistetut käytöt ja käytöt, joita ei suositella**  
Merkittäviä lisätietoja ei ole saatavilla.
- **Aineen / valmisteen käyttö** Laboratoriokemikaalit
- **1.3 Käyttöturvallisuustiedotteen toimittajan tiedot**
- **Valmistaja/toimittaja:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Tietoja antaa:** Product safety department
- **1.4 Hätäpuhelinnumero:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### KOHTA 2: Vaaran yksilöinti

- **2.1 Aineen tai seoksen luokitus**
- **Luokitus asetuksen (EY) N:o 1272/2008 mukaisesti**



GHS07

Acute Tox. 4 H302 Haitallista nieltynä.  
Acute Tox. 4 H332 Haitallista hengitettynä.  
Skin Irrit. 2 H315 Ärsyttää ihoa.

- **2.2 Merkinnät**
- **Merkinnät asetuksen (EY) N:o 1272/2008 mukaisesti** Tuote on luokiteltu ja merkitty CLP-asetuksen mukaan.
- **Varoitusmerkit**



GHS07

- **Huomiosana** Varoitus
- **Vaaran määrävät komponentit etiketeissä:**  
Sodium Phosphate Monobasic Monohydrate
- **Vaaralausekkeet**  
H302+H332 Haitallista nieltynä tai hengitettynä.  
H315 Ärsyttää ihoa.
- **Turvalausekkeet**  
P261 Vältä pölyn/savun/kaasun/sumun/höyryn/suihkeen hengittämistä.  
P280 Käytä suojakäsineitä.  
P301+P312 JOS KEMIKAALIA ON NIELTY: Ota yhteys MYRKYTYSTIETOKESKUKSEEN/lääkäriin jos ilmenee pahoinvointia.

(jatkuu sivulla 2)



# Käyttöturvallisuustiedote

## 1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 19.08.2022

Tarkistus: 19.08.2022

**Kauppanimike: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

(jatkuu sivulla 1)

P330 Huuhto suu.

P304+P340 JOS KEMIKAALIA ON HENGITETTY: Siirrä henkilö raittiiseen ilmaan ja varmista vaivaton hengitys.

P501 Hävitä säiliö(t) noudattaen paikallisia/alueellisia/kansallisia/kansainvälisiä määräyksiä.

- 2.3 Muut vaarat
- PBT- ja vPvB-arvioinnin tulokset
- PBT: Ei voida käyttää.
- vPvB: Ei voida käyttää.

### KOHTA 3: Koostumus ja tiedot aineosista

- 3.2 Kemialliset ominaisuudet: Seokset
- Selostus: Seuraavista aineista koostuva seos, jossa vaarattomia lisäaineita.

- Sisältää vaarallisia aineita:

7782-85-6	Disodium Orthophosphate Heptahydrate ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	>2,5-≤10%
10049-21-5	Sodium Phosphate Monobasic Monohydrate ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	>2,5-≤10%

- Lisätietoja: Annettujen turvaohjeiden sanamuoto kappaleesta 16.

### KOHTA 4: Ensiaputoimenpiteet

- 4.1 Ensiaputoimenpiteiden kuvaus
- Yleisohjeet:
  - Myrkytysoireet voivat ilmaantua vasta useiden tuntien kuluttua. Tästä syystä henkilöt on pidettävä lääkärin tarkkailun alaisena ainakin 48 tuntia onnettomuuden jälkeen.
- Hengitettynä:
  - Huolehdittava raittiin ilman saannista, tarvittaessa annettava tekohengitystä, pidettävä lämpimänä. Oireiden jatkuessa pyydettyä lääkärin apua.
  - Tajuton pidettävä ja kuljetettava kyljellään.
- Ihokosketuksessa: Pestävä heti vedellä ja saippualla ja huuhdottava hyvin.
- Aineen päästyä silmiin: Silmiä huuhdotaan luomet auki juoksevan veden alla useita minutteja.
- Nieltyä: Saatettava lääkärin hoitoon.
- 4.2 Tärkeimmät oireet ja vaikutukset, sekä välittömät että viivästyneet Merkittäviä lisätietoja ei ole saatavilla.
- 4.3 Mahdollisesti tarvittavaa välitöntä lääketieteellistä apua ja erityishoitoa koskevat ohjeet
  - Merkittäviä lisätietoja ei ole saatavilla.

### KOHTA 5: Palontorjuntatoimenpiteet

- 5.1 Sammutusaineet
- Sopivat sammutusaineet: Palontorjuntatoimenpiteet ympäristöä vastaavasti.
- 5.2 Aineesta tai seoksesta johtuvat erityiset vaarat Merkittäviä lisätietoja ei ole saatavilla.
- 5.3 Palontorjuntaa koskevat ohjeet
- Erityinen suojavarustus: Käytettävä hengityssuojainta.

### KOHTA 6: Toimenpiteet onnettomuuspäästöissä

- 6.1 Varotoimenpiteet, henkilönsuojaimet ja menettely hätätilanteessa Ei tarvita.
- 6.2 Ympäristöön kohdistuvat varotoimet: Estettävä pääsy viemäriihin/pintavesiin/pohjaveteen.

(jatkuu sivulla 3)

# Käyttöturvallisuustiedote

## 1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 19.08.2022

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**Kauppanimike: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

(jatkuu sivulla 2)

- **6.3 Suojarakenteita ja puhdistusta koskevat menetelmät ja -välineet:**  
Imettävä nestettä sitovalla aineella (hiekkä, piimaa, hapon sidosaaine, yleisidosaine, sahajauho).  
Saastunut aine on jätteenä hävitettävä kohdan 13 mukaisesti.  
Huolehdittava riittävästä tuuletuksesta.
- **6.4 Viihtaukset muihin kohtiin**  
Turvallista käsittelyä koskevia ohjeita kappaleessa 7.  
Henkilökohtaista suojavarustusta koskevia ohjeita kappaleessa 8.  
Aineen hävitystä koskevia ohjeita kappaleessa 13.

### KOHTA 7: Käsittely ja varastointi

- **7.1 Turvallisen käsittelyn edellyttämät toimenpiteet**  
Huolehdittava hyvästä tuuletuksesta/imusta työpaikalla.  
Vältettävä aerosolin muodostusta.
- **Palo- ja räjähdysuojaohejeet:** Erikoistoimenpiteitä ei tarvita.
- **7.2 Turvallisen varastoinnin edellyttämät olosuhteet, mukaan luettuina yhteensopimattomuudet**
- **Varastointi:**
- **Varastotiloille ja säiliöille asetettavat vaatimukset:** Ei erikoisvaatimuksia.
- **Yhteisvarastointiohejeet:** Ei tarvita.
- **Lisätietoja varastointiehtoihin:** Astiat on pidettävä tiiviisti suljettuina.
- **7.3 Erityinen loppukäyttö** Merkittäviä lisätietoja ei ole saatavilla.

### KOHTA 8: Altistumisen ehkäiseminen ja henkilösuojaimet

- **8.1 Valvontaa koskevat muuttujat**
- **Lisäohjeita teknisten laitteiden varustukseen:** Ei muita tietoja, ks. kohta 7.
- **Aineosat työpaikkakohtaisin valvottavin raja-arvoihin:**  
Tuote ei sisällä merkityksellisiä määriä aineita työpaikkakohtaisilla valvottavilla raja-arvoilla.
- **Lisäohjeet:** Tiedot perustuvat valmistushetkellä voimassaoleviin luetteloihin.
- **8.2 Altistumisen ehkäiseminen**
- **Henkilökohtainen suojavarustus:**
- **Yleiset suoja- ja hygieniatoimenpiteet:**  
Pidettävä loitolla elintarvikkeista, juomista ja rehuista.  
Likaantuneet, aineen saastuttamat vaatekappaleet on riisuttava välittömästi.  
Kädet on pestävä ennen taukoja ja työn päätyttyä.  
Vältettävä ihokosketusta.  
Vältettävä ihokosketusta ja kosketusta silmiin.
- **Hengityssuoja:**  
Lyhytaikaisessa tai vähäisessä altistuksessa hengityssuojasuodin; intensiivisessä tai pitempiaikaisessa rasiuksessa ulkoilmasta riippumaton hengityssuojain.
- **Käsisuojus:**



Suojakäsineet

Käsinemateriaalin tulee olla tuotetta/ainetta/valmistetta kestävä ja läpäisemätöntä.  
Puuttuvien testien vuoksi suositusta soveltuvasta suojakäsinemateriaalista tuotteelle/ valmisteelle / kemikaalikohteelle ei voida antaa.  
Suojakäsinemateriaalin valinnassa on otettava huomioon läpäisyajat, läpäisevyyskerroin ja kuluminen.

(jatkuu sivulla 4)

# Käyttöturvallisuustiedote

## 1907/2006/EY, 31 artikla mukainen

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**Kauppanimike: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

(jatkuu sivulla 3)

· **Käsinmateriaali**

Soveltuvan käsinetyypin valikoima ei riipu yksinomaan materiaalista vaan myös muista laatuominaisuuksista ja vaihtelee eri valmistajilla. Koska tuote on valmiste, joka koostuu eri aineista, ei suojakäsinmateriaalin kestävyys ole ennalta arvioitavissa vaan pitää tarkistaa ennen käyttöä.

· **Käsinmateriaalin läpäisy aika**

Tarkka läpäisy aika on selvitettävä suojakäsinvalmistajalta ja sitä on noudatettava.

· **Silmäsuojus:** Suojalaseja suositellaan uudelleentäytössä.

### KOHTA 9: Fysikaaliset ja kemialliset ominaisuudet

· **9.1 Fysikaalisia ja kemiallisia perusominaisuuksia koskevat tiedot**

· **Yleiset ohjeet**

· **Olomuoto:**

<b>Muoto:</b>	Neste
<b>Väri:</b>	Läpikuultava
<b>Haju:</b>	Hajuton
<b>Hajukynnys:</b>	Ei määrätty.

· **pH-arvo 20 °C lämpötilassa:** 7,4

· **Tilanmuutos**

<b>Sulamis- tai jäätymispiste:</b>	Ei määrätty.
<b>Kiehumispiste ja kiehumisalue:</b>	100 °C

· **Leimahduspiste:** Ei voida käyttää.

· **Syttyvyys (kiinteät aineet, kaasut):** Ei voida käyttää.

· **Hajoamislämpötila:** Ei määrätty.

· **Itsesyttymislämpötila:** Tuote ei ole itsestään syttyvä.

· **Räjähävyys:** Tuote ei ole räjähdysvaarallinen.

· **Räjähdyksrajat:**

<b>Alempi:</b>	Ei määrätty.
<b>Ylempi:</b>	Ei määrätty.

· **Höyrypaine 20 °C lämpötilassa:** 23 hPa

· **Tiheys 20 °C lämpötilassa:** 1,0079 g/cm<sup>3</sup>

· **Suhteellinen tiheys:** Ei määrätty.

· **Höyryntiheys:** Ei määrätty.

· **Haihtumisnopeus:** Ei määrätty.

· **Liukenevuus/sekoittuvuus**

**veteen:** Ei sekoittuva tai vain osittain sekoittuva.

· **Jakautumiskerroin: n-oktanoliväsi:** Ei määrätty.

· **Viskositeetti:**

<b>Dynaaminen:</b>	Ei määrätty.
<b>Kinemaattinen:</b>	Ei määrätty.

· **Liuteainepitoisuus:**

<b>Vesi:</b>	91,5 %
<b>VOC (EY)</b>	0,00 %

**Kiinnäinepitoisuus:** 8,5 %

(jatkuu sivulla 5)

# Käyttöturvallisuustiedote

## 1907/2006/EY, 31 artikla mukainen

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**Kauppanimike: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

(jatkuu sivulla 4)

**· 9.2 Muut tiedot**

Merkittäviä lisätietoja ei ole saatavilla.

### KOHTA 10: Stabiilisuus ja reaktiivisuus

- **10.1 Reaktiivisuus** Merkittäviä lisätietoja ei ole saatavilla.
- **10.2 Kemiallinen stabiilisuus**
- **Terminen hajoavuus / vältettävät olosuhteet:** Ei hajaantumista määräystenmukaisessa käytössä.
- **10.3 Vaarallisten reaktioiden mahdollisuus** Ei tiedossa vaarallisia reaktioita.
- **10.4 Vältettävät olosuhteet** Merkittäviä lisätietoja ei ole saatavilla.
- **10.5 Yhteensopimattomat materiaalit:** Merkittäviä lisätietoja ei ole saatavilla.
- **10.6 Vaaralliset hajoamistuotteet:** Tiedossa ei ole vaarallisia hajoamistuotteita.

### KOHTA 11: Myrkyllisyyteen liittyvät tiedot

- **11.1 Tiedot myrkyllisistä vaikutuksista**
- **Väliön myrkyllisyys**  
Haitallista nieltynä tai hengitettynä.
- **Ensisijainen ärsyttävä vaikutus:**
- **Ihosityttövyys/ihoärsytys**  
Ärsyttää ihoa.
- **Vakava silmävaurio/silmä-ärsytys** Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- **Hengitysteiden tai ihon herkistyminen** Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- **Toksikologia lisätietoja:**
- **CMR-vaikutukset eli syöpää aiheuttavat, perimää vaurioittavat ja lisääntymiselle vaaralliset vaikutukset**
- **Sukusolujen perimää vaurioittavat vaikutukset** Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- **Syöpää aiheuttavat vaikutukset** Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- **Lisääntymiselle vaaralliset vaikutukset** Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- **Elinkohtainen myrkyllisyys – kerta-altistuminen**  
Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- **Elinkohtainen myrkyllisyys – toistuva altistuminen**  
Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- **Aspiraatiovaara** Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.

### KOHTA 12: Tiedot vaarallisuudesta ympäristölle

- **12.1 Myrkyllisyys**
- **Vesimyrkyllisyys:** Merkittäviä lisätietoja ei ole saatavilla.
- **12.2 Pysyvyys ja hajoavuus** Merkittäviä lisätietoja ei ole saatavilla.
- **12.3 Biokertyvyys** Merkittäviä lisätietoja ei ole saatavilla.
- **12.4 Liikkuvuus maaperässä** Merkittäviä lisätietoja ei ole saatavilla.
- **Ekologia lisätietoja:**
- **Yleisohjeita:**  
Vesistövaarallisuusluokka 1 (Oma luokitus): lievästi vesistöä vaarantava  
Estetään aineen pääsy ohentamattomana tai suurina määrinä pohjaveteen, vesistöihin, viemäristöön.
- **12.5 PBT- ja vPvB-arvioinnin tulokset**
- **PBT:** Ei voida käyttää.
- **vPvB:** Ei voida käyttää.
- **12.6 Muut haitalliset vaikutukset** Merkittäviä lisätietoja ei ole saatavilla.

FI

(jatkuu sivulla 6)

# Käyttöturvallisuustiedote

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(jatkuu sivulla 5)

### KOHTA 13: Jätteiden käsittelyyn liittyvät näkökohdat

- **13.1 Jätteiden käsittelymenetelmät**
- **Suositus:** Ei voida hävittää yhdessä talousjätteiden kanssa. Ei saa päästää viemäristöön.
- **Puhdistamattomat pakkaukset:**
- **Suositus:** Hävitettävä virallisten määräysten mukaisesti.

### KOHTA 14: Kuljetustiedot

- |                                                                                               |                   |
|-----------------------------------------------------------------------------------------------|-------------------|
| · <b>14.1 YK-numero</b><br>· <b>ADR, IMDG, IATA</b>                                           | tarpeeton         |
| · <b>14.2 Kuljetuksessa käytettävä virallinen nimi</b><br>· <b>ADR, IMDG, IATA</b>            | tarpeeton         |
| · <b>14.3 Kuljetuksen vaaraluokka</b><br>· <b>ADR, ADN, IMDG, IATA</b><br>· <b>luokka</b>     | tarpeeton         |
| · <b>14.4 Pakkausryhmä</b><br>· <b>ADR, IMDG, IATA</b>                                        | tarpeeton         |
| · <b>14.5 Ympäristövaarat:</b>                                                                | Ei voida käyttää. |
| · <b>14.6 Erityiset varotoimet käyttäjälle</b>                                                | Ei voida käyttää. |
| · <b>14.7 Kuljetus irtolastina Marpol-sopimuksen II liitteen ja IBC-säännösten mukaisesti</b> | Ei voida käyttää. |
| · <b>UN "Model Regulation":</b>                                                               | tarpeeton         |

### KOHTA 15: Lainsäädäntöä koskevat tiedot

- **15.1 Nimenomaisesti ainetta tai seosta koskevat turvallisuus-, terveys- ja ympäristösäännökset tai -lainsäädäntö**
- **Direktiivi 2012/18/EU**
- **Nimetyt vaaralliset aineet - LIITE I sisältäviä aineita ei ole lueteltu**
- **NEUVOSTON ASETUS (EY) N:o 1907/2006 LIITE XVII Rajoitusehdot: 3**

- **Direktiivi 2011/65/EU tiettyjen vaarallisten aineiden käytön rajoittamisesta sähkö- ja elektroniikkalaitteissa - Liite II**

sisältäviä aineita ei ole lueteltu

- **ASETUS (EU) 2019/1148**

- **Liite I - RAJOITETUT RÄJÄHTEIDEN LÄHTÖAINEET (Yläraja-arvo lupien myöntämiseksi 5 artiklan 3 kohdan mukaisesti)**

sisältäviä aineita ei ole lueteltu

- **Liite II - ILMOITETTAVAT RÄJÄHTEIDEN LÄHTÖAINEET**

sisältäviä aineita ei ole lueteltu

- **Asetus (EY) N:o 273/2004 huumausaineiden lähtöaineista**

sisältäviä aineita ei ole lueteltu

(jatkuu sivulla 7)

**Käyttöturvallisuustiedote**  
1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 19.08.2022

Tarkistus: 19.08.2022

**Kauppanimike: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

(jatkuu sivulla 6)

· **Asetus (EY) N:o 111/2005 yhteisön ja kolmansien maiden välisen huumausaineiden lähtöaineiden kaupan valvontaa koskevista säännöistä**

sisältäviä aineita ei ole lueteltu

· **15.2 Kemikaaliturvallisuusarviointi:** Kemikaaliturvallisuusarviointia ei ole tehty.

### **KOHTA 16: Muut tiedot**

Annetut tiedot perustuvat tämänhetkisiin tietoihimme. Ne eivät kuitenkaan anna takuuta tuotteen ominaisuuksista eivätkä aikaansaa sopimuksellista oikeussuhdetta.

· **Asiaankuuluvat lausekkeet**

H302 Haitallista nieltynä.

H312 Haitallista joutuessaan iholle.

H315 Ärsyttää ihoa.

H319 Ärsyttää voimakkaasti silmiä.

H332 Haitallista hengitettynä.

H335 Saattaa aiheuttaa hengitysteiden ärsytystä.

