

# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/02/2016

Reviewed on 09/02/2016


## 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: info@emsdiasum.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**  
The product is not classified according to the Globally Harmonized System (GHS).

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- **Label elements**
- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Precautionary statements**  
Avoid breathing dust/fume/gas/mist/vapors/spray  
IF INHALED: Call a POISON CENTER/doctor if you feel unwell.  
Store in a well-ventilated place. Keep cool.  
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

Health = 1  
Fire = 0  
Reactivity = 0
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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

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### 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.  
No special measures required.
- **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:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult 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:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **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.

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

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## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
*No special measures required.  
 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.*
- **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:**  
*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:**  
**Form:** Liquid

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

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<b>Color:</b>	Transparent
<b>· Odor:</b>	Odorless
<b>· Odor threshold:</b>	Not determined.
<b>· pH-value at 20 °C (68 °F):</b>	7.4
<b>· Change in condition</b>	
<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	100 °C (212 °F)
<b>· Flash point:</b>	Not applicable.
<b>· Flammability (solid, gaseous):</b>	Not flammable.
<b>· Ignition temperature:</b>	
<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 mm Hg)
<b>· Density at 20 °C (68 °F):</b>	1.0079 g/cm <sup>3</sup> (8.411 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</b>	
<b>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>Organic solvents:</b>	0.0 %
<b>Water:</b>	91.5 %
<b>VOC content:</b>	0.0 g/l / 0.00 lb/gl
<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.

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

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· **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

· **Primary irritant effect:**

· **on the skin:** No irritant effect.

· **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:

The product is not subject to classification according to internally approved calculation methods for preparations:

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

Harmful

· **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:** Smaller quantities can be disposed of with household waste.

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

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

## 14 Transport information

- |  |                 |
|--|-----------------|
| · <b>UN-Number</b>   |                 |
| · <b>DOT, ADR, IMDG, IATA</b>  | Void            |
| · <b>UN proper shipping name</b>   |                 |
| · <b>DOT, ADR, IMDG, IATA</b>  | Void            |
| · <b>Transport hazard class(es)</b>  |                 |
| · <b>DOT, ADR, IMDG, IATA</b>  |                 |
| · <b>Class</b>   | Void            |
| · <b>Packing group</b>   |                 |
| · <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**
- **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):**

7647-14-5 sodium chloride

7732-18-5 water, distilled, conductivity or of similar purity

- **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.

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

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- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

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

None of the ingredients is listed.

- **GHS label elements** Void

- **Hazard pictograms** Void

- **Signal word** Void

- **Hazard statements** Void

- **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapors/spray

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

Store in a well-ventilated place. Keep cool.

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.

- **Date of preparation / last revision** 09/02/2016 / -

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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**

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

Printing date 02.09.2016

Revision: 02.09.2016

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

- **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: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://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)
- 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 Hazards identification

- **Classification of the substance or mixture**  
The product is not classified according to the Globally Harmonised System (GHS).

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- **Label elements**
- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Precautionary statements**  
Avoid breathing dust/fume/gas/mist/vapours/spray.  
IF INHALED: Call a POISON CENTER/doctor if you feel unwell.  
Store in a well-ventilated place. Keep cool.  
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.

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

Printing date 02.09.2016

Revision: 02.09.2016

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

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### 3 Composition/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.  
No special measures required.
- **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:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult 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 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **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.

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## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 02.09.2016

Revision: 02.09.2016

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

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### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
No special measures required.  
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/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.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:** Keep away from foodstuffs, beverages and feed.
- **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:**  
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:**  
**Form:** Liquid

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

Printing date 02.09.2016

Revision: 02.09.2016

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

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<b>Colour:</b>	Transparent
· <b>Odour:</b>	Odourless
· <b>Odour threshold:</b>	Not determined.
· <b>pH-value at 20 °C:</b>	7.4
· <b>Change in condition</b>	
<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	100 °C
· <b>Flash point:</b>	Not applicable.
· <b>Flammability (solid, gaseous):</b>	Not applicable.
· <b>Ignition temperature:</b>	
<b>Decomposition temperature:</b>	Not determined.
· <b>Self-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>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>Organic solvents:</b>	0.0 %
<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.