· **Lyhenteet ja lyhytnimet:**

ADR: Accord relatif au transport international 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 Harmonised 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 (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Välitön myrkyllisyys – Katgoria 4

Skin Irrit. 2: Ihosyövyttävyys/ihoärsytys – Katgoria 2

Eye Irrit. 2: Vakava silmävaurio/silmä-ärsytys – Katgoria 2

STOT SE 3: Elinkohtainen myrkyllisyys (kerta-altistuminen) – Katgoria 3

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 19.08.2022

Révision: 19.08.2022

### RUBRIQUE 1: Identification de la substance/du mélange et de la société/l'entreprise

- **1.1 Identificateur de produit**
- **Nom du produit:** *MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4*
- **Code du produit:** 11582-05, 11582-10
- **UFI:** UC01-W0PX-U006-8N9X
- **1.2 Utilisations identifiées pertinentes de la substance ou du mélange et utilisations déconseillées**  
Pas d'autres informations importantes disponibles.
- **Emploi de la substance / de la préparation** Produits chimiques pour laboratoires
- **1.3 Renseignements concernant le fournisseur de la fiche de données de sécurité**
- **Producteur/fournisseur:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkck@aol.com  
www.emsdiasum.com
- **Service chargé des renseignements:** Product safety department
- **1.4 Numéro d'appel d'urgence:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### RUBRIQUE 2: Identification des dangers

- **2.1 Classification de la substance ou du mélange**
- **Classification selon le règlement (CE) n° 1272/2008**



GHS07

- Acute Tox. 4 H302 Nocif en cas d'ingestion.
- Acute Tox. 4 H332 Nocif par inhalation.
- Skin Irrit. 2 H315 Provoque une irritation cutanée.

- **2.2 Éléments d'étiquetage**
- **Étiquetage selon le règlement (CE) n° 1272/2008** Le produit est classifié et étiqueté selon le règlement CLP.
- **Pictogrammes de danger**



GHS07

- **Mention d'avertissement** Attention
- **Composants dangereux déterminants pour l'étiquetage:**  
Sodium Phosphate Monobasic Monohydrate
- **Mentions de danger**  
H302+H332 Nocif en cas d'ingestion ou d'inhalation.  
H315 Provoque une irritation cutanée.
- **Conseils de prudence**  
P261 Éviter de respirer les poussières/fumées/gaz/brouillards/vapeurs/aérosols.  
P280 Porter des gants de protection.  
P301+P312 EN CAS D'INGESTION: Appeler un CENTRE ANTIPOISON/un médecin en cas de malaise.

(suite page 2)

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 19.08.2022

Révision: 19.08.2022

**Nom du produit:** MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4

(suite de la page 1)

P330 Rincer la bouche.

P304+P340 EN CAS D'INHALATION: transporter la personne à l'extérieur et la maintenir dans une position où elle peut confortablement respirer.

P501 Éliminer le contenu/réceptacle conformément à la réglementation locale/régionale/nationale/internationale.

- **2.3 Autres dangers**
- **Résultats des évaluations PBT et vPvB**
- **PBT:** Non applicable.
- **vPvB:** Non applicable.

### RUBRIQUE 3: Composition/informations sur les composants

- **3.2 Caractérisation chimique: Mélanges**
- **Description:** Mélange des substances mentionnées à la suite avec des additifs non dangereux.

· **Composants dangereux:**

7782-85-6	Disodium Orthophosphate Heptahydrate ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	>2,5-≤10%
10049-21-5	Sodium Phosphate Monobasic Monohydrate ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	>2,5-≤10%

- **Indications complémentaires:** Pour le libellé des phrases de risque citées, se référer au chapitre 16.

### RUBRIQUE 4: Premiers secours

- **4.1 Description des premiers secours**
- **Remarques générales:**  
Les symptômes d'intoxication peuvent apparaître après de nombreuses heures seulement; une surveillance médicale est donc nécessaire au moins 48 heures après un accident.
- **Après inhalation:**  
Donner de l'air frais. Assistance respiratoire si nécessaire. Tenir le malade au chaud. Si les troubles persistent, consulter un médecin.  
En cas d'inconscience, coucher et transporter la personne en position latérale stable.
- **Après contact avec la peau:** Laver immédiatement à l'eau et au savon et bien rincer.
- **Après contact avec les yeux:**  
Rincer les yeux, sous l'eau courante, pendant plusieurs minutes, en écartant bien les paupières.
- **Après ingestion:** Consulter immédiatement un médecin.
- **4.2 Principaux symptômes et effets, aigus et différés** Pas d'autres informations importantes disponibles.
- **4.3 Indication des éventuels soins médicaux immédiats et traitements particuliers nécessaires**  
Pas d'autres informations importantes disponibles.

### RUBRIQUE 5: Mesures de lutte contre l'incendie

- **5.1 Moyens d'extinction**
- **Moyens d'extinction:** Adapter les mesures d'extinction d'incendie à l'environnement.
- **5.2 Dangers particuliers résultant de la substance ou du mélange**  
Pas d'autres informations importantes disponibles.
- **5.3 Conseils aux pompiers**
- **Équipement spécial de sécurité:** Porter un appareil de protection respiratoire.

FR

(suite page 3)



# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

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Révision: 19.08.2022

**Nom du produit: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

(suite de la page 2)

### RUBRIQUE 6: Mesures à prendre en cas de dispersion accidentelle

- **6.1 Précautions individuelles, équipement de protection et procédures d'urgence** Pas nécessaire.
- **6.2 Précautions pour la protection de l'environnement:**  
Ne pas rejeter dans les canalisations, dans les eaux de surface et dans les nappes d'eau souterraines.
- **6.3 Méthodes et matériel de confinement et de nettoyage:**  
Recueillir les liquides à l'aide d'un produit absorbant (sable, kieselguhr, neutralisant d'acide, liant universel, sciure).  
Evacuer les matériaux contaminés en tant que déchets conformément au point 13.  
Assurer une aération suffisante.
- **6.4 Référence à d'autres rubriques**  
Afin d'obtenir des informations pour une manipulation sûre, consulter le chapitre 7.  
Afin d'obtenir des informations sur les équipements de protection personnels, consulter le chapitre 8.  
Afin d'obtenir des informations sur l'élimination, consulter le chapitre 13.

### RUBRIQUE 7: Manipulation et stockage

- **7.1 Précautions à prendre pour une manipulation sans danger**  
Veiller à une bonne ventilation/aspiration du poste de travail.  
Eviter la formation d'aérosols.
- **Préventions des incendies et des explosions:** Aucune mesure particulière n'est requise.
- **7.2 Conditions d'un stockage sûr, y compris d'éventuelles incompatibilités**
- **Stockage:**
- **Exigences concernant les lieux et conteneurs de stockage:** Aucune exigence particulière.
- **Indications concernant le stockage commun:** Pas nécessaire.
- **Autres indications sur les conditions de stockage:** Tenir les emballages hermétiquement fermés.
- **7.3 Utilisation(s) finale(s) particulière(s)** Pas d'autres informations importantes disponibles.

### RUBRIQUE 8: Contrôles de l'exposition/protection individuelle

- **8.1 Paramètres de contrôle**
- **Indications complémentaires pour l'agencement des installations techniques:**  
Sans autre indication, voir point 7.
- **Composants présentant des valeurs-seuil à surveiller par poste de travail:**  
Le produit ne contient pas en quantité significative des substances présentant des valeurs-seuil à surveiller par poste de travail.
- **Remarques supplémentaires:**  
Le présent document s'appuie sur les listes en vigueur au moment de son élaboration.
- **8.2 Contrôles de l'exposition**
- **Équipement de protection individuel:**
- **Mesures générales de protection et d'hygiène:**  
Tenir à l'écart des produits alimentaires, des boissons et de la nourriture pour animaux.  
Retirer immédiatement les vêtements souillés ou humectés.  
Se laver les mains avant les pauses et en fin de travail.  
Eviter tout contact avec la peau.  
Eviter tout contact avec les yeux et avec la peau.
- **Protection respiratoire:**  
En cas d'exposition faible ou de courte durée, utiliser un filtre respiratoire; en cas d'exposition intense ou durable, utiliser un appareil de respiration indépendant de l'air ambiant.

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# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 19.08.2022

Révision: 19.08.2022

**Nom du produit: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

(suite de la page 3)

· **Protection des mains:**



Gants de protection

Le matériau des gants doit être imperméable et résistant au produit / à la substance / à la préparation.

À cause du manque de tests, aucune recommandation pour un matériau de gants pour le produit / la préparation / le mélange de produits chimiques ne peut être donnée.

Choix du matériau des gants en fonction des temps de pénétration, du taux de perméabilité et de la dégradation.

· **Matériau des gants**

Le choix de gants appropriés dépend non seulement du matériau, mais aussi d'autres critères de qualité qui peuvent varier d'un fabricant à l'autre. Puisque le produit représente une préparation composée de plusieurs substances, la résistance des matériaux des gants ne peut pas être calculée à l'avance et doit, alors, être contrôlée avant l'utilisation.

· **Temps de pénétration du matériau des gants**

Le temps de pénétration exact est à déterminer par le fabricant des gants de protection et à respecter.

· **Protection des yeux:** Lunettes de protection recommandées pour le transvasement.

### RUBRIQUE 9: Propriétés physiques et chimiques

· **9.1 Informations sur les propriétés physiques et chimiques essentielles**

· **Indications générales**

· **Aspect:**

<b>Forme:</b>	Liquide
<b>Couleur:</b>	Translucide
<b>Odeur:</b>	Inodore
<b>Seuil olfactif:</b>	Non déterminé.

· **valeur du pH à 20 °C:** 7,4

· **Changement d'état**

<b>Point de fusion/point de congélation:</b>	Non déterminé.
<b>Point initial d'ébullition et intervalle d'ébullition:</b>	100 °C

· **Point d'éclair** Non applicable.

· **Inflammabilité (solide, gaz):** Non applicable.

· **Température de décomposition:** Non déterminé.

· **Température d'auto-inflammabilité:** Le produit ne s'enflamme pas spontanément.

· **Propriétés explosives:** Le produit n'est pas explosif.

· **Limites d'explosion:**

<b>Inférieure:</b>	Non déterminé.
<b>Supérieure:</b>	Non déterminé.

· **Pression de vapeur à 20 °C:** 23 hPa

· **Densité à 20 °C:** 1,0079 g/cm<sup>3</sup>

· **Densité relative** Non déterminé.

· **Densité de vapeur:** Non déterminé.

· **Taux d'évaporation:** Non déterminé.

· **Solubilité dans/miscibilité avec l'eau:**

Pas ou peu miscible

(suite page 5)

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 19.08.2022

Révision: 19.08.2022

**Nom du produit: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

(suite de la page 4)

· <b>Coefficient de partage: n-octanol/eau:</b>	Non déterminé.
· <b>Viscosité:</b>	
<b>Dynamique:</b>	Non déterminé.
<b>Cinématique:</b>	Non déterminé.
· <b>Teneur en solvants:</b>	
<b>Eau:</b>	91,5 %
<b>VOC (CE)</b>	0,00 %
<b>Teneur en substances solides:</b>	8,5 %
· <b>9.2 Autres informations</b>	Pas d'autres informations importantes disponibles.

### RUBRIQUE 10: Stabilité et réactivité

- **10.1 Réactivité** Pas d'autres informations importantes disponibles.
- **10.2 Stabilité chimique**
- **Décomposition thermique/conditions à éviter:** Pas de décomposition en cas d'usage conforme.
- **10.3 Possibilité de réactions dangereuses** Aucune réaction dangereuse connue.
- **10.4 Conditions à éviter** Pas d'autres informations importantes disponibles.
- **10.5 Matières incompatibles:** Pas d'autres informations importantes disponibles.
- **10.6 Produits de décomposition dangereux:** Pas de produits de décomposition dangereux connus

### RUBRIQUE 11: Informations toxicologiques

- **11.1 Informations sur les effets toxicologiques**
- **Toxicité aiguë**  
Nocif en cas d'ingestion ou d'inhalation.
- **Effet primaire d'irritation:**
- **Corrosion cutanée/irritation cutanée**  
Provoque une irritation cutanée.
- **Lésions oculaires graves/irritation oculaire**  
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Sensibilisation respiratoire ou cutanée**  
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Indications toxicologiques complémentaires:**
- **Effets CMR (cancérogène, mutagène et toxique pour la reproduction)**
- **Mutagénicité sur les cellules germinales**  
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Cancérogénicité** Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Toxicité pour la reproduction**  
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Toxicité spécifique pour certains organes cibles - exposition unique**  
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Toxicité spécifique pour certains organes cibles - exposition répétée**  
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Danger par aspiration** Compte tenu des données disponibles, les critères de classification ne sont pas remplis.

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# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

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**Nom du produit: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

(suite de la page 5)

### RUBRIQUE 12: Informations écologiques

- **12.1 Toxicité**
- **Toxicité aquatique:** Pas d'autres informations importantes disponibles.
- **12.2 Persistance et dégradabilité** Pas d'autres informations importantes disponibles.
- **12.3 Potentiel de bioaccumulation** Pas d'autres informations importantes disponibles.
- **12.4 Mobilité dans le sol** Pas d'autres informations importantes disponibles.
- **Autres indications écologiques:**
- **Indications générales:**  
 Catégorie de pollution des eaux 1 (D) (Classification propre): peu polluant  
 Ne pas laisser le produit, non dilué ou en grande quantité, pénétrer la nappe phréatique, les eaux ou les canalisations.
- **12.5 Résultats des évaluations PBT et VPVB**
- **PBT:** Non applicable.
- **vPvB:** Non applicable.
- **12.6 Autres effets néfastes** Pas d'autres informations importantes disponibles.

### RUBRIQUE 13: Considérations relatives à l'élimination

- **13.1 Méthodes de traitement des déchets**
- **Recommandation:** Ne doit pas être évacué avec les ordures ménagères. Ne pas laisser pénétrer dans les égouts.
- **Emballages non nettoyés:**
- **Recommandation:** Evacuation conformément aux prescriptions légales.

### RUBRIQUE 14: Informations relatives au transport

<ul style="list-style-type: none"> <li>· <b>14.1 Numéro ONU</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>	néant
<ul style="list-style-type: none"> <li>· <b>14.2 Désignation officielle de transport de l'ONU</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>	néant
<ul style="list-style-type: none"> <li>· <b>14.3 Classe(s) de danger pour le transport</b></li> <li>· <b>ADR, ADN, IMDG, IATA</b></li> <li>· <b>Classe</b></li> </ul>	néant
<ul style="list-style-type: none"> <li>· <b>14.4 Groupe d'emballage</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>	néant
<ul style="list-style-type: none"> <li>· <b>14.5 Dangers pour l'environnement:</b></li> </ul>	Non applicable.
<ul style="list-style-type: none"> <li>· <b>14.6 Précautions particulières à prendre par l'utilisateur</b></li> </ul>	Non applicable.
<ul style="list-style-type: none"> <li>· <b>14.7 Transport en vrac conformément à l'annexe II de la convention Marpol et au recueil IBC</b></li> </ul>	Non applicable.
<ul style="list-style-type: none"> <li>· <b>"Règlement type" de l'ONU:</b></li> </ul>	néant

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# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 19.08.2022

Révision: 19.08.2022

**Nom du produit: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

(suite de la page 6)

### RUBRIQUE 15: Informations relatives à la réglementation

· **15.1 Réglementations/législation particulières à la substance ou au mélange en matière de sécurité, de santé et d'environnement**

· **Directive 2012/18/UE**

· **Substances dangereuses désignées - ANNEXE I** Aucun des composants n'est compris.

· **RÈGLEMENT (CE) N° 1907/2006 ANNEXE XVII** Conditions de limitation: 3

· **Directive 2011/65/UE relative à la limitation de l'utilisation de certaines substances dangereuses dans les équipements électriques et électroniques – Annexe II**

Aucun des composants n'est compris.

· **RÈGLEMENT (UE) 2019/1148**

· **Annexe I - PRÉCURSEURS D'EXPLOSIFS FAISANT L'OBJET DE RESTRICTIONS (Valeur limite maximale aux fins de l'octroi d'une licence en vertu de l'article 5, paragraphe 3)**

Aucun des composants n'est compris.

· **Annexe II - PRÉCURSEURS D'EXPLOSIFS DEVANT FAIRE L'OBJET D'UN SIGNALEMENT**

Aucun des composants n'est compris.

· **Règlement (CE) n° 273/2004 relatif aux précurseurs de drogues**

Aucun des composants n'est compris.

· **Règlement (CE) n° 111/2005 fixant des règles pour la surveillance du commerce des précurseurs des drogues entre la Communauté et les pays tiers**

Aucun des composants n'est compris.

· **15.2 Évaluation de la sécurité chimique:** Une évaluation de la sécurité chimique n'a pas été réalisée.

### RUBRIQUE 16: Autres informations

Ces indications sont fondées sur l'état actuel de nos connaissances, mais ne constituent pas une garantie quant aux propriétés du produit et ne donnent pas lieu à un rapport juridique contractuel.

· **Phrases importantes**

H302 Nocif en cas d'ingestion.

H312 Nocif par contact cutané.

H315 Provoque une irritation cutanée.

H319 Provoque une sévère irritation des yeux.

H332 Nocif par inhalation.

H335 Peut irriter les voies respiratoires.

· **Acronymes et abréviations:**

ADR: Accord relatif au transport international des marchandises dangereuses par route

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised 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 (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Toxicité aiguë – Catégorie 4

Skin Irrit. 2: Corrosion cutanée/irritation cutanée – Catégorie 2

Eye Irrit. 2: Lésions oculaires graves/irritation oculaire – Catégorie 2

STOT SE 3: Toxicité spécifique pour certains organes cibles (exposition unique) – Catégorie 3

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 19.08.2022

überarbeitet am: 19.08.2022

### ABSCHNITT 1: Bezeichnung des Stoffs beziehungsweise des Gemischs und des Unternehmens

- **1.1 Produktidentifikator**
- **Handelsname:** MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4
- **Artikelnummer:** 11582-05, 11582-10
- **UFI:** UC01-W0PX-U006-8N9X
- **1.2 Relevante identifizierte Verwendungen des Stoffs oder Gemischs und Verwendungen, von denen abgeraten wird**  
Keine weiteren relevanten Informationen verfügbar.
- **Verwendung des Stoffes / des Gemisches** Laborchemikalien
- **1.3 Einzelheiten zum Lieferanten, der das Sicherheitsdatenblatt bereitstellt**
- **Hersteller/Lieferant:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com  
  
Science Services GmbH  
Unterhachinger Str. 75  
81737 München Germany  
  
Tel: +49(0)89 18 93 668-0  
safety@scienceservices.de  
  
Deutschland: +49 (0)89 19240, 24h Giftnotruf Munchen, www.toxinfo.org  
Osterreich: +43 1406 43 43, Gesundheit Osterreich GmbH, 24 h
- **Auskunfteibereich:** Product safety department
- **1.4 Notrufnummer:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### ABSCHNITT 2: Mögliche Gefahren

- **2.1 Einstufung des Stoffs oder Gemischs**
- **Einstufung gemäß Verordnung (EG) Nr. 1272/2008**



GHS07

Acute Tox. 4 H302 Gesundheitsschädlich bei Verschlucken.  
Acute Tox. 4 H332 Gesundheitsschädlich bei Einatmen.  
Skin Irrit. 2 H315 Verursacht Hautreizungen.

- **2.2 Kennzeichnungselemente**
- **Kennzeichnung gemäß Verordnung (EG) Nr. 1272/2008**  
Das Produkt ist gemäß CLP-Verordnung eingestuft und gekennzeichnet.

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**Gefahrenpiktogramme**


GHS07

**Signalwort Achtung**
**Gefahrbestimmende Komponenten zur Etikettierung:**
*Sodium Phosphate Monobasic Monohydrate*
**Gefahrenhinweise**
*H302+H332 Gesundheitsschädlich bei Verschlucken oder Einatmen.*
*H315 Verursacht Hautreizungen.*
**Sicherheitshinweise**
*P261 Einatmen von Staub/Rauch/Gas/Nebel/Dampf/Aerosol vermeiden.*
*P280 Schutzhandschuhe tragen.*
*P301+P312 BEI VERSCHLUCKEN: Bei Unwohlsein GIFTINFORMATIONSZENTRUM/Arzt anrufen.*
*P330 Mund ausspülen.*
*P304+P340 BEI EINATMEN: Die Person an die frische Luft bringen und für ungehinderte Atmung sorgen.*
*P501 Entsorgung des Inhalts / des Behälters gemäß den örtlichen / regionalen / nationalen / internationalen Vorschriften.*
**2.3 Sonstige Gefahren**
**Ergebnisse der PBT- und vPvB-Beurteilung**
**PBT:** Nicht anwendbar.

**vPvB:** Nicht anwendbar.

### ABSCHNITT 3: Zusammensetzung/Angaben zu Bestandteilen

**3.2 Chemische Charakterisierung: Gemische**
**Beschreibung:** Gemisch aus nachfolgend angeführten Stoffen mit ungefährlichen Beimengungen.

**Gefährliche Inhaltsstoffe:**

7782-85-6	Disodium Orthophosphate Heptahydrate ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	>2,5-≤10%
10049-21-5	Sodium Phosphate Monobasic Monohydrate ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	>2,5-≤10%

**Zusätzliche Hinweise:** Der Wortlaut der angeführten Gefahrenhinweise ist dem Abschnitt 16 zu entnehmen.

### ABSCHNITT 4: Erste-Hilfe-Maßnahmen

**4.1 Beschreibung der Erste-Hilfe-Maßnahmen**
**Allgemeine Hinweise:**
*Vergiftungssymptome können erst nach vielen Stunden auftreten, deshalb ärztliche Überwachung mindestens 48 Stunden nach einem Unfall.*
**Nach Einatmen:**
*Frischlufzufuhr, gegebenenfalls Atemspende, Wärme. Bei anhaltenden Beschwerden Arzt konsultieren.*
*Bei Bewusstlosigkeit Lagerung und Transport in stabiler Seitenlage.*
**Nach Hautkontakt:** Sofort mit Wasser und Seife abwaschen und gut nachspülen.

**Nach Augenkontakt:** Augen bei geöffnetem Lidspalt mehrere Minuten mit fließendem Wasser spülen.

**Nach Verschlucken:** Sofort Arzt aufsuchen.

**4.2 Wichtigste akute und verzögert auftretende Symptome und Wirkungen**
*Keine weiteren relevanten Informationen verfügbar.*

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- **4.3 Hinweise auf ärztliche Soforthilfe oder Spezialbehandlung**  
Keine weiteren relevanten Informationen verfügbar.

### ABSCHNITT 5: Maßnahmen zur Brandbekämpfung

- **5.1 Löschmittel**
- **Geeignete Löschmittel:** Feuerlöschmaßnahmen auf die Umgebung abstimmen.
- **5.2 Besondere vom Stoff oder Gemisch ausgehende Gefahren**  
Keine weiteren relevanten Informationen verfügbar.
- **5.3 Hinweise für die Brandbekämpfung**
- **Besondere Schutzausrüstung:** Atemschutzgerät anlegen.

### ABSCHNITT 6: Maßnahmen bei unbeabsichtigter Freisetzung

- **6.1 Personenbezogene Vorsichtsmaßnahmen, Schutzausrüstungen und in Notfällen anzuwendende Verfahren**  
Nicht erforderlich.
- **6.2 Umweltschutzmaßnahmen:** Nicht in die Kanalisation/Oberflächenwasser/Grundwasser gelangen lassen.
- **6.3 Methoden und Material für Rückhaltung und Reinigung:**  
Mit flüssigkeitsbindendem Material (Sand, Kieselgur, Säurebinder, Universalbinder, Sägemehl) aufnehmen.  
Kontaminiertes Material als Abfall nach Abschnitt 13 entsorgen.  
Für ausreichende Lüftung sorgen.
- **6.4 Verweis auf andere Abschnitte**  
Informationen zur sicheren Handhabung siehe Abschnitt 7.  
Informationen zur persönlichen Schutzausrüstung siehe Abschnitt 8.  
Informationen zur Entsorgung siehe Abschnitt 13.

### ABSCHNITT 7: Handhabung und Lagerung

- **7.1 Schutzmaßnahmen zur sicheren Handhabung**  
Für gute Belüftung/Absaugung am Arbeitsplatz sorgen.  
Aerosolbildung vermeiden.
- **Hinweise zum Brand- und Explosionsschutz:** Keine besonderen Maßnahmen erforderlich.
- **7.2 Bedingungen zur sicheren Lagerung unter Berücksichtigung von Unverträglichkeiten**
- **Lagerung:**
- **Anforderung an Lagerräume und Behälter:** Keine besonderen Anforderungen.
- **Zusammenlagerungshinweise:** Nicht erforderlich.
- **Weitere Angaben zu den Lagerbedingungen:** Behälter dicht geschlossen halten.
- **Lagerklasse:**
- **Klassifizierung nach Betriebssicherheitsverordnung (BetrSichV):** -
- **7.3 Spezifische Endanwendungen** Keine weiteren relevanten Informationen verfügbar.

### ABSCHNITT 8: Begrenzung und Überwachung der Exposition/Persönliche Schutzausrüstungen

- **8.1 Zu überwachende Parameter**
- **Zusätzliche Hinweise zur Gestaltung technischer Anlagen:** Keine weiteren Angaben, siehe Abschnitt 7.
- **Bestandteile mit arbeitsplatzbezogenen, zu überwachenden Grenzwerten:**  
Das Produkt enthält keine relevanten Mengen von Stoffen mit arbeitsplatzbezogenen, zu überwachenden Grenzwerten.

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- **Zusätzliche Hinweise:** Als Grundlage dienen die bei der Erstellung gültigen Listen.
- **8.2 Begrenzung und Überwachung der Exposition**
- **Persönliche Schutzausrüstung:**
- **Allgemeine Schutz- und Hygienemaßnahmen:**  
 Von Nahrungsmitteln, Getränken und Futtermitteln fernhalten.  
 Beschmutzte, getränkte Kleidung sofort ausziehen.  
 Vor den Pausen und bei Arbeitsende Hände waschen.  
 Berührung mit der Haut vermeiden.  
 Berührung mit den Augen und der Haut vermeiden.
- **Atemschutz:**  
 Bei kurzzeitiger oder geringer Belastung Atemfiltergerät; bei intensiver bzw. längerer Exposition umluftunabhängiges Atemschutzgerät verwenden.
- **Handschutz:**



Schutzhandschuhe

Das Handschuhmaterial muss undurchlässig und beständig gegen das Produkt / den Stoff / die Zubereitung sein. Aufgrund fehlender Tests kann keine Empfehlung zum Handschuhmaterial für das Produkt / die Zubereitung / das Chemikaliengemisch abgegeben werden. Auswahl des Handschuhmaterials unter Beachtung der Durchbruchzeiten, Permeationsraten und der Degradation.

- **Handschuhmaterial**  
 Die Auswahl eines geeigneten Handschuhs ist nicht nur vom Material, sondern auch von weiteren Qualitätsmerkmalen abhängig und von Hersteller zu Hersteller unterschiedlich. Da das Produkt eine Zubereitung aus mehreren Stoffen darstellt, ist die Beständigkeit von Handschuhmaterialien nicht vorausberechenbar und muß deshalb vor dem Einsatz überprüft werden.
- **Durchdringungszeit des Handschuhmaterials**  
 Die genaue Durchbruchzeit ist beim Schutzhandschuhhersteller zu erfahren und einzuhalten.
- **Augenschutz:** Beim Umfüllen Schutzbrille empfehlenswert.

### ABSCHNITT 9: Physikalische und chemische Eigenschaften

#### · 9.1 Angaben zu den grundlegenden physikalischen und chemischen Eigenschaften

##### · Allgemeine Angaben

##### · Aussehen:

<b>Form:</b>	Flüssigkeit
<b>Farbe:</b>	Durchscheinend
<b>Geruch:</b>	Geruchlos
<b>Geruchsschwelle:</b>	Nicht bestimmt.

· **pH-Wert bei 20 °C:** 7,4

##### · Zustandsänderung

<b>Schmelzpunkt/Gefrierpunkt:</b>	Nicht bestimmt.
<b>Siedebeginn und Siedebereich:</b>	100 °C

· **Flammpunkt:** Nicht anwendbar.

· **Entzündbarkeit (fest, gasförmig):** Nicht anwendbar.

· **Zersetzungstemperatur:** Nicht bestimmt.

· **Selbstentzündungstemperatur:** Das Produkt ist nicht selbstentzündlich.

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· <b>Explosive Eigenschaften:</b>	Das Produkt ist nicht explosionsgefährlich.
· <b>Explosionsgrenzen:</b>	
<b>Untere:</b>	Nicht bestimmt.
<b>Obere:</b>	Nicht bestimmt.
· <b>Dampfdruck bei 20 °C:</b>	23 hPa
· <b>Dichte bei 20 °C:</b>	1,0079 g/cm <sup>3</sup>
· <b>Relative Dichte</b>	Nicht bestimmt.
· <b>Dampfdichte</b>	Nicht bestimmt.
· <b>Verdampfungsgeschwindigkeit</b>	Nicht bestimmt.
· <b>Löslichkeit in / Mischbarkeit mit Wasser:</b>	Nicht bzw. wenig mischbar.
· <b>Verteilungskoeffizient: n-Octanol/Wasser:</b>	Nicht bestimmt.
· <b>Viskosität:</b>	
<b>Dynamisch:</b>	Nicht bestimmt.
<b>Kinematisch:</b>	Nicht bestimmt.
· <b>Lösemittelgehalt:</b>	
<b>Wasser:</b>	91,5 %
<b>VOC (EU)</b>	0,00 %
<b>Festkörpergehalt:</b>	8,5 %
· <b>9.2 Sonstige Angaben</b>	Keine weiteren relevanten Informationen verfügbar.

### ABSCHNITT 10: Stabilität und Reaktivität

- **10.1 Reaktivität** Keine weiteren relevanten Informationen verfügbar.
- **10.2 Chemische Stabilität**
- **Thermische Zersetzung / zu vermeidende Bedingungen:**  
Keine Zersetzung bei bestimmungsgemäßer Verwendung.
- **10.3 Möglichkeit gefährlicher Reaktionen** Keine gefährlichen Reaktionen bekannt.
- **10.4 Zu vermeidende Bedingungen** Keine weiteren relevanten Informationen verfügbar.
- **10.5 Unverträgliche Materialien:** Keine weiteren relevanten Informationen verfügbar.
- **10.6 Gefährliche Zersetzungsprodukte:** Keine gefährlichen Zersetzungsprodukte bekannt.

### ABSCHNITT 11: Toxikologische Angaben

- **11.1 Angaben zu toxikologischen Wirkungen**
- **Akute Toxizität**  
Gesundheitsschädlich bei Verschlucken oder Einatmen.
- **Primäre Reizwirkung:**
- **Ätz-/Reizwirkung auf die Haut**  
Verursacht Hautreizungen.
- **Schwere Augenschädigung/-reizung** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Sensibilisierung der Atemwege/Haut** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Zusätzliche toxikologische Hinweise:**
- **CMR-Wirkungen (krebserzeugende, erbgutverändernde und fortpflanzungsgefährdende Wirkung)**
- **Keimzell-Mutagenität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Karzinogenität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

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- **Reproduktionstoxizität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Spezifische Zielorgan-Toxizität bei einmaliger Exposition**  
Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Spezifische Zielorgan-Toxizität bei wiederholter Exposition**  
Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Aspirationsgefahr** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

### ABSCHNITT 12: Umweltbezogene Angaben

- **12.1 Toxizität**
- **Aquatische Toxizität:** Keine weiteren relevanten Informationen verfügbar.
- **12.2 Persistenz und Abbaubarkeit** Keine weiteren relevanten Informationen verfügbar.
- **12.3 Bioakkumulationspotenzial** Keine weiteren relevanten Informationen verfügbar.
- **12.4 Mobilität im Boden** Keine weiteren relevanten Informationen verfügbar.
- **Weitere ökologische Hinweise:**
- **Allgemeine Hinweise:**  
Wassergefährdungsklasse 1 (Selbsteinstufung): schwach wassergefährdend  
Nicht unverdünnt bzw. in größeren Mengen in das Grundwasser, in Gewässer oder in die Kanalisation gelangen lassen.
- **12.5 Ergebnisse der PBT- und vPvB-Beurteilung**
- **PBT:** Nicht anwendbar.
- **vPvB:** Nicht anwendbar.
- **12.6 Andere schädliche Wirkungen** Keine weiteren relevanten Informationen verfügbar.

### ABSCHNITT 13: Hinweise zur Entsorgung

- **13.1 Verfahren der Abfallbehandlung**
- **Empfehlung:** Darf nicht zusammen mit Hausmüll entsorgt werden. Nicht in die Kanalisation gelangen lassen.
- **Ungereinigte Verpackungen:**
- **Empfehlung:** Entsorgung gemäß den behördlichen Vorschriften.

### ABSCHNITT 14: Angaben zum Transport

- |                                                                                                                                                          |                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| <ul style="list-style-type: none"> <li>· <b>14.1 UN-Nummer</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>                                              | entfällt         |
| <ul style="list-style-type: none"> <li>· <b>14.2 Ordnungsgemäße UN-Versandbezeichnung</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>                   | entfällt         |
| <ul style="list-style-type: none"> <li>· <b>14.3 Transportgefahrenklassen</b></li> <li>· <b>ADR, ADN, IMDG, IATA</b></li> <li>· <b>Klasse</b></li> </ul> | entfällt         |
| <ul style="list-style-type: none"> <li>· <b>14.4 Verpackungsgruppe</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>                                      | entfällt         |
| <ul style="list-style-type: none"> <li>· <b>14.5 Umweltgefahren:</b></li> </ul>                                                                          | Nicht anwendbar. |
| <ul style="list-style-type: none"> <li>· <b>14.6 Besondere Vorsichtsmaßnahmen für den Verwender</b></li> </ul>                                           | Nicht anwendbar. |

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· **14.7 Massengutbeförderung gemäß Anhang II des MARPOL-Übereinkommens und gemäß IBC-Code** Nicht anwendbar.

· **UN "Model Regulation":** entfällt

### ABSCHNITT 15: Rechtsvorschriften

· **15.1 Vorschriften zu Sicherheit, Gesundheits- und Umweltschutz/spezifische Rechtsvorschriften für den Stoff oder das Gemisch**

· **Richtlinie 2012/18/EU**

· **Namentlich aufgeführte gefährliche Stoffe - ANHANG I** Keiner der Inhaltsstoffe ist enthalten.

· **VERORDNUNG (EG) Nr. 1907/2006 ANHANG XVII Beschränkungsbedingungen: 3**

· **Richtlinie 2011/65/EU zur Beschränkung der Verwendung bestimmter gefährlicher Stoffe in Elektro- und Elektronikgeräten – Anhang II**

Keiner der Inhaltsstoffe ist enthalten.

· **VERORDNUNG (EU) 2019/1148**

· **Anhang I - BESCHRÄNKTE AUSGANGSSTOFFE FÜR EXPLOSIVSTOFFE (Oberer Konzentrationsgrenzwert für eine Genehmigung nach Artikel 5 Absatz 3)**

Keiner der Inhaltsstoffe ist enthalten.

· **Anhang II - MELDEPFLICHTIGE AUSGANGSSTOFFE FÜR EXPLOSIVSTOFFE**

Keiner der Inhaltsstoffe ist enthalten.

· **Verordnung (EG) Nr. 273/2004 betreffend Drogenausgangsstoffe**

Keiner der Inhaltsstoffe ist enthalten.

· **Verordnung (EG) Nr. 111/2005 zur Festlegung von Vorschriften für die Überwachung des Handels mit Drogenaustauschstoffen zwischen der Gemeinschaft und Drittländern**

Keiner der Inhaltsstoffe ist enthalten.

· **Nationale Vorschriften:**

· **Wassergefährdungsklasse: WGK 1 (Selbsteinstufung):** schwach wassergefährdend.

· **15.2 Stoffsicherheitsbeurteilung:** Eine Stoffsicherheitsbeurteilung wurde nicht durchgeführt.

### ABSCHNITT 16: Sonstige Angaben

Die Angaben stützen sich auf den heutigen Stand unserer Kenntnisse, sie stellen jedoch keine Zusicherung von Produkteigenschaften dar und begründen kein vertragliches Rechtsverhältnis.

· **Relevante Sätze**

H302 Gesundheitsschädlich bei Verschlucken.

H312 Gesundheitsschädlich bei Hautkontakt.

H315 Verursacht Hautreizungen.

H319 Verursacht schwere Augenreizung.

H332 Gesundheitsschädlich bei Einatmen.

H335 Kann die Atemwege reizen.

· **Abkürzungen und Akronyme:**

ADR: Accord relatif au transport international 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 Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

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*ELINCS: European List of Notified Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**VOC: Volatile Organic Compounds (USA, EU)**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Acute Tox. 4: Akute Toxizität – Kategorie 4**Skin Irrit. 2: Hautreizende/-ätzende Wirkung – Kategorie 2**Eye Irrit. 2: Schwere Augenschädigung/Augenreizung – Kategorie 2**STOT SE 3: Spezifische Zielorgan-Toxizität (einmalige Exposition) – Kategorie 3*

-DE-

**Scheda di dati di sicurezza**  
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 19.08.2022

Revisione: 19.08.2022

### SEZIONE 1: Identificazione della sostanza o della miscela e della società/impresa

· **1.1 Identificatore del prodotto**

· **Denominazione commerciale:** MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4

· **Articolo numero:** 11582-05, 11582-10

· **UFI:** UC01-W0PX-U006-8N9X

· **1.2 Usi identificati pertinenti della sostanza o della miscela e usi sconsigliati**  
Non sono disponibili altre informazioni.

· **Utilizzazione della Sostanza / del Preparato** Prodotti chimici per laboratorio

· **1.3 Informazioni sul fornitore della scheda di dati di sicurezza**

· **Produttore/fornitore:**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

Tel: 215-412-8400 Fax: 215-412-8450

email: sgkcck@aol.com

www.emsdiasum.com

Societa Italiana Chimici

Via Rio Nell Ellba 140

00138 Rome, Italy

Tel: 39 06 8800211

Fax: 39 30 06 8815313

Web: www.sichim.com

· **Informazioni fornite da:** Product safety department

· **1.4 Numero telefonico di emergenza:**

ChemTrec 1-800-424-9300 Contract CCN7661

1-703-527-3887

### SEZIONE 2: Identificazione dei pericoli

· **2.1 Classificazione della sostanza o della miscela**

· **Classificazione secondo il regolamento (CE) n. 1272/2008**



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Acute Tox. 4 H302 Nocivo se ingerito.

Acute Tox. 4 H332 Nocivo se inalato.

Skin Irrit. 2 H315 Provoca irritazione cutanea.

· **2.2 Elementi dell'etichetta**

· **Etichettatura secondo il regolamento (CE) n. 1272/2008**

Il prodotto è classificato ed etichettato conformemente al regolamento CLP.

· **Pittogrammi di pericolo**



GHS07

· **Avvertenza** Attenzione

· **Componenti pericolosi che ne determinano l'etichettatura:**

Sodium Phosphate Monobasic Monohydrate

(continua a pagina 2)

**Scheda di dati di sicurezza**  
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**Denominazione commerciale: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

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· **Indicazioni di pericolo**

H302+H332 Nocivo se ingerito o inalato.