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

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

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· **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity**

· **Primary irritant effect:**

· **Skin corrosion/irritation** No irritant effect.

· **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:

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

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

Harmful

### 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** Smaller quantities can be disposed of with household waste.

· **Uncleaned packaging:**

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

### 14 Transport information

· **UN-Number**

· **ADG, ADN, IMDG, IATA**

not regulated

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· <b>UN proper shipping name</b> · <b>ADG, ADN, 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>

### 15 Regulatory information

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

· **Australian Inventory of Chemical Substances**

*All ingredients are listed.*

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

*None of the ingredients is listed.*

· **GHS label elements** *Void*

· **Hazard pictograms** *Void*

· **Signal word** *Void*

· **Hazard statements** *Void*

· **Precautionary statements**

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

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

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

*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.*

· **Abbreviations and acronyms:**

*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*

*IMDG: International Maritime Code for Dangerous Goods*

*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*

# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/02/2016

Reviewed on 09/02/2016

## 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: info@emsdiasum.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**  
The product is not classified according to the Globally Harmonized System (GHS).
- **Label elements**
- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Precautionary statements**  
Avoid breathing dust/fume/gas/mist/vapours/spray.  
IF INHALED: Call a POISON CENTER/doctor if you feel unwell.  
Store in a well-ventilated place. Keep cool.  
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



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

HEALTH	1	Health = 1
FIRE	0	Fire = 0
REACTIVITY	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
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(Contd. on page 2)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/02/2016

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

10049-21-5 Sodium Phosphate Monobasic Monohydrate

(Contd. of page 1)

1-5% w/w

## 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.  
No special measures required.
- **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:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult 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:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **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**  
No special measures required.  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.

(Contd. on page 3)

CA

# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/02/2016

Reviewed on 09/02/2016

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

(Contd. of page 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 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.
- **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:**  
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

(Contd. on page 4)



# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/02/2016

Reviewed on 09/02/2016

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

(Contd. of page 3)

· <b>Flash point:</b>	Not applicable.
· <b>Flammability (solid, gaseous):</b>	Not flammable.
· <b>Ignition temperature:</b>	
<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:</b>	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.
· <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>Organic solvents:</b>	0.0 %
<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:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

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CA

# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/02/2016

Reviewed on 09/02/2016

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

(Contd. of page 4)

· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:  
The product is not subject to classification according to internally approved calculation methods for preparations:

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

Harmful

· **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.

## 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:** Smaller quantities can be disposed of with household waste.

· **Uncleaned packagings:**

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

## 14 Transport information

· **UN-Number**

· **DOT, TDG, ADN, IMDG, IATA** Void

· **UN proper shipping name**

· **DOT, TDG, ADN, IMDG, IATA** Void

· **Transport hazard class(es)**

· **DOT, TDG, ADN, IMDG, IATA**

· **Class** Void

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# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/02/2016

Reviewed on 09/02/2016

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

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- |  |                 |
|--|-----------------|
| <b>· Packing group</b>   | Void            |
| <b>· DOT, TDG, 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**
- **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):**

7647-14-5 sodium chloride

7732-18-5 water, distilled, conductivity or of similar purity

**· Canadian substance listings:**

**· Canadian Domestic Substances List (DSL)**

7647-14-5 sodium chloride

7732-18-5 water, distilled, conductivity or of similar purity

**· Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

**· Canadian Ingredient Disclosure list (limit 1%)**

None of the ingredients is listed.

· **GHS label elements** Void

· **Hazard pictograms** Void

· **Signal word** Void

· **Hazard statements** Void

**· Precautionary statements**

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

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

Store in a well-ventilated place. Keep cool.

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.

· **Date of preparation / last revision** 09/02/2016 / -

**· Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

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**Safety Data Sheet**  
**acc. to OSHA HCS**

Printing date 09/02/2016

Reviewed on 09/02/2016

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

(Contd. of page 6)

*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 02.09.2016

Revision: 02.09.2016

### 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: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://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**  
The product is not classified according to the CLP regulation.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Precautionary statements**  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P304+P312 IF INHALED: Call a POISON CENTER/doctor if you feel unwell.  
P403+P235 Store in a well-ventilated place. Keep cool.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Additional information:**  
Safety data sheet available on request.
- **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%

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

Printing date 02.09.2016

Revision: 02.09.2016

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

(Contd. of page 1)

· **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.