H315 Provoca irritazione cutanea.

· **Consigli di prudenza**

P261 Evitare di respirare la polvere/i fumi/i gas/la nebbia/i vapori/gli aerosol.

P280 Indossare guanti di protezione.

P301+P312 IN CASO DI INGESTIONE: in presenza di malessere contattare un CENTRO ANTIVELENI/un medico.

P330 Sciacquare la bocca.

P304+P340 IN CASO DI INALAZIONE: trasportare l'infortunato all'aria aperta e mantenerlo a riposo in posizione che favorisca la respirazione.

P501 Smaltire il prodotto/recipiente in conformità con le disposizioni locali / regionali / nazionali / internazionali.

· **2.3 Altri pericoli**

· **Risultati della valutazione PBT e vPvB**

· **PBT:** Non applicabile.

· **vPvB:** Non applicabile.

**SEZIONE 3: Composizione/informazioni sugli ingredienti**

· **3.2 Caratteristiche chimiche: Miscela**

· **Descrizione:** Miscela delle seguenti sostanze con additivi non pericolosi.

· **Sostanze pericolose:**

7782-85-6	Disodium Orthophosphate Heptahydrate ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	>2,5-≤10%
10049-21-5	Sodium Phosphate Monobasic Monohydrate ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	>2,5-≤10%

· **Ulteriori indicazioni:** Il testo dell'avvertenza dei pericoli citati può essere appreso dal capitolo 16

**SEZIONE 4: Misure di primo soccorso**

· **4.1 Descrizione delle misure di primo soccorso**

· **Indicazioni generali:**

I sintomi di avvelenamento possono comparire dopo molte ore, per tale motivo è necessaria la sorveglianza di un medico nelle 48 ore successive all'incidente.

· **Inalazione:**

Portare in zona ben areata, praticare eventualmente la respirazione artificiale, tenere al caldo. Se i disturbi persistono consultare il medico.

Se il soggetto è svenuto provvedere a tenerlo durante il trasporto in posizione stabile su un fianco.

· **Contatto con la pelle:** Lavare immediatamente con acqua e sapone sciacquando accuratamente.

· **Contatto con gli occhi:** Lavare con acqua corrente per alcuni minuti tenendo le palpebre ben aperte.

· **Ingestione:** Chiamare subito il medico.

· **4.2 Principali sintomi ed effetti, sia acuti che ritardati** Non sono disponibili altre informazioni.

· **4.3 Indicazione dell'eventuale necessità di consultare immediatamente un medico e di trattamenti speciali**

Non sono disponibili altre informazioni.

**SEZIONE 5: Misure antincendio**

· **5.1 Mezzi di estinzione**

· **Mezzi di estinzione idonei:** Adottare provvedimenti antiincendio nei dintorni della zona colpita.

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- **5.2 Pericoli speciali derivanti dalla sostanza o dalla miscela** Non sono disponibili altre informazioni.
- **5.3 Raccomandazioni per gli addetti all'estinzione degli incendi**
- **Mezzi protettivi specifici:** Indossare il respiratore.

### **SEZIONE 6: Misure in caso di rilascio accidentale**

- **6.1 Precauzioni personali, dispositivi di protezione e procedure in caso di emergenza** Non necessario.
- **6.2 Precauzioni ambientali:** Impedire infiltrazioni nella fognatura/nelle acque superficiali/nelle acque freatiche.
- **6.3 Metodi e materiali per il contenimento e per la bonifica:**  
Raccogliere il liquido con materiale assorbente (sabbia, tripoli, legante di acidi, legante universale, segatura).  
Smaltimento del materiale contaminato conformemente al punto 13.  
Provvedere ad una sufficiente areazione.
- **6.4 Riferimenti ad altre sezioni**  
Per informazioni relative ad un manipolazione sicura, vedere capitolo 7.  
Per informazioni relative all'equipaggiamento protettivo ad uso personale vedere Capitolo 8.  
Per informazioni relative allo smaltimento vedere Capitolo 13.

### **SEZIONE 7: Manipolazione e immagazzinamento**

- **7.1 Precauzioni per la manipolazione sicura**  
Accurata ventilazione/aspirazione nei luoghi di lavoro.  
Evitare la formazione di aerosol.
- **Indicazioni in caso di incendio ed esplosione:** Non sono richiesti provvedimenti particolari.
- **7.2 Condizioni per lo stoccaggio sicuro, comprese eventuali incompatibilità**
- **Stoccaggio:**
- **Requisiti dei magazzini e dei recipienti:** Non sono richiesti requisiti particolari.
- **Indicazioni sullo stoccaggio misto:** Non necessario.
- **Ulteriori indicazioni relative alle condizioni di immagazzinamento:** Mantenere i recipienti ermeticamente chiusi.
- **7.3 Usi finali particolari** Non sono disponibili altre informazioni.

### **SEZIONE 8: Controllo dell'esposizione/protezione individuale**

- **8.1 Parametri di controllo**
- **Ulteriori indicazioni sulla struttura di impianti tecnici:** Nessun dato ulteriore, vedere punto 7.
- **Componenti i cui valori limite devono essere tenuti sotto controllo negli ambienti di lavoro:**  
Il prodotto non contiene quantità rilevanti di sostanze i cui valori limite devono essere tenuti sotto controllo negli ambienti di lavoro.
- **Ulteriori indicazioni:** Le liste valide alla data di compilazione sono state usate come base.
- **8.2 Controlli dell'esposizione**
- **Mezzi protettivi individuali:**
- **Norme generali protettive e di igiene del lavoro:**  
Tenere lontano da cibo, bevande e foraggi.  
Togliere immediatamente gli abiti contaminati.  
Lavarsi le mani prima dell'intervallo o a lavoro terminato.  
Evitare il contatto con la pelle.  
Evitare il contatto con gli occhi e la pelle.
- **Maschera protettiva:**  
Nelle esposizioni brevi e minime utilizzare la maschera; nelle esposizioni più intense e durature indossare l'autorespiratore.

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· **Guanti protettivi:**



Guanti protettivi

*Il materiale dei guanti deve essere impermeabile e stabile contro il prodotto/ la sostanza/ la formulazione.*

*A causa della mancanza di tests non può essere consigliato alcun tipo di materiale per i guanti con cui manipolare il prodotto / la formulazione / la miscela di sostanze chimiche.*

*Scelta del materiale dei guanti in considerazione dei tempi di passaggio, dei tassi di permeazione e della degradazione.*

· **Materiale dei guanti**

*La scelta dei guanti adatti non dipende soltanto dal materiale bensì anche da altre caratteristiche di qualità variabili da un produttore a un altro. Poiché il prodotto rappresenta una formulazione di più sostanze, la stabilità dei materiali dei guanti non è calcolabile in anticipo e deve essere testata prima dell'impiego*

· **Tempo di permeazione del materiale dei guanti**

*Richiedere dal fornitore dei guanti il tempo di passaggio preciso il quale deve essere rispettato.*

· **Occhiali protettivi:** Si consiglia l'uso di occhiali protettivi durante il travaso.

**SEZIONE 9: Proprietà fisiche e chimiche**

· **9.1 Informazioni sulle proprietà fisiche e chimiche fondamentali**

· **Indicazioni generali**

· **Aspetto:**

**Forma:** Liquido

**Colore:** Traslucido

· **Odore:** Inodore

· **Soglia olfattiva:** Non definito.

· **valori di pH a 20 °C:** 7,4

· **Cambiamento di stato**

**Punto di fusione/punto di congelamento:** Non definito.

**Punto di ebollizione iniziale e intervallo di ebollizione:** 100 °C

· **Punto di infiammabilità:** Non applicabile.

· **Infiammabilità (solidi, gas):** Non applicabile.

· **Temperatura di decomposizione:** Non definito.

· **Temperatura di autoaccensione:** Prodotto non autoinfiammabile.

· **Proprietà esplosive:** Prodotto non esplosivo.

· **Limiti di infiammabilità:**

**Inferiore:** Non definito.

**Superiore:** Non definito.

· **Tensione di vapore a 20 °C:** 23 hPa

· **Densità a 20 °C:** 1,0079 g/cm<sup>3</sup>

· **Densità relativa** Non definito.

· **Densità di vapore:** Non definito.

· **Velocità di evaporazione** Non definito.

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· <b>Solubilità in/Miscibilità con acqua:</b>	Poco e/o non miscibile.
· <b>Coefficiente di ripartizione: n-ottanolo/acqua:</b>	Non definito.
· <b>Viscosità:</b>	
<b>Dinamica:</b>	Non definito.
<b>Cinematica:</b>	Non definito.
· <b>Tenore del solvente:</b>	
<b>Acqua:</b>	91,5 %
<b>VOC (CE)</b>	0,00 %
<b>Contenuto solido:</b>	8,5 %
· <b>9.2 Altre informazioni</b>	Non sono disponibili altre informazioni.

### SEZIONE 10: Stabilità e reattività

- **10.1 Reattività** Non sono disponibili altre informazioni.
- **10.2 Stabilità chimica**
- **Decomposizione termica/ condizioni da evitare:** Il prodotto non si decompone se utilizzato secondo le norme.
- **10.3 Possibilità di reazioni pericolose** Non sono note reazioni pericolose.
- **10.4 Condizioni da evitare** Non sono disponibili altre informazioni.
- **10.5 Materiali incompatibili:** Non sono disponibili altre informazioni.
- **10.6 Prodotti di decomposizione pericolosi:** Non sono noti prodotti di decomposizione pericolosi.

### SEZIONE 11: Informazioni tossicologiche

- **11.1 Informazioni sugli effetti tossicologici**
- **Tossicità acuta**  
Nocivo se ingerito o inalato.
- **Irritabilità primaria:**
- **Corrosione/irritazione cutanea**  
Provoca irritazione cutanea.
- **Lesioni oculari gravi/irritazioni oculari gravi**  
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Sensibilizzazione respiratoria o cutanea**  
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Ulteriori dati tossicologici:**
- **Effetti CMR (cancerogenicità, mutagenicità e tossicità per la riproduzione)**
- **Mutagenicità delle cellule germinali**  
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Cancerogenicità** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Tossicità per la riproduzione** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Tossicità specifica per organi bersaglio (STOT) - esposizione singola**  
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Tossicità specifica per organi bersaglio (STOT) - esposizione ripetuta**  
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Pericolo in caso di aspirazione** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.

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### **SEZIONE 12: Informazioni ecologiche**

- **12.1 Tossicità**
- **Tossicità acquatica:** Non sono disponibili altre informazioni.
- **12.2 Persistenza e degradabilità** Non sono disponibili altre informazioni.
- **12.3 Potenziale di bioaccumulo** Non sono disponibili altre informazioni.
- **12.4 Mobilità nel suolo** Non sono disponibili altre informazioni.
- **Ulteriori indicazioni in materia ambientale:**
- **Ulteriori indicazioni:**  
*Pericolosità per le acque classe 1 (D) (Autoclassificazione): poco pericoloso*  
*Non immettere nelle acque freatiche, nei corsi d'acqua o nelle fognature non diluito o in grandi quantità.*
- **12.5 Risultati della valutazione PBT e vPvB**
- **PBT:** Non applicabile.
- **vPvB:** Non applicabile.
- **12.6 Altri effetti avversi** Non sono disponibili altre informazioni.

### **SEZIONE 13: Considerazioni sullo smaltimento**

- **13.1 Metodi di trattamento dei rifiuti**
- **Consigli:** Non smaltire il prodotto insieme ai rifiuti domestici Non immettere nelle fognature.
- **Imballaggi non puliti:**
- **Consigli:** Smaltimento in conformità con le disposizioni amministrative.

### **SEZIONE 14: Informazioni sul trasporto**

- |                                                                                                            |                         |
|------------------------------------------------------------------------------------------------------------|-------------------------|
| · <b>14.1 Numero ONU</b><br>· <b>ADR, IMDG, IATA</b>                                                       | <i>non applicabile</i>  |
| · <b>14.2 Nome di spedizione dell'ONU</b><br>· <b>ADR, IMDG, IATA</b>                                      | <i>non applicabile</i>  |
| · <b>14.3 Classi di pericolo connesso al trasporto</b><br>· <b>ADR, ADN, IMDG, IATA</b><br>· <b>Classe</b> | <i>non applicabile</i>  |
| · <b>14.4 Gruppo di imballaggio</b><br>· <b>ADR, IMDG, IATA</b>                                            | <i>non applicabile</i>  |
| · <b>14.5 Pericoli per l'ambiente:</b>                                                                     | <i>Non applicabile.</i> |
| · <b>14.6 Precauzioni speciali per gli utilizzatori</b>                                                    | <i>Non applicabile.</i> |
| · <b>14.7 Trasporto di rinfuse secondo l'allegato II di MARPOL ed il codice IBC</b>                        | <i>Non applicabile.</i> |
| · <b>UN "Model Regulation":</b>                                                                            | <i>non applicabile</i>  |

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### SEZIONE 15: Informazioni sulla regolamentazione

· **15.1 Disposizioni legislative e regolamentari su salute, sicurezza e ambiente specifiche per la sostanza o la miscela**

· **Direttiva 2012/18/UE**

· **Sostanze pericolose specificate - ALLEGATO I** Nessuno dei componenti è contenuto.

· **REGOLAMENTO (CE) n. 1907/2006 ALLEGATO XVII** Restrizioni: 3

· **Direttiva 2011/65/UE sulla restrizione dell'uso di determinate sostanze pericolose nelle apparecchiature elettriche ed elettroniche - Allegato II**

Nessuno dei componenti è contenuto.

· **REGOLAMENTO (UE) 2019/1148**

· **Allegato I - PRECURSORI DI ESPLOSIVI SOGGETTI A RESTRIZIONI (Valore limite superiore ai fini della concessione di licenze a norma dell'articolo 5, paragrafo 3)**

Nessuno dei componenti è contenuto.

· **Allegato II - PRECURSORI DI ESPLOSIVI SOGGETTI A SEGNALAZIONE**

Nessuno dei componenti è contenuto.

· **Regolamento (CE) n. 273/2004 relativo ai precursori di droghe**

Nessuno dei componenti è contenuto.

· **Regolamento (CE) N. 111/2005 recante norme per il controllo del commercio dei precursori di droghe tra la Comunità e i paesi terzi**

Nessuno dei componenti è contenuto.

· **15.2 Valutazione della sicurezza chimica:** Una valutazione della sicurezza chimica non è stata effettuata.

### SEZIONE 16: Altre informazioni

I dati sono riportati sulla base delle nostre conoscenze attuali, non rappresentano tuttavia alcuna garanzia delle caratteristiche del prodotto e non motivano alcun rapporto giuridico contrattuale.

· **Frase rilevanti**

H302 Nocivo se ingerito.

H312 Nocivo per contatto con la pelle.

H315 Provoca irritazione cutanea.

H319 Provoca grave irritazione oculare.

H332 Nocivo se inalato.

H335 Può irritare le vie respiratorie.

· **Abbreviazioni e acronimi:**

ADR: Accord relatif au transport international 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 Harmonised 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 (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Tossicità acuta – Categoria 4

Skin Irrit. 2: Corrosione/irritazione della pelle – Categoria 2

Eye Irrit. 2: Gravi lesioni oculari/irritazione oculare – Categoria 2

STOT SE 3: Tossicità specifica per organi bersaglio (esposizione singola) – Categoria 3

# 安全データシート

## JIS Z 7253:2019 による

印刷日: 2022.08.19

バージョン番号: 1

改訂日: 2022.08.19

### 項目 1: 化学品及び会社情報

- ・製品識別子
- ・化学品の名称 **MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**
- ・製品コード 11582-05, 11582-10
- ・該当純物質または混合物の関連特定用途及び使用禁止用途 追加的な関連情報は得られていません。
- ・推奨用途 実験用化学物質
- ・安全データシートの供給元の詳細情報
- ・供給者の会社名称,住所及び電話番号  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- ・その他の情報問い合わせ先: Product safety department
- ・緊急連絡電話番号  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 項目 2: 危険有害性の要約

- ・化学品のGHS分類



- 急性毒性(経口) 区分4 H302 飲み込むと有害
- 急性毒性(吸入) 区分4 H332 吸入すると有害
- 皮膚腐食性/刺激性 区分2 H315 皮膚刺激

- ・GHSラベル要素 ( 絵表示又はシンボル,注意喚起語,危険有害性情報及び注意書き )
- ・GHS ラベル要素  
本製品はGHS(化学品の分類および表示に関する世界調和システム)により分類及び表示されています。
- ・絵表示



GHS07

- ・注意喚起語 警告
- ・危険有害性情報  
飲み込んだり, 吸入すると有害  
皮膚刺激
- ・注意書き  
粉じん/煙/ガス/ミスト/蒸気/スプレーの吸入を避けること。  
保護手袋の着用  
飲み込んだ場合: 気分が悪い時は毒物センター/医師に連絡すること。  
口をすすぐこと。  
吸入した場合: 空気の新鮮な場所に移し、呼吸しやすい姿勢で休息させること。  
現地/地域/国/国際規定に従い内容物・容器の露出
- ・GHS分類に関係しない又はGHSで扱われない他の危険有害性
- ・PBT ( 残留性、生物濃縮性、毒性物質 ) 及び vPvB ( 高残留性、高生物濃縮性物質 ) アセスメント
- ・PBT ( 残留性、生物濃縮性、毒性物質 ): 情報なし

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# 安全データシート

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化学品の名称 MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4

・vPvB (高残留性、高生物濃縮性物質): 情報なし

(1ページの続き)

### 項目 3: 組成及び成分情報

- ・化学物質・混合物の区別: 混合物
- ・説明: 危険のない混ぜ合わせかたをした以下成分からなる混合物

#### ・危険な含有成分:

7782-85-6	Disodium Orthophosphate Heptahydrate ⚠ 皮膚腐食性/刺激性 区分2, H315; 重篤な眼の損傷性/眼刺激性 区分2A, H319; 特定標的臓器有害性(単回暴露) 区分3, H335	>2.5-≤10%
10049-21-5	Sodium Phosphate Monobasic Monohydrate 重篤な眼の損傷性/眼刺激性 区分2B, H320	>2.5-≤10%

### 項目 4: 応急措置

#### ・応急手当処置に関する説明

##### ・一般情報:

中毒症状は時間がかかり経過した後に現れる場合もあるため、事故後最低 4 8 時間は医師の監視のもとで過ごすこと

##### ・吸入した場合

外気を送り込み、同時に人工呼吸、温める。状態がよくなる場合には医師に相談する  
意識不明の場合には安定させた状態で横向きに寝かせ、移送する

##### ・皮膚に付着した場合 即刻石鹼と水で洗い、よくすすぐ

##### ・眼に入った場合 瞼を開けたまま、流水で何分間か眼をすすぐ

##### ・飲み込んだ場合 即医者を呼ぶ

##### ・急性症状及び遅発性症状の最も重要な徴候症状 追加的な関連情報は得られていません。

##### ・何らかの即時医療処置及び特別治療の必要性を示す兆候 追加的な関連情報は得られていません。

### 項目 5: 火災時の措置

#### ・消火剤

#### ・適切な消火剤 周辺の状況に合わせた消火措置を取る

#### ・本化学物質または混合物から発生する特別な危険性 追加的な関連情報は得られていません。

#### ・消火活動を行う者の特別な保護具及び予防措置

#### ・特別な保護装備: 呼吸保護マスクを着用

### 項目 6: 漏出時の措置

#### ・人体に対する注意事項, 保護具及び緊急時措置 必要ない

#### ・環境に対する注意事項 下水処理施設、地上水あるいは地下水に達しないようにする

#### ・封じ込め及び浄化の方法及び機材

液体吸収材(砂、珪藻土、酸結合剤、ユニバーサル結合剤、おがくず)で吸収する

13 項に下がい汚染材は廃棄物として処理する

十分な換気を心がける

#### ・他のセクションへの言及

安全な取り扱い方に関しては 7 項を参照

人の保護装備の情報に関しては 8 項を参照

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# 安全データシート

## JIS Z 7253:2019 による

印刷日: 2022.08.19

バージョン番号: 1

改訂日: 2022.08.19

化学品の名称 MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4

廃棄処分に關しては 13 項参照

(2ページの続き)

### 項目 7: 取扱い及び保管上の注意

- ・ **取扱い**  
作業場では十分な換気、埃を吸い取るよう心がける  
エアゾールの発生を防ぐ
- ・ **火災および爆発防止に関する注意事項:** 特別な措置は必要ない
- ・ **混融危険性を含めた安全貯蔵条件**
- ・ **保管**  
保管スペースおよび容器に関する**要求事項:** 特別な要求事項なし  
同じ場所に保管する際の**注意事項:** 必要ない  
保管条件に関する**その他の注意事項:** 容器は密閉した状態に保つ  
特定の**最終用途** 追加的な関連情報は得られていません。

### 項目 8: ばく露防止及び保護措置

- ・ **許容濃度等**
- ・ **作業場において限界値の監視を要する成分:**  
このプロダクトは作業場において監視する必要のある限界値を持つ成分は含まれていない
- ・ **追加注意事項:** 生成時に有効なリストがもとなっている
- ・ **設備対策**
- ・ **技術設備の形体に関する追加注意事項:** その他の申し立てなし、7 項参照
- ・ **保護具**
- ・ **一般防止措置および衛生措置:**  
食物、飲み物、飼料からは遠ざける  
汚れのしみ込んだ衣類は即刻脱ぐ  
休憩の前、作業終了後には手を洗う  
皮膚が触れないようにする  
眼に入らないよう、また皮膚に接触しないよう注意する
- ・ **呼吸保護器具:**  
短時間もしくは負担が小さい場合には呼吸フィルター付装置を、集中的にあるいは長時間触れる場合には、酸素ボンベ付き呼吸保護装置を使用すること
- ・ **手の保護:**



保護手袋

手袋の材質は物質/材料/調剤に対して耐性であり、成分を通すことがあってはならない  
テストをおこなっていないため、物質/調剤/化合物を取り扱う際の手袋の材質として勧められるものはない  
浸透時間、透過性および劣化の点を留意しながら手袋の材質を選択する

- ・ **手袋材**  
適当な手袋は材質だけではなく、その他の品質によっても変わり、各メーカーによって異なる。調剤する際の物質は複数の成分から生成されるため、手袋材の耐久性は予想できない。このため使用前には必ずチェックしなければならない
- ・ **手袋材の浸透時間** 正確な浸透時間については保護手袋メーカーに問い合わせ、それを遵守すること

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・ 眼の保護: 詰め替えの際には保護めがねの装着が望ましい

### 項目 9: 物理的及び化学的性質

#### ・ 基本的な物理及び化学特性に関する情報

#### ・ 一般指示事項

#### ・ 物理状態

液状

#### ・ 色

半透明

#### ・ 臭い

無臭

#### ・ 嗅覚閾値

決まっていない。

#### ・ 融点 / 凝固点 (混合物の場合は, 記載省略可)

決まっていない

#### ・ 沸点又は初留点及び沸点範囲

100 °C

#### ・ 可燃性

情報なし

#### ・ 爆発下限界及び爆発上限界 / 可燃限界

#### ・ 下限:

決まっていない。

#### ・ 上限:

決まっていない。

#### ・ 引火点

情報なし

#### ・ 分解温度

決まっていない。

#### ・ pH 約 20 °C

7.4

#### ・ 粘性:

#### ・ 動粘性率

決まっていない。

#### ・ 力学的:

決まっていない。

#### ・ 溶解度 (混合物の場合は, 記載省略可)

#### ・ 水:

混ぜ合わせられない、ほとんど混ぜ合わせられない

#### ・ n-オクタノール / 水分分配係数 (log 値) (混合物の場合は, 記載省略可)

決まっていない。

#### ・ 蒸気圧 約 20 °C

23 hPa

#### ・ 密度及び / 又は相対密度

#### ・ 密度 約 20 °C:

1.0079 g/cm<sup>3</sup>

#### ・ 相対的密度

決まっていない。

#### ・ 蒸気密度

決まっていない。

#### ・ その他のデータ

#### ・ 外観

#### ・ 形:

液体

#### ・ 健康および環境保護ならびに安全に関する重要な指示事項

#### ・ 自然発火点

プロダクトは自然発火しない

#### ・ 爆発の危険:

プロダクトは爆発する危険はない

#### ・ 溶剤含有量:

#### ・ 水:

91.5 %

#### ・ 固形物含有量:

8.5 %

#### ・ 状態の変化

#### ・ 気化速度

決まっていない。

### 項目 10: 安定性及び反応性

・ 反応性 追加的な関連情報は得られていません。

・ 化学的安定性

・ 熱分解/回避すべき条件: 規定どおりの使用では分解しない

・ 危険有害反応可能性 危険な反応は起きていない

・ 避けるべき条件 追加的な関連情報は得られていません。

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- ・ **混触危険物質** 追加的な関連情報は得られていません。
- ・ **危険有害な分解生成物** 危険な分解プロダクトはない

### 項目 11: 有害性情報

- ・ **毒性学的影響に関する情報**
- ・ **急性毒性** 飲み込んだり、吸入すると有害
- ・ **皮膚腐食性 / 刺激性** 皮膚刺激
- ・ **誤えん有害性** 追加的な関連情報は得られていません。

### 項目 12: 環境影響情報

- ・ **毒性**
- ・ **水生生物に対する毒性:** 追加的な関連情報は得られていません。
- ・ **残留性・分解性** 追加的な関連情報は得られていません。
- ・ **生態蓄積性** 追加的な関連情報は得られていません。
- ・ **土壤中の移動性** 追加的な関連情報は得られていません。
- ・ **PBT (残留性、生物濃縮性、毒性物質) 及び vPvB (高残留性、高生物濃縮性物質) アセスメント**
- ・ **PBT (残留性、生物濃縮性、毒性物質):** 情報なし
- ・ **vPvB (高残留性、高生物濃縮性物質):** 情報なし
- ・ **オゾン層への有害性** 追加的な関連情報は得られていません。
- ・ **他の副作用**
- ・ **その他のエコロジーに関する注意事項:**
- ・ **一般注意事項:**  
水への危険度分類 1 (ドイツの規定) (自己査定): 水に対する危険性はわずかにある  
薄めずに、あるいは大量に地下水、河川もしくは下水施設に流してはならない

### 項目 13: 廃棄上の注意

- ・ **化学品 (残余廃棄物), 当該化学品が付着している汚染容器及び包装の安全で、かつ、環境上望ましい廃棄、又はリサイクルに関する情報**
- ・ **勧告:** 家庭ごみとはいっしょに処分できない。下水処理施設に流してはならない
- ・ **洗浄されていないパッケージ:**
- ・ **勧告:** 関係当局の規則に従って処分する

### 項目 14: 輸送上の注意

- |                                |    |
|--------------------------------|----|
| ・ <b>国連番号</b>                  |    |
| ・ ADR, IMDG, IATA              | 無効 |
| ・ <b>品名 (国連輸送名)</b>            |    |
| ・ ADR, IMDG, IATA              | 無効 |
| ・ <b>国連分類 (輸送における危険有害性クラス)</b> |    |
| ・ ADR, ADN, IMDG, IATA         |    |
| ・ <b>分類</b>                    | 無効 |
| ・ <b>容器等級</b>                  |    |
| ・ ADR, IMDG, IATA              | 無効 |

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・環境危険:	情報なし
・ユーザー用特別予防措置	情報なし
・MARPOL73/78附属書II及びIBCコードによるばら積み輸送される液体物質	情報なし
・UN "模範規制":	無効

### 項目 15: 適用法令

- ・該当法令の名称及びその法令に基づく規制に関する情報 追加的な関連情報は得られていません。
- ・化審法

#### ・既存化学物質

7782-85-6	Disodium Orthophosphate Heptahydrate	1-497
10049-21-5	Sodium Phosphate Monobasic Monohydrate	1-497
7647-14-5	sodium chloride	1-236

#### ・特定化学物質

内容成分はリストアップされていない

#### ・監視化学物質、旧第二種監視化学物質、旧第三種監視化学物質

内容成分はリストアップされていない

#### ・優先評価化学物質

内容成分はリストアップされていない

#### ・白物質

内容成分はリストアップされていない

#### ・既存化学物質安全性点検結果 (分解性・蓄積性)

内容成分はリストアップされていない

#### ・既存化学物質安全性点検結果 (毒性)

内容成分はリストアップされていない

#### ・PRTR 制度 - 第一種指定化学物質

内容成分はリストアップされていない

#### ・PRTR 制度 - 特定第一種指定化学物質

内容成分はリストアップされていない

#### ・PRTR 制度 - 第二種指定化学物質

内容成分はリストアップされていない

#### ・毒物及び劇物取締法:劇物

内容成分はリストアップされていない

#### ・毒物及び劇物取締法:有機シアン化合物から除かれるもの

内容成分はリストアップされていない

#### ・毒物及び劇物取締法:毒物

内容成分はリストアップされていない

#### ・毒物及び劇物取締法:特定毒物

内容成分はリストアップされていない

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・労働安全衛生法

・危険物

・爆発性の物 ( 施行令別表第 1 第 1 号 )

内容成分はリストアップされていない

・発火性の物 ( 施行令別表第 1 第 2 号 )

内容成分はリストアップされていない

・酸化性の物 ( 施行令別表第 1 第 3 号 )

内容成分はリストアップされていない

・引火性の物 ( 施行令別表第 1 第 4 号 )

内容成分はリストアップされていない

・可燃性のガス ( 施行令別表第 1 第 5 号 )

内容成分はリストアップされていない

・特定化学物質等

・第一類物質

内容成分はリストアップされていない

・第二類物質

内容成分はリストアップされていない

・第三類物質

内容成分はリストアップされていない

・名称等を通知すべき有害物 ( 別表第 9 )

内容成分はリストアップされていない

・製造許可物質

内容成分はリストアップされていない

・鉛中毒予防規則 ( 施行令別表第 4 )

内容成分はリストアップされていない

・四アルキル鉛中毒予防規則 ( 施行令別表第 5 )

内容成分はリストアップされていない

・有機溶剤中毒予防規則第 ( 施行令別表第 6 の 2 )

・第一種有機溶剤等

内容成分はリストアップされていない

・第二種有機溶剤等

内容成分はリストアップされていない

・第三種有機溶剤等

内容成分はリストアップされていない

・強い変異原性が認められた化学物質

内容成分はリストアップされていない

・消防法

内容成分はリストアップされていない

・特定物質等の規制等によるオゾン層の保護に関する法律

・特定物質代替物質

内容成分はリストアップされていない

・特定物質

内容成分はリストアップされていない

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### 化学品の名称 MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4

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#### ・大気汚染防止法

内容成分はリストアップされていない

#### ・水質汚濁防止法

#### ・有害物質

内容成分はリストアップされていない

#### ・指定物質

内容成分はリストアップされていない

#### ・GHS ラベル要素

本製品はGHS(化学品の分類および表示に関する世界調和システム)により分類及び表示されています。

#### ・絵表示



GHS07

#### ・注意喚起語 警告

#### ・危険有害性情報

飲み込んだり, 吸入すると有害

皮膚刺激

#### ・注意書き

粉じん/煙/ガス/ミスト/蒸気/スプレーの吸入を避けること。

保護手袋の着用

飲み込んだ場合: 気分が悪い時は毒物センター/医師に連絡すること。

口をすすぐこと。

吸入した場合: 空気の新鮮な場所に移し、呼吸しやすい姿勢で休息させること。

現地/地域/国/国際規定に従い内容物・容器の露出

#### ・化学物質の安全性評価: 化学物質安全性評価が遂行されていない

### 項目 16: その他の情報

この情報は現在の我々の認識に基づいている。ただし、プロダクトの特性を保証するものではなく、また契約において法的根拠にはならない

#### ・縮約と二文字語:

ADR: Accord relatif au transport international 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

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

急性毒性(経口) 区分4: Acute toxicity – Category 4

皮膚腐食性/刺激性 区分2: Skin corrosion/irritation – Category 2

重篤な眼の損傷性/眼刺激性 区分2A: Serious eye damage/eye irritation – Category 2A

重篤な眼の損傷性/眼刺激性 区分2B: Serious eye damage/eye irritation – Category 2B

特定標的臓器有害性(単回暴露) 区分3: Specific target organ toxicity (single exposure) – Category 3

# 물질안전보건자료 GHS에 따라

인쇄일자: 2022.08.19

개정: 2022.08.19

## 1 화학제품과 회사에 관한 정보

- 제품 식별자
- 제품명: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4
- 상품번호: 11582-05, 11582-10
- 해당 순물질이나 혼합물의 관련 하위용도 및 사용금지용도
- 제품의 권고 용도와 사용상의 제한: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4
- 제품의 권고 용도와 사용상의 제한: 실험실화학품
- 안전데이터표(Safety Data Sheet)내 공급업체 관련 상세 정보
- 제조자/수입자/유통업자 정보:  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- Samchang Commercial Co., Ltd.  
Yeo Eui Do  
PO Box 1110  
Seoul, Korea  
Tel: 82 2 703 3040  
Fax: 82 2 717 3298
- 
- Daedok Science, Co. Ltd.  
34141 E10 Korea Advanced Institute of Science  
Guseong-Dong, Yuseong-gu, Daejeon,  
Korea  
Phone: 82 42 710 2091  
Fax: 82 42 367 0005  
Website: www.labsmro.com
- 추가적인 정보 획득 가능: Product safety department
- 비상연락 전화번호:  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## 2 유해성·위험성

- 순물질 또는 혼합물의 분류



급성 독성 - 경구 - 구분4	H302 삼키면 유해함
급성 독성 - 흡입 - 구분4	H332 흡입하면 유해함
피부 부식성/피부 자극성 - 구분2	H315 피부에 자극을 일으킴

- 라벨표기 요소

- GHS 라벨 요소

본 제품은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.

(2 쪽에 계속)

# 물질안전보건자료

## GHS에 따라

인쇄일자: 2022.08.19

개정: 2022.08.19

**제품명: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

(1 쪽부터계속)

· GHS 그림문자



GHS07

- **신호어 경고**
- **유해·위험문구**  
삼키거나 흡입하면 유해함.  
피부에 자극을 일으킴
- **예방조치문구**  
분진·흙·가스·미스트·증기·스프레이의 흡입을 피하십시오.  
보호장갑 착용.  
삼켰을 시: 몸에 이상이 있을 시 독성물질 센터/병원 연락 필요.  
입을 씻어내시오.  
흡입하면 신선한 공기가 있는 곳으로 옮기고 호흡하기 쉬운 자세로 안정을 취하십시오.  
(지방/지역/국가/국제 규정에 따라) 에 내용물/용기를 폐기하십시오.
- **기타 유해성**
- PBT(잔류성, 생물농축성, 독성 물질) 및 vPvB(고 잔류성, 고 생물농축성 물질) 평가 결과
- PBT(잔류성, 생물농축성, 독성 물질): 해당사항 없음.
- vPvB(고 잔류성, 고 생물농축성 물질): 해당사항 없음.

### 3 구성성분의 명칭 및 함유량

- **화학적 특성:** 혼합물
- **설명:** 무해한 첨가물이 함유된 아래에 열거된 물질로 만들어진 혼합물.

· **위험요소:**

7782-85-6	Disodium Orthophosphate Heptahydrate ⚠️ 피부 부식성/피부 자극성 - 구분2, H315; 심한 눈 손상성/눈 자극성 - 구분2A, H319; 특정표적장기 독성 - 1회 노출 - 구분3, H335	>2.5-≤10%
10049-21-5	Sodium Phosphate Monobasic Monohydrate 심한 눈 손상성/눈 자극성 - 구분2B, H320	>2.5-≤10%

### 4 응급조치 요령

- **응급조치요령 내용**
- **일반적 정보:**  
중독 증상은 몇 시간이 지난 뒤에 발생할 수 있다. 따라서 사고가 발생한 후에 적어도 48 시간동안은 의료진의 관찰을 받아야 한다.
- **흡입했을 때:**  
신선한 공기를 쐬고, 필요할 경우에는 산소 호흡기의 도움을 받는다. 환자를 따뜻하게 하고, 증상이 지속될 경우에는 의료진의 도움을 구한다.  
환자가 의식을 잃었을 경우에는 안전한 자세에서 환자를 운반한다.
- **피부에 접촉했을 때:** 즉시 물과 비누로 씻고 잘 행군다.
- **눈에 들어갔을 때:** 흐르는 물에 눈을 몇 분 동안 씻어낸다.
- **먹었을 때:** 즉시 의사의 도움을 구한다.
- **기타 의사의 주의사항:**
- **가장 중요한 급·만성 증상 및 영향** 추가적인 정보가 존재하지 않습니다.

(3 쪽에계속)

# 물질안전보건자료

## GHS에 따라

인쇄일자: 2022.08.19

개정: 2022.08.19

**제품명:** MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4

· **즉각적인 의료처치 및 특별치료가 필요함을 시사하는 징후** 추가적인 정보가 존재하지 않습니다. (2 쪽부터계속)

### 5 폭발·화재시 대처방법

- **소화제**
- **적절한 소화제:** 주 변 환 경에 맞는 화 재 진 화방법을 사용한다.
- **본 화학물질이나 혼합물에서 발생하는 특별 유해성** 추가적인 정보가 존재하지 않습니다.
- **소방관에 대한 권고사항**
- **화재 진압 시 착용할 보호구 및 예방조치:** 호흡보호장비설치.

### 6 누출 사고 시 대처방법

- **개인적 예방조치, 보호장비 및 응급처치 절차** 필요없음.
- **환경 관련 예방조치:** 하수도망/해수면위외물/지하수로도달하지않게한다.
- **밀폐 및 정화 방법과 소재:**  
액체가 혼합된 물질 (모래, 구조토, 산성 결합 물, 일반 결합 물, 톱밥)에 흡입되도록 한다.  
항목 13에 따라 오염된 물질을 쓰레기로 처분한다.  
충분한 환기가 되도록 한다.
- **타 섹션 참조**  
안 전 관 리 에 대한 정보는 제7 장 을 참고하시오.  
개 인 보 호 장 비에 대한 정보는 제8 장 을 참고하시 오.  
쓰 레 기 처 리 에 대한 정보는 제13 장 을 참고하시 오.