No special measures required.

· **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:** Generally the product does not irritate the skin.

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

· **After swallowing:** If symptoms persist consult doctor.

· **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:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **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.

· **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**

No special measures required.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· **Information about fire - and explosion protection:** No special measures required.

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

Printing date 02.09.2016

Revision: 02.09.2016

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

(Contd. of page 2)

- 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

- Additional information about design of technical facilities: No further data; see item 7.
- 8.1 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.
- 8.2 Exposure controls
- Personal protective equipment:
  - General protective and hygienic measures: Keep away from foodstuffs, beverages and feed.
  - 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:
 

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

### 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/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C

(Contd. on page 4)

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

Printing date 02.09.2016

Revision: 02.09.2016

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

(Contd. of page 3)

· <b>Flash point:</b>	Not applicable.
· <b>Flammability (solid, gaseous):</b>	Not applicable.
· <b>Ignition temperature:</b>	
<b>Decomposition temperature:</b>	Not determined.
· <b>Self-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>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>Organic solvents:</b>	0.0 %
<b>Water:</b>	91.5 %
<b>VOC (EC)</b>	0.00 %
<b>Solids content:</b>	8.5 %
· <b>9.2 Other information</b>	No further relevant information available.

### 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** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.

(Contd. on page 5)



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

Printing date 02.09.2016

Revision: 02.09.2016

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

(Contd. of page 4)

- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenity, 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** Smaller quantities can be disposed of with household waste.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information

· <b>14.1 UN-Number</b>	
· <b>ADR, ADN, IMDG, IATA</b>	not regulated
· <b>14.2 UN proper shipping name</b>	
· <b>ADR, ADN, IMDG, IATA</b>	not regulated
· <b>14.3 Transport hazard class(es)</b>	
· <b>ADR, ADN, IMDG, IATA</b>	
· <b>Class</b>	not regulated
· <b>14.4 Packing group</b>	
· <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.

(Contd. on page 6)

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

Printing date 02.09.2016

Revision: 02.09.2016

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

(Contd. of page 5)

- |  |                        |
|--|------------------------|
| · <b>14.7 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>   |

### **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 européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*

*IMDG: International Maritime Code for Dangerous Goods*

*IATA: International Air Transport Association*

*GHS: Globally 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: 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*

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 02.09.2016

Herziening van: 02.09.2016

### 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
- **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: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://www.emsdiasum.com)
- **Aurion**  
Binnenhaven 5  
6709 PD Wageningen  
The Netherlands  
Tel: 31 317 415094  
Fax: 31 317 415955  
email: [info@aurion.nl](mailto: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**  
Het product is niet geclassificeerd volgens de CLP-verordening.
- **2.2 Etiketteringselementen**
- **Etikettering overeenkomstig Verordening (EG) nr. 1272/2008** Niet van toepassing
- **Gevarenpictogrammen** Niet van toepassing
- **Signaalwoord** Niet van toepassing
- **Gevarenaanduidingen** Niet van toepassing
- **Veiligheidsaanbevelingen**  
P261 Inademing van stof/rook/gas/nevel/damp/spuitnevel vermijden.  
P304+P312 NA INADEMING: Bij onwel voelen een ANTIGIFCENTRUM/arts raadplegen.  
P403+P235 Op een goed geventileerde plaats bewaren. Koel bewaren.  
P501 De inhoud en de verpakking verwerken volgens de plaatselijke/regionale/nationale/internationale voorschriften.
- **Aanvullende gegevens:**  
Veiligheidsinformatieblad op verzoek verkrijgbaar.
- **2.3 Andere gevaren**
- **Resultaten van PBT- en zPzB-beoordeling**
- **PBT:** Niet bruikbaar.
- **zPzB:** Niet bruikbaar.