### 7 취급 및 저장방법

- **취급:**
- **안전 취급을 위한 예방조치**  
작업장에서는통풍이잘되고/습기제거가잘 되게주의한다.  
연무질이형성되는것을피한다.
- **화재 및 폭발 사고 예방대책에 관한 정보:** 특 별 한 조 치 가 필 요없음.
- **혼합위험성 등 안전 저장 조건**
- **보관:**
- **안전한 저장 방법:** 특 별 한 요 구 사 항 이 없 음.
- **하나의 공동 보관 시설에 대한 보관 관련 정보:** 필 요 없 음
- **보 관 조 건 에 관 한 추 가 적 인 정 보:** 용기를새지않게밀폐한채보관한다.
- **구체적 최종 사용자** 추가적인 정보가 존재하지 않습니다.

### 8 노출방지 및 개인보호구

- **첨단시설 디자인에 대한 추가정보:** 더 이 상 의 자 료 는 없 음. 항 목 7 을 참 고 하 시 오.
- **통제 변수**
- **화학물질의 노출기준, 생물학적 노출기준 등:**  
본 제품에는 작업장에서 감시가 필요한 주요한 가치의 어떤 해당 재료의 양을 함유하고 있지 않다.
- **추 가 정 보:** 제 조 할 당 시 에 유 효 한 목 록 을 기 초 로 사 용 했 다.
- **노출 통제**
- **개인 보호구**
- **일반적보호조치및위생조치:**  
식료품, 음료수와 사료로부터 멀리떨어뜨려 놓는다.  
더러워지거나 음료수가 묻은 옷은 즉시 탈의한다.

(4 쪽에계속)

# 물질안전보건자료

## GHS에 따라

인쇄일자: 2022.08.19

개정: 2022.08.19

**제품명: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

(3 쪽부터계속)

휴식 전 이 나 작업이 끝날때마다 손을 씻는다.  
 피부와의 접촉을 피한다.  
 눈과 피부와의 접촉은 피한다.

**· 호흡기 보호:**

단 시간 또는 경미한 오염의 경우에는 호흡 여과기를 사용한다. 심각한 또는 장기간 노출시에는 호흡보호장비를 사용한다.

**· 손 보호:**



보호용 장갑

장갑재질은제품 / 원료 / 조제를투과시키지않아야하고, 내구성이있어야한다.  
 테스트를 하지 않았기 때문에 제품 / 조제 / 화학 혼합 물에 적합한 장갑재질에 대한 추천이 없다.  
 투과 시간, 침투율과 저하를 고려해서 장갑 재료를 선택한다.

**· 장갑 의 재료**

적합한장갑의선택은재질차이뿐만아니라품질기준의차이도고려하여이루어져야하고제조업종에따라서도다르게선정되어야한다. 제품은다양한재료로부터의조제로이루어지는것이기때문에, 장갑재질의안정성은사전에예측되어질수있는것이아니고, 반드시사용전에 (그안전성이) 체크되어야한다.

**· 장갑 재료의 투과 시간** 정확한관통시간은보호장갑제조자에의하여인지되고, 준수되어야한다.

**· 눈 보호:** 옮겨부울경우추천할만한보안경.

### 9 물리화학적 특성

**· 기본 물리 및 화학적 특성에 대한 정보**

**· 일반정보**

**· 외형**

· 물리적 상태:	액체
· 색:	투명한
· 냄새:	무취의
· 후각역치	알맞지않다.

· pH 의경우 20 °C: 7.4

**· 상태변화**

· 녹는점/어는점:	맞지않는
· 초기 끓는점과 끓는점 범위:	100 °C

· 인화점: 해당사항 없음.

· 인화성(고체, 기체): 해당사항 없음.

· 분해 온도: 알맞지않다.

· 자기점화: 이제품은자연발화성이없다.

· 폭발위험: 이제품은폭발위험성이없다

**· 인화 또는 폭발 범위의 상한/하한**

· 아래로:	알맞지않다.
· 위로:	알맞지않다.

· 증기압 의경우 20 °C: 23 hPa

· 밀도 의경우 20 °C: 1.0079 g/cm<sup>3</sup>

· 비중: 알맞지않다.

· 증기밀도: 알맞지않다.

(5 쪽에계속)



# 물질안전보건자료

## GHS에 따라

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개정: 2022.08.19

**제품명: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

(4 쪽부터계속)

· <b>증발 속도:</b>	알맞지않다.
· <b>용해도:</b> · <b>물:</b>	각각의경우에따라서는거의혼합할수없는
· <b>n 옥탄올/물 분배계수:</b>	알맞지않다.
· <b>점도:</b> · <b>역학성:</b> · <b>등점성:</b>	알맞지않다. 알맞지않다.
· <b>용매내용물</b> · <b>물:</b> · <b>VOC (EU)</b>	91.5 % 0.00 %
· <b>고체의 함량:</b>	8.5 %
· <b>기타 정보</b>	추가적인 정보가 존재하지 않습니다.

### 10 안정성 및 반응성

- 반응성 추가적인 정보가 존재하지 않습니다.
- 화학적 안정성
- 화학적 안정성 및 유해 반응의 가능성 / 피해야 할 조건: 규정에따라사용할경우해체는없다
- 유해반응 가능성 위험한반응으로는알려지지않았다.
- 피해야 할 조건 추가적인 정보가 존재하지 않습니다.
- 혼합 금지 물질: 추가적인 정보가 존재하지 않습니다.
- 유해분해물질: 위험성있는분해물들은알려지지않았다.

### 11 독성에 관한 정보

- **독성학적 영향에 대한 정보**
- 급성 독성:
- 일차적 자극 효과:
- 피부 부식성 또는 자극성: 피부와점막을자극한다.
- 심한 눈 손상 또는 자극성: 무자극.
- 감각화: 민감한영향이없는것으로알려져있다.
- **추 가 적 인 독성 에 관 한 정보:**  
이제품은유럽공동체의공동분류원칙의합법적인절차에근거하여최근에발효된원고에서아래위험들의사전준비에대하여제시하고있다.  
건강에해로운  
자극적인

### 12 환경에 미치는 영향

- 독성
- 수생독성: 추가적인 정보가 존재하지 않습니다.
- 지속성 및 분해성 추가적인 정보가 존재하지 않습니다.
- 환경 시스템에서의 행동:
- 생물농축 잠재성 추가적인 정보가 존재하지 않습니다.
- 토양내 이동성 추가적인 정보가 존재하지 않습니다.

(6 쪽에계속)

# 물질안전보건자료

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(5 쪽부터계속)

- **추가적인 생태학 정보:**
- **일반 특징:**  
수질오염등급 1 (자체등급분류): 약하게수질오염이된  
희석시키지않은채대량으로지하수나, 하천으로그리고하수도망에도달하지않게한다.
- **PBT(잔류성, 생물농축성, 독성 물질) 및 vPvB(고 잔류성, 고 생물농축성 물질) 평가 결과**
- **PBT(잔류성, 생물농축성, 독성 물질):** 해당사항 없음.
- **vPvB(고 잔류성, 고 생물농축성 물질):** 해당사항 없음.
- **기타 부작용** 추가적인 정보가 존재하지 않습니다.

### 13 폐기시 주의사항

- **폐기물 처리 방법**
- **권고:** 생활쓰레기와함께처리되어서는안된다. 하수도망으로유입되어서는안된다.
- **비위생적 포장:**
- **권고:** 당국의지침에입각한쓰레기처리.

### 14 운송에 필요한 정보

· 유엔 번호	
· ADR, IMDG, IATA	누락되다
· UN 적정 선적명	
· ADR, IMDG, IATA	누락되다
· 교통 위험 클래스	
· ADR, ADN, IMDG, IATA	
· 등급	누락되다
· 용기등급	
· ADR, IMDG, IATA	누락되다
· 환경적 유해물질:	해당사항 없음.
· 이용자 특별 예방조치	해당사항 없음.
· MARPOL73/78(선박으로부터의 해양오염방지협약) 부속서2 및 IBC Code(국제선적화물코드)에 따른 벌크(bulk) 운송	해당사항 없음.
· UN "모범 규제":	누락되다

### 15 법적 규제현황

- **산업안전보건법에 의한 규제:**

· <b>제조 등 금지물질:</b>	어떠한내용물도목록화되어있지않다
· <b>허가대상물질:</b>	어떠한내용물도목록화되어있지않다
· <b>관리대상유해물질:</b>	어떠한내용물도목록화되어있지않다

(7 쪽에계속)

# 물질안전보건자료

## GHS에 따라

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(6 쪽부터계속)

**· 작업환경측정 대상 유해인자**

어떠한내용물도목록화되어있지않다

**· 특수건강진단 대상 유해인자**

어떠한내용물도목록화되어있지않다

· 해당 순물질 또는 혼합물에 대한 안전, 보건 및 환경 규제/법률 추가적인 정보가 존재하지 않습니다.

**· Korean Existing Chemical Inventory**

7732-18-5	물	KE-35400
7647-14-5	sodium chloride	KE-31387

**· 화학물질관리법**

**· 사고대비물질**

어떠한내용물도목록화되어있지않다

**· 금지물질**

어떠한내용물도목록화되어있지않다

**· 제한물질**

어떠한내용물도목록화되어있지않다

**· 유독물질**

어떠한내용물도목록화되어있지않다

**· 허가물질**

어떠한내용물도목록화되어있지않다

**· 등록 또는 신고 면제대상 화학물질**

7732-18-5 물

· ‘21년까지 등록하여야 할 압, 돌연변이, 생식능력 이상을 일으키거나 일으킬 우려가 있는 기존화학물질

어떠한내용물도목록화되어있지않다

**· 중점관리물질(제2조 관련)**

어떠한내용물도목록화되어있지않다

**· GHS 라벨 요소**

본 제품은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.

**· GHS 그림문자**



GHS07

**· 신호어 경고**

**· 유해·위험문구**

삼키거나 흡입하면 유해함.

피부에 자극을 일으킴

**· 예방조치문구**

분진·흙·가스·미스트·증기·스프레이의 흡입을 피하십시오.

보호장갑 착용.

삼켰을 시: 몸에 이상이 있을 시 독성물질 센터/병원 연락 필요.

입을 씻어내시오.

흡입하면 신선한 공기가 있는 곳으로 옮기고 호흡하기 쉬운 자세로 안정을 취하십시오.

(지방/지역/국가/국제 규정에 따라) 에 내용물/용기를 폐기하십시오.

(8 쪽에계속)

# 물질안전보건자료

## GHS에 따라

인쇄일자: 2022.08.19

개정: 2022.08.19

**제품명: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

· **화학물질 안전성 평가:** 화학물질 안전성 평가가 수행되지 않음

(7 쪽부터계속)

### 16 그 밖의 참고사항

이보고는우리지식에대한오늘날의상태에대하여평가하고있다, 하지만이보고서는생산특성에관한보증은  
기술하지않았으며계약적인법률관계에기반을두고있지도않다

· **담당자:**

· **최초 작성일자:** 2022.08.19

· **개정 횟수 및 최종 개정일자:** 1 / 2022.08.19

· **약어와 두문자어:**

ADR: Accord relatif au transport international 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

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

KR

# 安全資料表

## 根據 危害性化學品標示及通識規則

打印日期 2022.08.19

在 2022.08.19 審核

### 1 化學品與廠商資料

- 產品識別者
- 化學品中文(英文)名稱, 化學品俗名或商品名: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4
- 商品編號: 11582-05, 11582-10
- 相應純物質或者混合物的相關下位用途及禁止用途 無相關詳細資料。
- 物質或混合物的用途 實驗室化學物
- 安全技術說明書內供應商詳細信息
- 企業名稱:  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- 可獲取更多資料的部門: Product safety department
- 緊急聯繫電話號碼:  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2 危害辨識資料

- 緊急情況概述:  
透明的, 液體, 吞食或吸入有害. 造成皮膚刺激。

- GHS危險性類別



急毒性物質(吞食) 第4級 H302 吞食有害  
 急毒性物質(吸入) 第4級 H332 吸入有害  
 腐蝕/刺激皮膚物質 第2級 H315 造成皮膚刺激

- 標籤要素
- GHS標籤元素 本產品根據化學物質分類及標記全球協調制度(GHS)進行了分類及標記。
- 象形圖



GHS07

- 警示詞 警告
- 危險性說明  
吞食或吸入有害。  
造成皮膚刺激
- 防範說明
- 預防措施  
避免吸入粉塵/煙/氣體/煙霧/蒸氣/噴霧。  
戴防護手套。
- 事故響應  
如誤吞咽：如感覺不適，呼叫解毒中心/醫生  
漱口。  
若不慎吸入：將患者移到空氣新鮮處，保持呼吸舒適的體位休息。

(在 2 頁繼續)

# 安全資料表

## 根據 危害性化學品標示及通識規則

打印日期 2022.08.19

在 2022.08.19 審核

化學品中文(英文)名稱, 化學品俗名或商品名: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4

(在 1 頁繼續)

- **廢棄處置**  
按照地方/區域/國家/國際法規處理內容物之廢棄/容器。
- **其他有害性**
- PBT(殘留性、生物濃縮性、毒性物質) 及 vPvB(高殘留性、高生物濃縮性物質) 評價結果
- PBT(殘留性、生物濃縮性、毒性物質) 不適用的
- vPvB(高殘留性、高生物濃縮性物質): 不適用的

### 3 成分辨識資料

- **混合物**
- **描述:** 由以下含有無害添加劑的成分組成的混合物

- **危險的成分:**

7782-85-6	磷酸氫二鈉七水合物 ⚠ 腐蝕/刺激皮膚物質 第2級, H315; 嚴重損傷/刺激眼睛物質 第2A級, H319; 特定標的器官系統毒性物質(單一暴露) 第3級, H335	>2.5-≤10%
10049-21-5	磷酸二氫鈉一水合物 嚴重損傷/刺激眼睛物質 第2B級, H320	>2.5-≤10%

### 4 急救措施

- **應急措施要領**
- **總說明:** 中毒的症狀可能會在幾個小時以後才出現;因此在發生事故之後起碼要有 48 小時的醫療觀察。
- **吸入:**  
供給新鮮空氣. 如有需要,提供人工呼吸. 讓病人保暖. 如果症狀持續則詢問醫生.  
萬一病人不清醒時,請讓病人側躺以便移動。
- **皮膚接觸:** 馬上用水和肥皂進行徹底的沖洗。
- **眼睛接觸:** 張開眼睛在流水下沖洗數分鐘。
- **食入:** 馬上召喚醫生。
- **給醫生的資料:**
- **最重要的急慢性症狀及其影響** 無相關詳細資料。
- **需要及時的醫療處理及特別處理的症狀** 無相關詳細資料。

### 5 滅火措施

- **滅火方法**
- **滅火的方法和滅火劑:** 使用適合四周環境的滅火措施。
- **特別危險性** 無相關詳細資料。
- **特殊滅火方法**
- **消防人員特殊的防護裝備:** 口腔呼吸保護裝置。

### 6 洩漏處理方法

- **保護措施** 沒有要求。
- **環境保護措施:** 切勿讓其進入下水道/水面或地下水。
- **密封及淨化方法和材料:**  
吸收液體粘合原料(沙粒、矽藻土、酸性粘合劑、通用粘合劑、鋸屑)。  
根據第 13 條條款棄置受汙染物。  
確保有足夠的通風裝置。

(在 3 頁繼續)

# 安全資料表

## 根據 危害性化學品標示及通識規則

打印日期 2022.08.19

在 2022.08.19 審核

化學品中文(英文)名稱, 化學品俗名或商品名: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4

(在 2 頁繼續)

- **參照其他部分**
- 有關安全處理的資料請參閱第 7 節.
- 有關個人保護裝備的資料請參閱第 8 節.
- 有關棄置的資料請參閱第 13 節.

## 7 安全處置與儲存方法

- **操作處置**
- **儲存**
- 確保工作間有良好的通風/排氣裝置.
- 防止氣溶膠的形成.
- **有關火災及防止爆炸的資料:** 不需特別的措施.
- **混合危險性等安全儲存條件**
- **儲存:**
- **儲存庫和容器須要達到的要求:** 沒有特別的要求.
- **有關使用一個普通的儲存設施來儲存的資料:** 不需要.
- **有關儲存條件的更多資料:** 將容器密封.
- **具體的最終用戶** 無相關詳細資料.

## 8 暴露預防措施

- **工程控制方法:** 沒有進一步數據;見第 7 項.
- **控制變數**
- **在工作場需要監控的限值成分** 該產品不含任何必須在工作間受到監視的重要價值的材料.
- **額外的資料:** 制作期間有效的清單將作為基礎來使用.
- **遺漏控制**
- **個人防護設備:**
- **一般保護和衛生措施:**
- 遠離食品、飲料和飼料.
- 立即除去所有的不潔的和被汙染的衣服.
- 在休息之前和工作完畢後請清洗雙手.
- 避免和皮膚接觸.
- 避免和眼睛及皮膚接觸.
- **呼吸系統防護:**
- 如果會短暫接觸或在低汙染的情況下,請使用呼吸過濾裝置. 如果會深入或較長時間接觸,請使用獨立的呼吸保護裝置.
- **手防護:**



保護手套

- 手套的物料必須是不滲透性的,且能抵抗該產品/物質/添加劑.
- 基於缺乏測試,對於產品/制劑/化學混合物,並不會提供手套材料的建議
- 選擇手套材料時,請注意材料的滲透時間,滲濾率和降解參數
- **手套材料**
- 選擇合適的手套不單取決於材料,亦取決於質量特征,以及來自哪一間生產廠家,因為該產品是由很多材料配制而成,手套材料的抵抗力並不可預計,所以,必須在使用之前進行檢查
- **滲入手套材料的時間** 請向勞保手套生產廠家獲取準確的破裂時間並觀察實際的破裂時間

(在 4 頁繼續)

# 安全資料表

## 根據 危害性化學品標示及通識規則

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· 眼睛防護: 補充期間建議使用的護目鏡

(在 3 頁繼續)

### 9 物理及化學性質

· 有關基本物理及化學特性的資訊

· 一般說明

· 外觀:

· 形狀: 液體

· 顏色: 透明的

· 氣味: 無氣味的

· 嗅覺閾限: 未決定.

· pH值 在 20 °C: 7.4

· 條件的更改

· 熔點: 未確定的

· 沸點/初沸點和沸程: 100 °C

· 閃點: 不適用的

· 可燃性 (固體、氣體): 不適用的

· 分解溫度: 未決定.

· 自燃溫度: 該產品是不自燃的

· 爆炸的危險性: 該產品並沒有爆炸的危險

· 爆炸極限:

· 較低: 未決定.

· 較高: 未決定.

· 蒸氣壓 在 20 °C: 23 hPa

· 密度 在 20 °C: 1.0079 g/cm<sup>3</sup>

· 相對密度: 未決定.

· 蒸氣密度: 未決定.

· 蒸發速率: 未決定.

· 溶解性

· 水: 不能拌和的或難以拌和

· n-辛醇/水分配係數: 未決定.

· 黏性:

· 動態: 未決定.

· 運動學的: 未決定.

· 溶劑成份:

· 水: 91.5 %

· 固體成份: 8.5 %

· 其他資訊: 無相關詳細資料。

### 10 安定性及反應性

· 反應性 無相關詳細資料。

(在 5 頁繼續)



# 安全資料表

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化學品中文(英文)名稱, 化學品俗名或商品名 : MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4

(在 4 頁繼續)

- **穩定性**
- **熱分解/要避免的情況:** 如果遵照規格使用則不會分解.
- **有害反應可能性** 未有已知的危險反應.
- **應避免的條件** 無相關詳細資料。
- **不相容的物質:** 無相關詳細資料。
- **危險的分解產物:** 未知有危險的分解產品。

### 11 毒性資料

- **對毒性學影響的資訊**
- **急性毒性:**
- **主要的刺激性影響:**
- **皮膚:** 刺激皮膚和粘膜.
- **在眼睛上面:** 沒有刺激的影響.
- **致敏作用:** 沒有已知的敏化影響.
- **更多毒物的資料:**  
根據有關配制的 一般歐盟分類指南的計算方法 (刊印在最新版本), 該產品顯示以下的危險:  
有害的  
刺激性的

### 12 生態資料

- **生態毒性**
- **水生毒性:** 無相關詳細資料。
- **持久性和降解性** 無相關詳細資料。
- **環境系統習性:**
- **潛在的生物累積性** 無相關詳細資料。
- **土壤內移動性** 無相關詳細資料。
- **額外的生態學資料:**
- **總括注解:**  
水危害級別 1(德國規例) (通過名單進行自我評估): 對水是稍微危害的  
不要讓未稀釋或大量的產品接觸地下水、水道或者汗水系統.
- **PBT(殘留性、生物濃縮性、毒性物質) 及 vPvB(高殘留性、高生物濃縮性物質) 評價結果**
- **PBT(殘留性、生物濃縮性、毒性物質)** 不適用的
- **vPvB(高殘留性、高生物濃縮性物質):** 不適用的
- **其他副作用** 無相關詳細資料。

### 13 廢棄處置方法

- **廢棄處置方法**
- **建議:** 不能將該產品和家居垃圾一起丟棄. 不要讓該產品接觸汗水系統.
- **受污染的容器和包裝:**
- **建議:** 必須根據官方的規章來丟棄.

### 14 運送資料

- **聯合國危險貨物編號(UN號)**
- **ADR, IMDG, IATA** 無效

(在 6 頁繼續)

# 安全資料表

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(在 5 頁繼續)

· UN適當裝船名 · ADR, IMDG, IATA	無效
· 運輸危險等級 · ADR, ADN, IMDG, IATA · 級別	無效
· 包裝組別 · ADR, IMDG, IATA	無效
· 環境危害	不適用的
· 用戶特別預防措施	不適用的
· MARPOL73/78(針對船舶引起的海洋污染預防協約) 附件書2及根據IBC Code(國際裝船貨物編碼)的大量 運送	不適用的
· UN "標準規定":	無效

### 15 法規資料

- 對相應純物質或者混合物的安全、保健及環境法規/法律 無相關詳細資料。
- 優先管理化學品之指定及運作管理辦法

· 附表一-對於未滿十八歲及妊娠或分娩後未滿一年女性勞工具危害性之化學品

沒有列出成份

· 附件 1: 2 條第 2 款指定之化學品

沒有列出成份

· 附件 2: 2 條第 3 款指定之化學品

沒有列出成份

· 新化學物質及既有化學物質資料登錄辦法 英

沒有列出成份

· 中國現有化學物質名錄

列出所有成分

· TCSCA

· 列管編號

沒有列出成份

· 毒性分類

沒有列出成份

· 管制濃度 ( w/w% )

沒有列出成份

· 大量運作基準 ( 公斤 )

沒有列出成份

· 新化學物質及既有化學物質資料登錄辦法, 附表六

沒有列出成份

· TCSI - Taiwan Chemical Substance Inventory

列出所有成分

· GHS標籤元素 本產品根據化學物質分類及標記全球協調制度(GHS)進行了分類及標記。

(在 7 頁繼續)

# 安全資料表

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(在 6 頁繼續)

### · 象形圖



GHS07

· 警示詞 警告

· 危險性說明

吞食或吸入有害。

造成皮膚刺激

· 防範說明

· 預防措施

避免吸入粉塵/煙/氣體/煙霧/蒸氣/噴霧。

戴防護手套。

· 事故響應

如誤吞咽：如感覺不適，呼叫解毒中心/醫生

漱口。

若不慎吸入：將患者移到空氣新鮮處，保持呼吸舒適的體位休息。

· 廢棄處置

按照地方/區域/國家/國際法規處理內容物之廢棄/容器。

· 化學物質安全性評價：尚未進行化學物質安全性評價

## 16 其他資料

該資料是基於我們目前的知識。然而,這並不構成對任何特定產品特性的擔保並且不建立一個法律上有效的合同關係。

· 聯絡:

· 縮寫:

ADR: Accord relatif au transport international 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

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

PBT: 持久性生物累積性有毒物質

vPvB: very Persistent and very Bioaccumulative

急性性物質(吞食) 第4級: Acute toxicity – Category 4

腐蝕/刺激皮膚物質 第2級: Skin corrosion/irritation – Category 2

嚴重損傷/刺激眼睛物質 第2A級: Serious eye damage/eye irritation – Category 2A

嚴重損傷/刺激眼睛物質 第2B級: Serious eye damage/eye irritation – Category 2B

特定標的器官系統毒性物質(單一暴露) 第3級: Specific target organ toxicity (single exposure) – Category 3

**Ficha de dados de segurança**  
em conformidade com 1907/2006/CE, Artigo 31°

data da impressão 19.08.2022

Revisão: 19.08.2022

### SECÇÃO 1: Identificação da substância/mistura e da sociedade/empresa

- **1.1 Identificador do produto**
- **Nome comercial:** MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4
- **Código do produto:** 11582-05, 11582-10
- **UFI:** UC01-W0PX-U006-8N9X
- **1.2 Utilizações identificadas relevantes da substância ou mistura e utilizações desaconselhadas**  
Não existe mais nenhuma informação relevante disponível.
- **Utilização da substância / da preparação** Químicos de laboratório
- **1.3 Identificação do fornecedor da ficha de dados de segurança**
- **Fabricante/fornecedor:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Entidade para obtenção de informações adicionais:** Product safety department
- **1.4 Número de telefone de emergência:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### SECÇÃO 2: Identificação dos perigos

- **2.1 Classificação da substância ou mistura**
- **Classificação em conformidade com o Regulamento (CE) n.º 1272/2008**



GHS07

- Acute Tox. 4 H302 Nocivo por ingestão.
- Acute Tox. 4 H332 Nocivo por inalação.
- Skin Irrit. 2 H315 Provoca irritação cutânea.

- **2.2 Elementos do rótulo**
- **Rotulagem em conformidade com o Regulamento (CE) n.º 1272/2008**  
O produto classificou-se e está etiquetado em conformidade com o regulamento CLP.
- **Pictogramas de perigo**



GHS07

- **Palavra-sinal** Atenção
- **Componentes determinantes para os perigos constantes do rótulo:**  
Sodium Phosphate Monobasic Monohydrate
- **Advertências de perigo**  
H302+H332 Nocivo por ingestão ou inalação.  
H315 Provoca irritação cutânea.
- **Recomendações de prudência**  
P261 Evitar respirar as poeiras/fumos/gases/névoas/vapores/aerossóis.  
P280 Usar luvas de proteção.

( continuação na página 2 )

# Ficha de dados de segurança

## em conformidade com 1907/2006/CE, Artigo 31º

data da impressão 19.08.2022

Revisão: 19.08.2022

Nome comercial: **MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

(continuação da página 1)

**P301+P312 EM CASO DE INGESTÃO:** caso sinta indisposição, contacte um **CENTRO DE INFORMAÇÃO ANTIVENENOS/médico**.

**P330** Enxaguar a boca.

**P304+P340 EM CASO DE INALAÇÃO:** retirar a pessoa para uma zona ao ar livre e mantê-la numa posição que não dificulte a respiração.

**P501** Eliminar o conteúdo/recipiente de acordo com a legislação local/regional/nacional/internacional.

- **2.3 Outros perigos**
- **Resultados da avaliação PBT e mPmB**
- **PBT:** Não aplicável.
- **mPmB:** Não aplicável.

### SECÇÃO 3: Composição/informação sobre os componentes

- **3.2 Caracterização química: Misturas**
- **Descrição:** Mistura das seguintes substâncias com aditivos não perigosos.

#### · Substâncias perigosas:

7782-85-6	Disodium Orthophosphate Heptahydrate ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	>2,5-≤10%
10049-21-5	Sodium Phosphate Monobasic Monohydrate ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	>2,5-≤10%

- **Avisos adicionais:** O texto das indicações de perigo aqui incluído poderá ser consultado no capítulo 16.

### SECÇÃO 4: Medidas de primeiros socorros

- **4.1 Descrição das medidas de primeiros socorros**
- **Indicações gerais:**  
Os sintomas de envenenamento podem surgir apenas após várias horas, por isso é necessária vigilância médica pelo menos 48 horas após o acidente.
- **Em caso de inalação:**  
Remover a vítima para um local arejado. Se necessário administrar respiração artificial. Manter a vítima aquecida. Se os sintomas persistirem, consultar o médico.  
Se a vítima estiver inconsciente, posicioná-la e transportá-la com estabilidade, deitada lateralmente.
- **Em caso de contacto com a pele:** Lavar imediatamente com água e sabão e enxaguar abundantemente.
- **Em caso de contacto com os olhos:**  
Enxaguar os olhos durante alguns minutos sob água corrente, mantendo as pálpebras abertas.
- **Em caso de ingestão:** Consultar imediatamente o médico
- **4.2 Sintomas e efeitos mais importantes, tanto agudos como retardados**  
Não existe mais nenhuma informação relevante disponível.
- **4.3 Indicações sobre cuidados médicos urgentes e tratamentos especiais necessários**  
Não existe mais nenhuma informação relevante disponível.

### SECÇÃO 5: Medidas de combate a incêndios

- **5.1 Meios de extinção**
- **Meios adequados de extinção:** Coordenar no local medidas para extinção do fogo.
- **5.2 Perigos especiais decorrentes da substância ou mistura**  
Não existe mais nenhuma informação relevante disponível.

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## Ficha de dados de segurança em conformidade com 1907/2006/CE, Artigo 31º

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**Nome comercial:** MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4

(continuação da página 2)

- **5.3 Recomendações para o pessoal de combate a incêndios**
- **Equipamento especial de protecção:** Colocar máscara de respiração.

### SECÇÃO 6: Medidas a tomar em caso de fugas acidentais

- **6.1 Precauções individuais, equipamento de protecção e procedimentos de emergência** Não necessário.
- **6.2 Precauções a nível ambiental:** Evitar que penetre na canalização / águas superficiais / águas subterrâneas.
- **6.3 Métodos e materiais de confinamento e limpeza:**  
Recolher com produtos que absorvam líquidos (areia, seixos, absorventes universais, serradura ).  
Eliminar residualmente as substâncias contaminadas como um resíduo segundo o Ponto 13.  
Assegurar uma ventilação adequada.
- **6.4 Remissão para outras secções**  
Para informações sobre uma manipulação segura, ver o capítulo 7.  
Para informações referentes ao equipamento de protecção individual, ver o capítulo 8.  
Para informações referentes à eliminação residual, ver o capítulo 13.

### SECÇÃO 7: Manuseamento e armazenagem

- **7.1 Precauções para um manuseamento seguro**  
Assegurar uma boa ventilação / exaustão no local de trabalho.  
Evitar a formação de aerossóis.
- **Precauções para prevenir incêndios e explosões:** Não são necessárias medidas especiais.
- **7.2 Condições de armazenagem segura, incluindo eventuais incompatibilidades**
- **Armazenagem:**
- **Requisitos para espaços ou contentores para armazenagem:** Sem requisitos especiais.
- **Avisos para armazenagem conjunta:** Não necessário.
- **Outros avisos sobre as condições de armazenagem:** Manter o recipiente hermeticamente fechado.
- **7.3 Utilização(ões) final(is) específica(s)** Não existe mais nenhuma informação relevante disponível.

### SECÇÃO 8: Controlo da exposição/Protecção individual

- **8.1 Parâmetros de controlo**
- **Indicações adicionais para concepção de instalações técnicas:** Não existem outras informações, ver ponto 7.
- **Componentes cujo valor do limite de exposição no local de trabalho deve ser monitorizado:**  
O produto não contém quantidades relevantes de substâncias cujo valor limite relacionado no local de trabalho tenha que ser monitorizado.
- **Indicações adicionais:** Foram utilizadas como base as listas válidas à data da elaboração.
- **8.2 Controlo da exposição**
- **Equipamento de protecção individual:**
- **Medidas gerais de protecção e higiene:**  
Manter afastado de alimentos, bebidas e forragens.  
Despir imediatamente a roupa contaminada e embebida.  
Lavar as mãos antes das pausas e no fim do trabalho.  
Evitar o contacto com a pele.  
Evitar o contacto com os olhos e com a pele.
- **Protecção respiratória:**  
Utilizar uma máscara respiratória se a exposição for reduzida ou durante um curto espaço de tempo; se esta for mais prolongada ou mais intensa, utilizar uma máscara respiratória independente do ar ambiente.

(continuação na página 4)

**Ficha de dados de segurança**  
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Nome comercial: **MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

( continuação da página 3 )

· **Protecção das mãos:**

Luvas de protecção

O material das luvas tem de ser impermeável e resistente ao produto / à substância / preparação.

Uma vez que não foram realizados testes nesta área, não podemos recomendar um determinado tipo de material para as luvas que seja adequado para o produto / a preparação / a mistura de químicos.

Escolher o material das luvas tendo em consideração a durabilidade, a permeabilidade e a degradação.

· **Material das luvas**

A escolha das luvas mais adequadas não depende apenas do material, mas também de outras características qualitativas e varia de fabricante para fabricante. O facto de o produto ser composto por uma variedade de materiais leva a que não seja possível prever a duração dos mesmos e, conseqüentemente, das luvas, sendo assim necessário proceder a uma verificação antes da sua utilização.

· **Tempo de penetração no material das luvas**

Deve informar-se sobre a validade exacta das suas luvas junto do fabricante e respeitá-la.

· **Protecção dos olhos:** Recomendamos o uso de óculos de protecção nas operações de trasfega.

### SECCÃO 9: Propriedades físico-químicas

· **9.1 Informações sobre propriedades físicas e químicas de base**· **Informações gerais**· **Aspetto:**

· <b>Forma:</b>	Líquido
· <b>Cor:</b>	Transparente
· <b>Odor:</b>	Inodoro
· <b>Limiar olfactivo:</b>	Não determinado.

· <b>valor pH em 20 °C:</b>	7,4
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· **Mudança do estado:**

· <b>Ponto de fusão/ponto de congelação:</b>	Não determinado.
· <b>Ponto de ebulição inicial e intervalo de ebulição:</b>	100 °C

· <b>Ponto de inflamação:</b>	Não aplicável.
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· <b>Inflamabilidade (sólido, gás):</b>	Não aplicável.
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· <b>Temperatura de decomposição:</b>	Não determinado.
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· <b>Temperatura de autoignição:</b>	O produto não é auto-inflamável.
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· <b>Propriedades explosivas:</b>	O produto não corre o risco de explosão.
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· **Limites de explosão:**

· <b>Inferior:</b>	Não determinado.
· <b>Superior:</b>	Não determinado.

· <b>Pressão de vapor em 20 °C:</b>	23 hPa
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· <b>Densidade em 20 °C:</b>	1,0079 g/cm <sup>3</sup>
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· <b>Densidade relativa</b>	Não determinado.
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· <b>Densidade de vapor</b>	Não determinado.
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· <b>Taxa de evaporação:</b>	Não determinado.
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· <b>Solubilidade em / miscibilidade com água:</b>	Pouco misturável.
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( continuação na página 5 )

**Ficha de dados de segurança**  
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Nome comercial: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4

( continuação da página 4 )

· <b>Coeficiente de partição: n-octanol/água</b>	Não determinado.
· <b>Viscosidade:</b>	
<b>Dinâmico:</b>	Não determinado.
<b>Cinemático:</b>	Não determinado.
· <b>Percentagem de solvente:</b>	
<b>Água:</b>	91,5 %
<b>VOC (UE)</b>	0,00 %
<b>Percentagem de substâncias sólidas:</b>	8,5 %
· <b>9.2 Outras informações</b>	Não existe mais nenhuma informação relevante disponível.

### SECÇÃO 10: Estabilidade e reactividade

- **10.1 Reactividade** Não existe mais nenhuma informação relevante disponível.
- **10.2 Estabilidade química**
- **Decomposição térmica / condições a evitar:** Não existe decomposição se usado de acordo com as especificações.
- **10.3 Possibilidade de reações perigosas** Não se conhecem reacções perigosas.
- **10.4 Condições a evitar** Não existe mais nenhuma informação relevante disponível.
- **10.5 Materiais incompatíveis:** Não existe mais nenhuma informação relevante disponível.
- **10.6 Produtos de decomposição perigosos:** Não se conhecem produtos de decomposição perigosos.

### SECÇÃO 11: Informação toxicológica

- **11.1 Informações sobre os efeitos toxicológicos**
- **Toxicidade aguda**  
Nocivo por ingestão ou inalação.
- **Efeito de irritabilidade primário:**
- **Corrosão/irritação cutânea**  
Provoca irritação cutânea.
- **Lesões oculares graves/irritação ocular**  
Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Sensibilização respiratória ou cutânea**  
Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Avisos adicionais de toxicologia:**
- **Efeitos CMR (carcinogenicidade, mutagenicidade e efeitos tóxicos na reprodução)**
- **Mutagenicidade em células germinativas**  
Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Carcinogenicidade** Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Toxicidade reprodutiva** Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Toxicidade para órgãos-alvo específicos (STOT) - exposição única**  
Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Toxicidade para órgãos-alvo específicos (STOT) - exposição repetida**  
Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Perigo de aspiração** Com base nos dados disponíveis, os critérios de classificação não são preenchidos.

### SECÇÃO 12: Informação ecológica

- **12.1 Toxicidade**
- **Toxicidade aquática:** Não existe mais nenhuma informação relevante disponível.

( continuação na página 6 )



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- **12.2 Persistência e degradabilidade** Não existe mais nenhuma informação relevante disponível.
- **12.3 Potencial de bioacumulação** Não existe mais nenhuma informação relevante disponível.
- **12.4 Mobilidade no solo** Não existe mais nenhuma informação relevante disponível.
- **Outras indicações ecológicas:**
- **Indicações gerais:**  
Classe de perigo para a água 1 (D) (auto-classificação): pouco perigoso para a água  
Não deixar chegar substâncias concentradas, ou seja quantidades grandes, às águas subterrâneas, aos cursos de água ou à canalização.
- **12.5 Resultados da avaliação PBT e mPmB**
- **PBT:** Não aplicável.
- **mPmB:** Não aplicável.
- **12.6 Outros efeitos adversos** Não existe mais nenhuma informação relevante disponível.

### SECÇÃO 13: Considerações relativas à eliminação

- **13.1 Métodos de tratamento de resíduos**
- **Recomendação:** Não se pode eliminar juntamente com o lixo doméstico. Não permita que chegue à canalização.
- **Embalagens contaminadas:**
- **Recomendação:** Eliminação residual conforme o regulamento dos serviços públicos.