NL

(Vervolg op blz. 2)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 02.09.2016

Herziening van: 02.09.2016

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

(Vervolg van blz. 1)

### 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.  
Geen speciale maatregelen 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:** Over het algemeen is het produkt niet prikkelend voor de huid
- **Na oogcontact:** Ogen bij geopend ooglid meerdere minuten met stromend water spoelen
- **Na inslikken:** Als de klachten niet minderen, een 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:**  
CO<sub>2</sub>, bluspoeder of waterstraal. Grotere brand met waterstraal bestrijden of met schuim, dat tegen alcohol bestand is.
- **5.2 Speciale gevaren die door de stof of het mengsel worden veroorzaakt**  
Geen verdere relevante informatie verkrijgbaar.
- **5.3 Advies voor brandweerlieden**
- **Speciale beschermende kleding:** Ademhalingstoestel aantrekken.

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

- **6.1 Persoonlijke voorzorgsmaatregelen, beschermde uitrusting 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.

(Vervolg op blz. 3)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 02.09.2016

Herziening van: 02.09.2016

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

(Vervolg van blz. 2)

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**  
Geen bijzondere maatregelen noodzakelijk.  
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

- **Aanvullende gegevens m.b.t. de inrichting van technische installaties:** Geen aanvullende gegevens. Zie 7.
- **8.1 Controleparameters**
- **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.
- **Ademhalingsbescherming:**  
Bij korte of geringe belasting ademfiltertoestel; bij intensieve resp. langdurige expositie een van de omringende lucht onafhankelijk ademhalingstoestel gebruiken.
- **Handbescherming:**  
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.

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(Vervolg op blz. 4)

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(Vervolg van blz. 3)

### RUBRIEK 9: Fysische en chemische eigenschappen

#### · 9.1 Informatie over fysische en chemische basiseigenschappen

##### · Algemene gegevens

##### · Voorkomen:

Vorm:	Vloeistof
Kleur:	Doorschijnend
· Reuk:	Reukloos
· Geurdrempelwaarde:	Niet bepaald.

· pH-waarde bij 20 °C: 7,4

##### · Toestandsverandering

Smeltpunt/smeltbereik:	Niet bepaald.
Kookpunt/kookpuntbereik:	100 °C

· Vlampunt: Niet bruikbaar.

· Ontvlambaarheid (vast, gasvormig): Niet bruikbaar.

##### · Ontstekingstemperatuur:

Ontbindingstemperatuur: Niet bepaald.

· Zelfonsteking: Het produkt ontbrandt niet uit zichzelf.

· Ontploffingsgevaar: 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.

· Verdelingscoëfficiënt (n-octanol/water): Niet bepaald.

##### · Viscositeit

Dynamisch:	Niet bepaald.
Kinematisch:	Niet bepaald.

##### · Oplosmiddelgehalte:

Organisch oplosmiddel:	0,0 %
Water:	91,5 %
VOC (EG)	0,00 %

Gehalte aan vaste bestanddelen: 8,5 %

· 9.2 Overige informatie: 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.

(Vervolg op blz. 5)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

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

(Vervolg van blz. 4)

- **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** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Primaire aandoening:**
- **Huidcorrosie/-irritatie** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **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.
- **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.
- **Verdere ecologische informatie:**
- **Algemene informatie:**  
Waterbezwaarlijkheid (NL) 11: Weinig schadelijk voor 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:** Kleine hoeveelheden kunnen tezamen met huisvuil gestort worden.
- **Niet gereinigde verpakkingen:**
- **Aanbeveling:** Afvalverwijdering volgens overheidsbepalingen.

-NL

(Vervolg op blz. 6)

# Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 02.09.2016

Herziening van: 02.09.2016

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

(Vervolg van blz. 5)

## RUBRIEK 14: Informatie met betrekking tot het vervoer

- |  |                     |
|--|---------------------|
| · 14.1 VN-nummer   |                     |
| · ADR, ADN, IMDG, IATA   | Niet van toepassing |
| · 14.2 Juiste ladingnaam overeenkomstig de modelreglementen van de VN      |                     |
| · ADR, ADN, IMDG, IATA   | Niet van toepassing |
| · 14.3 Transportgevaarenklasse(n)  |                     |
| · ADR, ADN, IMDG, IATA   |                     |
| · klasse   | Niet van toepassing |
| · 14.4 Verpakkingsgroep:   |                     |
| · ADR, IMDG, IATA  | Niet van toepassing |
| · 14.5 Milieugevaren:  | Niet bruikbaar.     |
| · 14.6 Bijzondere voorzorgen voor de gebruiker                             | Niet bruikbaar.     |
| · 14.7 Vervoer in bulk overeenkomstig bijlage II bij Marpol en de IBC-code | Niet bruikbaar.     |
| · VN "Model Regulation":   | 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.
- 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.
- Richtlijn 2012/18/EU
- Gevaarlijke stoffen die met naam genoemd worden - BIJLAGE I geen der bestanddelen staat op de lijst.
- Nationale voorschriften:
- Gevaarklasse v. water: Waterbezwaarlijkheid (NL) 11: Saneringsinspanning B
- 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 produkteigenschappen en vestigen geen contractuele rechtsbetrekking.

- Relevante zinnen  
H302 Schadelijk bij inslikken.  
H312 Schadelijk bij contact met de huid.  
H315 Veroorzaakt huidirritatie.

(Vervolg op blz. 7)



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

datum van de druk: 02.09.2016

Herziening van: 02.09.2016

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

(Vervolg van blz. 6)

*H319 Veroorzaakt ernstige oogirritatie.**H332 Schadelijk bij inademing.**H335 Kan irritatie van de luchtwegen veroorzaken.***Afkortingen en acroniemen:***ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)**IMDG: International Maritime Code for Dangerous Goods**IATA: International Air Transport Association**GHS: Globally 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: 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*

NL

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 02.09.2016

Révision: 02.09.2016

### 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
- **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: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://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** Le produit n'est pas classifié selon le règlement CLP.
- **2.2 Éléments d'étiquetage**
- **Étiquetage selon le règlement (CE) n° 1272/2008** néant
- **Pictogrammes de danger** néant
- **Mention d'avertissement** néant
- **Mentions de danger** néant
- **Conseils de prudence**  
P261 Éviter de respirer les poussières/fumées/gaz/brouillards/vapeurs/aérosols.  
P304+P312 EN CAS D'INHALATION: Appeler un CENTRE ANTIPOISON/un médecin en cas de malaise.  
P403+P235 Stocker dans un endroit bien ventilé. Tenir au frais.  
P501 Éliminer le contenu/récipient conformément à la réglementation locale/régionale/nationale/internationale.
- **Indications complémentaires:**  
Fiche de données de sécurité disponible sur demande.
- **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%

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· **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.

Aucune mesure particulière n'est requise.

· **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:** En règle générale, le produit n'irrite pas la peau.

· **Après contact avec les yeux:**

Rincer les yeux, sous l'eau courante, pendant plusieurs minutes, en écartant bien les paupières.

· **Après ingestion:** Si les troubles persistent, consulter 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:**

CO<sub>2</sub>, poudre d'extinction ou eau pulvérisée. Combattre les foyers importants avec de l'eau pulvérisée ou de la mousse résistant à l'alcool.

· **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.

### 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).

Évacuer 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**

Aucune mesure particulière n'est requise.

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- 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

- **Indications complémentaires pour l'agencement des installations techniques:**  
Sans autre indication, voir point 7.
- **8.1 Paramètres de contrôle**
- **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**
- **Equipement 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.
- **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.
- **Protection des mains:**  
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:**
- **Forme:** Liquide
- **Couleur:** Translucide
- **Odeur:** Inodore