### SECÇÃO 14: Informações relativas ao transporte

· <b>14.1 Número ONU</b>	
· <b>ADR, IMDG, IATA</b>	não aplicável
· <b>14.2 Designação oficial de transporte da ONU</b>	
· <b>ADR, IMDG, IATA</b>	não aplicável
· <b>14.3 Classes de perigo para efeitos de transporte</b>	
· <b>ADR, ADN, IMDG, IATA</b>	
· <b>Classe</b>	não aplicável
· <b>14.4 Grupo de embalagem</b>	
· <b>ADR, IMDG, IATA</b>	não aplicável
· <b>14.5 Perigos para o ambiente:</b>	Não aplicável.
· <b>14.6 Precauções especiais para o utilizador</b>	Não aplicável.
· <b>14.7 Transporte a granel em conformidade com o anexo II da Convenção MARPOL e o Código IBC</b>	Não aplicável.
· <b>UN "Model Regulation":</b>	não aplicável

### SECÇÃO 15: Informação sobre regulamentação

- **15.1 Regulamentação/legislação específica para a substância ou mistura em matéria de saúde, segurança e ambiente**
- **Diretiva 2012/18/UE**
- **Substâncias perigosas designadas - ANEXO I** Nenhum dos componentes se encontra listado.
- **Regulamento (CE) n.º 1907/2006 ANEXO XVII** Condições de limitação: 3

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**Ficha de dados de segurança**  
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**Nome comercial: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4**

(continuação da página 6)

· **Directiva 2011/65/UE relativa à restrição do uso de determinadas substâncias perigosas em equipamentos eléctricos e electrónicos - Anexo II**

Nenhum dos componentes se encontra listado.

· **REGULAMENTO (UE) 2019/1148**

· **Anexo I - PRECURSORES DE EXPLOSIVOS OBJETO DE RESTRIÇÕES (Valor-limite máximo para efeitos de licenciamento nos termos do artigo 5.o, n.o 3)**

Nenhum dos componentes se encontra listado.

· **Anexo II - PRECURSORES DE EXPLOSIVOS PASSÍVEIS DE PARTICIPAÇÃO**

Nenhum dos componentes se encontra listado.

· **Regulamento (CE) n.º 273/2004 relativo aos precursores de drogas**

Nenhum dos componentes se encontra listado.

· **Regulamento (CE) n.º 111/2005 que estabelece regras de controlo do comércio de precursores de drogas entre a Comunidade e países terceiros**

Nenhum dos componentes se encontra listado.

· **15.2 Avaliação da segurança química: Não foi realizada nenhuma Avaliação de Segurança Química.**

### **SECÇÃO 16: Outras informações**

As informações fornecidas baseiam-se no estado actual dos nossos conhecimentos, embora não representem uma garantia das propriedades do produto e não fundamentam uma relação contratual.

· **Frases relevantes**

H302 Nocivo por ingestão.

H312 Nocivo em contacto com a pele.

H315 Provoca irritação cutânea.

H319 Provoca irritação ocular grave.

H332 Nocivo por inalação.

H335 Pode provocar irritação das vias respiratórias.

· **Abreviaturas e acrónimos:**

ADR: Accord relatif au transport international 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 Harmonised 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 (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Toxicidade aguda – Categoria 4

Skin Irrit. 2: Corrosão/irritação cutânea – Categoria 2

Eye Irrit. 2: Lesões oculares graves/irritação ocular – Categoria 2

STOT SE 3: Toxicidade para órgãos-alvo específicos (exposição única) – Categoria 3

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 19.08.2022

Revisión: 19.08.2022

### SECCIÓN 1: Identificación de la sustancia o la mezcla y de la sociedad o la empresa

- **1.1 Identificador del producto**
- **Nombre comercial:** MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4
- **Número del artículo:** 11582-05, 11582-10
- **UFI:** UC01-W0PX-U006-8N9X
- **1.2 Usos pertinentes identificados de la sustancia o de la mezcla y usos desaconsejados**  
No existen más datos relevantes disponibles.
- **Utilización del producto / de la elaboración** Sustancias químicas de laboratorio
- **1.3 Datos del proveedor de la ficha de datos de seguridad**
- **Fabricante/distribuidor:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Aname**  
C/ Perez Galdos no. 2  
28693 Quijorna  
Madrid, Spain  
Tel: +34.91.816.89.50  
Fax: +34.91.816.85.94  
email: ventas@aname.es
- **Área de información:** Product safety department
- **1.4 Teléfono de emergencia:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### SECCIÓN 2: Identificación de los peligros

- **2.1 Clasificación de la sustancia o de la mezcla**
- **Clasificación con arreglo al Reglamento (CE) n° 1272/2008**



GHS07

Acute Tox. 4 H302 Nocivo en caso de ingestión.  
Acute Tox. 4 H332 Nocivo en caso de inhalación.  
Skin Irrit. 2 H315 Provoca irritación cutánea.

- **2.2 Elementos de la etiqueta**
- **Etiquetado con arreglo al Reglamento (CE) n° 1272/2008**  
El producto se ha clasificado y etiquetado de conformidad con el reglamento CLP.
- **Pictogramas de peligro**



GHS07

- **Palabra de advertencia** Atención
- **Componentes peligrosos a indicar en el etiquetaje:**  
Sodium Phosphate Monobasic Monohydrate

( se continua en página 2 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 19.08.2022

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· **Indicaciones de peligro**

H302+H332 Nocivo en caso de ingestión o inhalación.

H315 Provoca irritación cutánea.

· **Consejos de prudencia**

P261 Evitar respirar el polvo/el humo/el gas/la niebla/los vapores/el aerosol.

P280 Llevar guantes de protección.

P301+P312 EN CASO DE INGESTIÓN: Llamar a un CENTRO DE TOXICOLOGÍA/médico si la persona se encuentra mal.

P330 Enjuagarse la boca.

P304+P340 EN CASO DE INHALACIÓN: Transportar a la persona al aire libre y mantenerla en una posición que le facilite la respiración.

P501 Eliminar el contenido o el recipiente conforme a la reglamentación local/regional/nacional/internacional.

· **2.3 Otros peligros**

· **Resultados de la valoración PBT y mPmB**

· **PBT:** No aplicable.

· **mPmB:** No aplicable.

### SECCIÓN 3: Composición/información sobre los componentes

· **3.2 Caracterización química: Mezclas**

· **Descripción:** Mezcla formada por las sustancias especificadas a continuación con adiciones no peligrosas.

· **Componentes peligrosos:**

7782-85-6	Disodium Orthophosphate Heptahydrate ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	>2,5-≤10%
10049-21-5	Sodium Phosphate Monobasic Monohydrate ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	>2,5-≤10%

· **Indicaciones adicionales:** El texto de los posibles riesgos aquí indicados se puede consultar en el capítulo 16.

### SECCIÓN 4: Primeros auxilios

· **4.1 Descripción de los primeros auxilios**

· **Instrucciones generales:**

Los síntomas de intoxicación pueden presentarse después de muchas horas, por lo que se requiere una supervisión médica durante un mínimo de 48 horas después del accidente.

· **En caso de inhalación del producto:**

Suministrar aire fresco; eventualmente hacer respiración artificial, calor. Si los trastornos persisten, consultar al médico.

Las personas desmayadas deben tenderse y transportarse de lado con la suficiente estabilidad.

· **En caso de contacto con la piel:** Lavar inmediatamente con agua y jabón y enjuagar bien.

· **En caso de con los ojos:** Limpiar los ojos abiertos durante varios minutos con agua corriente.

· **En caso de ingestión:** Consultar inmediatamente un médico.

· **4.2 Principales síntomas y efectos, agudos y retardados** No existen más datos relevantes disponibles.

· **4.3 Indicación de toda atención médica y de los tratamientos especiales que deban dispensarse inmediatamente** No existen más datos relevantes disponibles.

### SECCIÓN 5: Medidas de lucha contra incendios

· **5.1 Medios de extinción**

· **Sustancias extintoras apropiadas:** Combatir los incendios con medidas adaptados al ambiente circundante.

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- **5.2 Peligros específicos derivados de la sustancia o la mezcla** No existen más datos relevantes disponibles.
- **5.3 Recomendaciones para el personal de lucha contra incendios**
- **Equipo especial de protección:** Colocarse la protección respiratoria.

### SECCIÓN 6: Medidas en caso de vertido accidental

- **6.1 Precauciones personales, equipo de protección y procedimientos de emergencia** No es necesario.
- **6.2 Precauciones relativas al medio ambiente:**  
Evitar que penetre en la canalización /aguas de superficie /agua subterráneas.
- **6.3 Métodos y material de contención y de limpieza:**  
Quitar con material absorbente (arena, kieselgur, aglutinante de ácidos, aglutinante universal, aserrín).  
Desechar el material contaminado como vertido según ítem 13.  
Asegurar suficiente ventilación.
- **6.4 Referencia a otras secciones**  
Ver capítulo 7 para mayor información sobre una manipulación segura.  
Ver capítulo 8 para mayor información sobre el equipo personal de protección.  
Para mayor información sobre cómo desechar el producto, ver capítulo 13.

### SECCIÓN 7: Manipulación y almacenamiento

- **7.1 Precauciones para una manipulación segura**  
Asegurar suficiente ventilación /aspiración en el puesto de trabajo.  
Evitar la formación de aerosoles.
- **Prevención de incendios y explosiones:** No se requieren medidas especiales.
- **7.2 Condiciones de almacenamiento seguro, incluidas posibles incompatibilidades**
- **Almacenamiento:**
- **Exigencias con respecto al almacén y los recipientes:** No se requieren medidas especiales.
- **Normas en caso de un almacenamiento conjunto:** No es necesario.
- **Indicaciones adicionales sobre las condiciones de almacenamiento:**  
Mantener el recipiente cerrado herméticamente.
- **7.3 Usos específicos finales** No existen más datos relevantes disponibles.

### SECCIÓN 8: Controles de exposición/protección individual

- **8.1 Parámetros de control**
- **Instrucciones adicionales para el acondicionamiento de instalaciones técnicas:**  
Sin datos adicionales, ver punto 7.
- **Componentes con valores límite admisibles que deben controlarse en el puesto de trabajo:**  
El producto no contiene cantidades relevantes de sustancias con valores límite que exijan un control en el puesto de trabajo.
- **Indicaciones adicionales:** Como base se han utilizado las listas vigentes en el momento de la elaboración.
- **8.2 Controles de la exposición**
- **Equipo de protección individual:**
- **Medidas generales de protección e higiene:**  
Mantener alejado de alimentos, bebidas y alimentos para animales.  
Quitarse de inmediato la ropa ensuciada o impregnada.  
Lavarse las manos antes de las pausas y al final del trabajo.  
Evitar el contacto con la piel.  
Evitar el contacto con los ojos y la piel.

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· **Protección respiratoria:**

Si la exposición va a ser breve o de poca intensidad, colocarse una máscara respiratoria. Para una exposición más intensa o de mayor duración, usar un aparato de respiración autónomo.

· **Protección de manos:**



Guantes de protección

El material del guante deberá ser impermeable y resistente al producto / sustancia / preparado.

Ante la ausencia de tests específicos, no se puede recomendar ningún material específico para guantes de protección contra el producto / preparado / mezcla de sustancias químicas.

Selección del material de los guantes en función de los tiempos de rotura, grado de permeabilidad y degradación.

· **Material de los guantes**

La elección del guante adecuado no depende únicamente del material, sino también de otras características de calidad, que pueden variar de un fabricante a otro. Teniendo en cuenta que el producto está fabricado a partir de diferentes materiales, su calidad no puede ser evaluada de antemano, de modo que los guantes deberán ser controlados antes de su utilización.

· **Tiempo de penetración del material de los guantes**

El tiempo de resistencia a la penetración exacto deberá ser pedido al fabricante de los guantes. Este tiempo debe ser respetado.

· **Protección de ojos:** Se recomienda el uso de gafas de protección durante el trasvase del producto.

### SECCIÓN 9: Propiedades físicas y químicas

· **9.1 Información sobre propiedades físicas y químicas básicas**

· **Datos generales**

· **Aspecto:**

Forma:

Líquido

Color:

Transparente

· **Olor:**

Inodoro

· **Umbral olfativo:**

No determinado.

· **valor pH a 20 °C:**

7,4

· **Cambio de estado**

Punto de fusión/punto de congelación:

Indeterminado.

Punto inicial de ebullición e intervalo de ebullición: 100 °C

· **Punto de inflamación:**

No aplicable.

· **Inflamabilidad (sólido, gas):**

No aplicable.

· **Temperatura de descomposición:**

No determinado.

· **Temperatura de auto-inflamación:**

El producto no es autoinflamable.

· **Propiedades explosivas:**

El producto no es explosivo.

· **Límites de explosión:**

Inferior:

No determinado.

Superior:

No determinado.

· **Presión de vapor a 20 °C:**

23 hPa

· **Densidad a 20 °C:**

1,0079 g/cm<sup>3</sup>

· **Densidad relativa**

No determinado.

· **Densidad de vapor**

No determinado.

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· <b>Tasa de evaporación:</b>	No determinado.
· <b>Solubilidad en / miscibilidad con agua:</b>	Poco o no mezclable.
· <b>Coeficiente de reparto: n-octanol/agua:</b>	No determinado.
· <b>Viscosidad:</b>	
<b>Dinámica:</b>	No determinado.
<b>Cinemática:</b>	No determinado.
· <b>Concentración del disolvente:</b>	
<b>Agua:</b>	91,5 %
<b>VOC (CE)</b>	0,00 %
<b>Contenido de cuerpos sólidos:</b>	8,5 %
· <b>9.2 Otros datos</b>	No existen más datos relevantes disponibles.

### SECCIÓN 10: Estabilidad y reactividad

- **10.1 Reactividad** No existen más datos relevantes disponibles.
- **10.2 Estabilidad química**
- **Descomposición térmica / condiciones que deben evitarse:** No se descompone al emplearse adecuadamente.
- **10.3 Posibilidad de reacciones peligrosas** No se conocen reacciones peligrosas.
- **10.4 Condiciones que deben evitarse** No existen más datos relevantes disponibles.
- **10.5 Materiales incompatibles:** No existen más datos relevantes disponibles.
- **10.6 Productos de descomposición peligrosos:** No se conocen productos de descomposición peligrosos.

### SECCIÓN 11: Información toxicológica

- **11.1 Información sobre los efectos toxicológicos**
- **Toxicidad aguda**  
Nocivo en caso de ingestión o inhalación.
- **Efecto estimulante primario:**
- **Corrosión o irritación cutáneas**  
Provoca irritación cutánea.
- **Lesiones o irritación ocular graves**  
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Sensibilización respiratoria o cutánea**  
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Indicaciones toxicológicas adicionales:**
- **Efectos CMR (carcinogenicidad, mutagenicidad y toxicidad para la reproducción)**
- **Mutagenicidad en células germinales**  
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Carcinogenicidad** A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Toxicidad para la reproducción** A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Toxicidad específica en determinados órganos (STOT) – exposición única**  
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Toxicidad específica en determinados órganos (STOT) – exposición repetida**  
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Peligro de aspiración** A la vista de los datos disponibles, no se cumplen los criterios de clasificación.

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### SECCIÓN 12: Información ecológica

- **12.1 Toxicidad**
- **Toxicidad acuática:** No existen más datos relevantes disponibles.
- **12.2 Persistencia y degradabilidad** No existen más datos relevantes disponibles.
- **12.3 Potencial de bioacumulación** No existen más datos relevantes disponibles.
- **12.4 Movilidad en el suelo** No existen más datos relevantes disponibles.
- **Indicaciones medioambientales adicionales:**
- **Indicaciones generales:**  
Nivel de riesgo para el agua 1 (autoclasiificación): escasamente peligroso para el agua  
En estado no diluido o no neutralizado, no dejar que se infiltre en aguas subterráneas, aguas superficiales o en alcantarillados.
- **12.5 Resultados de la valoración PBT y mPmB**
- **PBT:** No aplicable.
- **mPmB:** No aplicable.
- **12.6 Otros efectos adversos** No existen más datos relevantes disponibles.

### SECCIÓN 13: Consideraciones relativas a la eliminación

- **13.1 Métodos para el tratamiento de residuos**
- **Recomendación:** No debe desecharse con la basura doméstica. No debe llegar al alcantarillado.
- **Embalajes sin limpiar:**
- **Recomendación:** Eliminar conforme a las disposiciones oficiales.

### SECCIÓN 14: Información relativa al transporte

- |                                                                                                         |               |
|---------------------------------------------------------------------------------------------------------|---------------|
| · <b>14.1 Número ONU</b><br>· <b>ADR, IMDG, IATA</b>                                                    | suprimido     |
| · <b>14.2 Designación oficial de transporte de las Naciones Unidas</b><br>· <b>ADR, IMDG, IATA</b>      | suprimido     |
| · <b>14.3 Clase(s) de peligro para el transporte</b><br>· <b>ADR, ADN, IMDG, IATA</b><br>· <b>Clase</b> | suprimido     |
| · <b>14.4 Grupo de embalaje</b><br>· <b>ADR, IMDG, IATA</b>                                             | suprimido     |
| · <b>14.5 Peligros para el medio ambiente:</b>                                                          | No aplicable. |
| · <b>14.6 Precauciones particulares para los usuarios</b>                                               | No aplicable. |
| · <b>14.7 Transporte a granel con arreglo al anexo II del Convenio MARPOL y el Código IBC</b>           | No aplicable. |
| · <b>"Reglamentación Modelo" de la UNECE:</b>                                                           | suprimido     |

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### SECCIÓN 15: Información reglamentaria

- **15.1 Reglamentación y legislación en materia de seguridad, salud y medio ambiente específicas para la sustancia o la mezcla**
- **Directiva 2012/18/UE**
- **Sustancias peligrosas nominadas - ANEXO I** ninguno de los componentes está incluido en una lista
- **REGLAMENTO (CE) n° 1907/2006 ANEXO XVII Restricciones: 3**
- **Directiva 2011/65/UE sobre restricciones a la utilización de determinadas sustancias peligrosas en aparatos eléctricos y electrónicos - Anexo II**
- ninguno de los componentes está incluido en una lista
- **REGLAMENTO (UE) 2019/1148**
- **Anexo I - PRECURSORES DE EXPLOSIVOS RESTRINGIDOS (Valor límite superior a efectos de la concesión de licencias con arreglo al artículo 5, apartado 3)**
- ninguno de los componentes está incluido en una lista
- **Anexo II - PRECURSORES DE EXPLOSIVOS NOTIFICABLES**
- ninguno de los componentes está incluido en una lista
- **Reglamento (CE) no 273/2004 sobre precursores de drogas**
- ninguno de los componentes está incluido en una lista
- **Reglamento (CE) N o 111/2005 por el que establecen normas para la vigilancia del comercio de precursores de drogas entre la Comunidad y terceros países**
- ninguno de los componentes está incluido en una lista
- **15.2 Evaluación de la seguridad química:** Una evaluación de la seguridad química no se ha llevado a cabo.

### SECCIÓN 16: Otra información

Los datos se fundan en el estado actual de nuestros conocimientos, pero no constituyen garantía alguna de cualidades del producto y no generan ninguna relación jurídica contractual.

#### · Frases relevantes

- H302 Nocivo en caso de ingestión.
- H312 Nocivo en contacto con la piel.
- H315 Provoca irritación cutánea.
- H319 Provoca irritación ocular grave.
- H332 Nocivo en caso de inhalación.
- H335 Puede irritar las vías respiratorias.

#### · Abreviaturas y acrónimos:

- ADR: Accord relatif au transport international 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 Harmonised 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 (division of the American Chemical Society)
- VOC: Volatile Organic Compounds (USA, EU)
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Acute Tox. 4: Toxicidad aguda – Categoría 4
- Skin Irrit. 2: Corrosión o irritación cutáneas – Categoría 2
- Eye Irrit. 2: Lesiones oculares graves o irritación ocular – Categoría 2
- STOT SE 3: Toxicidad específica en determinados órganos ( exposición única) – Categoría 3