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· <b>Seuil olfactif:</b>	Non déterminé.
· <b>valeur du pH à 20 °C:</b>	7,4
· <b>Changement d'état</b> <b>Point de fusion:</b>	Non déterminé.
<b>Point d'ébullition:</b>	100 °C
· <b>Point d'éclair</b>	Non applicable.
· <b>Inflammabilité (solide, gazeux):</b>	Non applicable.
· <b>Température d'inflammation:</b>	
<b>Température de décomposition:</b>	Non déterminé.
· <b>Auto-inflammation:</b>	Le produit ne s'enflamme pas spontanément.
· <b>Danger d'explosion:</b>	Le produit n'est pas explosif.
· <b>Limites d'explosion:</b> <b>Inférieure:</b>	Non déterminé.
<b>Supérieure:</b>	Non déterminé.
· <b>Pression de vapeur à 20 °C:</b>	23 hPa
· <b>Densité à 20 °C:</b>	1,0079 g/cm <sup>3</sup>
· <b>Densité relative</b>	Non déterminé.
· <b>Densité de vapeur.</b>	Non déterminé.
· <b>Vitesse d'évaporation</b>	Non déterminé.
· <b>Solubilité dans/miscibilité avec l'eau:</b>	Pas ou peu miscible
· <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>Solvants organiques:</b>	0,0 %
<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

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### RUBRIQUE 11: Informations toxicologiques

- **11.1 Informations sur les effets toxicologiques**
- **Toxicité aiguë** Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Effet primaire d'irritation:**
- **Corrosion cutanée/irritation cutanée**  
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **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.
- **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.

### 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:** De petites quantités peuvent être mises en décharge avec les ordures ménagères.
- **Emballages non nettoyés:**
- **Recommandation:** Evacuation conformément aux prescriptions légales.

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### RUBRIQUE 14: Informations relatives au transport

· 14.1 Numéro ONU · ADR, ADN, IMDG, IATA	néant
· 14.2 Désignation officielle de transport de l'ONU · ADR, ADN, IMDG, IATA	néant
· 14.3 Classe(s) de danger pour le transport · ADR, ADN, IMDG, IATA · Classe	néant
· 14.4 Groupe d'emballage · ADR, IMDG, IATA	néant
· 14.5 Dangers pour l'environnement:	Non applicable.
· 14.6 Précautions particulières à prendre par l'utilisateur	Non applicable.
· 14.7 Transport en vrac conformément à l'annexe II de la convention Marpol et au recueil IBC	Non applicable.
· "Règlement type" de l'ONU:	néant

### 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.
- 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 européen sur le transport 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

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Eye Irrit. 2: Lésions oculaires graves/irritation oculaire – Catégorie 2  
STOT SE 3: Toxicité spécifique pour certains organes cibles (exposition unique) – Catégorie 3

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# Sicherheitsdatenblatt

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### 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
- **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: info@emsdiasum.com  
www.emsdiasum.com  
  
Science Services GmbH  
Unterhachinger Str. 75  
81737 München Germany  
Tel: +49(0)89 18 93 668-0  
safety@scienceservices.de  
  
24h Giftnotruf Munchen: +49 (0)89 19240  
Toxikologische Abteilung der II. Medizinischen Klinik  
rechts der Isar, Munchen. - www.toxinfo.org
- **Auskunftgebender Bereich:** 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** Das Produkt ist gemäß CLP-Verordnung nicht eingestuft.
- **2.2 Kennzeichnungselemente**
- **Kennzeichnung gemäß Verordnung (EG) Nr. 1272/2008** entfällt
- **Gefahrenpiktogramme** entfällt
- **Signalwort** entfällt
- **Gefahrenhinweise** entfällt
- **Sicherheitshinweise**  
P261 Einatmen von Staub/Rauch/Gas/Nebel/Dampf/Aerosol vermeiden.  
P304+P312 BEI EINATMEN: Bei Unwohlsein GIFTINFORMATIONSZENTRUM/Arzt anrufen.  
P403+P235 An einem gut belüfteten Ort aufbewahren. Kühl halten.  
P501 Entsorgung des Inhalts / des Behälters gemäß den örtlichen / regionalen / nationalen / internationalen Vorschriften.
- **Zusätzliche Angaben:**  
Sicherheitsdatenblatt auf Anfrage erhältlich.
- **2.3 Sonstige Gefahren**
- **Ergebnisse der PBT- und vPvB-Beurteilung**
- **PBT:** Nicht anwendbar.

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· **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.  
Keine besonderen Maßnahmen erforderlich.
- **Nach Einatmen:**  
Frischlufzufuhr, gegebenenfalls Atemspende, Wärme. Bei anhaltenden Beschwerden Arzt konsultieren.  
Bei Bewußtlosigkeit Lagerung und Transport in stabiler Seitenlage.
- **Nach Hautkontakt:** Im allgemeinen ist das Produkt nicht hautreizend.
- **Nach Augenkontakt:** Augen bei geöffnetem Lidspalt mehrere Minuten mit fließendem Wasser spülen.
- **Nach Verschlucken:** Bei anhaltenden Beschwerden Arzt konsultieren.
- **4.2 Wichtigste akute und verzögert auftretende Symptome und Wirkungen**  
Keine weiteren relevanten Informationen verfügbar.
- **4.3 Hinweise auf ärztliche Soforthilfe oder Spezialbehandlung**  
Keine weiteren relevanten Informationen verfügbar.

### ABSCHNITT 5: Maßnahmen zur Brandbekämpfung

- **5.1 Löschmittel**
- **Geeignete Löschmittel:**  
CO<sub>2</sub>, Löschpulver oder Wassersprühstrahl. Größeren Brand mit Wassersprühstrahl oder alkoholbeständigem Schaum bekämpfen.
- **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.

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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**

Keine besonderen Maßnahmen erforderlich.

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

· **Zusätzliche Hinweise zur Gestaltung technischer Anlagen:** Keine weiteren Angaben, siehe Abschnitt 7.

· **8.1 Zu überwachende Parameter**

· **Bestandteile mit arbeitsplatzbezogenen, zu überwachenden Grenzwerten:**

Das Produkt enthält keine relevanten Mengen von Stoffen mit arbeitsplatzbezogenen, zu überwachenden Grenzwerten.

· **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.

· **Atemschutz:**

Bei kurzzeitiger oder geringer Belastung Atemfiltergerät; bei intensiver bzw. längerer Exposition unluftunabhängiges Atemschutzgerät verwenden.

· **Handschutz:**

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.

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 · **Augenschutz:** Beim Umfüllen Schutzbrille empfehlenswert.

### ABSCHNITT 9: Physikalische und chemische Eigenschaften

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

##### · Allgemeine Angaben

##### · Aussehen:

**Form:** Flüssigkeit  
**Farbe:** Durchscheinend

· **Geruch:** Geruchlos

· **Geruchsschwelle:** Nicht bestimmt.

· **pH-Wert bei 20 °C:** 7,4

##### · Zustandsänderung

**Schmelzpunkt/Schmelzbereich:** Nicht bestimmt.

**Siedepunkt/Siedebereich:** 100 °C

· **Flammpunkt:** Nicht anwendbar.

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

##### · Zündtemperatur:

**Zersetzungstemperatur:** Nicht bestimmt.

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

· **Explosionsgefahr:** Das Produkt ist nicht explosionsgefährlich.

##### · Explosionsgrenzen:

**Untere:** Nicht bestimmt.

**Obere:** Nicht bestimmt.

· **Dampfdruck bei 20 °C:** 23 hPa

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

· **Relative Dichte:** Nicht bestimmt.

· **Dampfdichte:** Nicht bestimmt.

· **Verdampfungsgeschwindigkeit:** Nicht bestimmt.

##### · Löslichkeit in / Mischbarkeit mit

**Wasser:** Nicht bzw. wenig mischbar.

· **Verteilungskoeffizient (n-Octanol/Wasser):** Nicht bestimmt.

##### · Viskosität:

**Dynamisch:** Nicht bestimmt.

**Kinematisch:** Nicht bestimmt.

##### · Lösemittelgehalt:

**Organische Lösemittel:** 0,0 %

**Wasser:** 91,5 %

**VOC (EU)** 0,00 %

**Festkörpergehalt:** 8,5 %

· **9.2 Sonstige Angaben:** Keine weiteren relevanten Informationen verfügbar.

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### 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** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Primäre Reizwirkung:**
- **Ätz-/Reizwirkung auf die Haut** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **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.
- **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.
- **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:** Kleinere Mengen können gemeinsam mit Hausmüll deponiert werden.

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- **Ungereinigte Verpackungen:**
- **Empfehlung:** Entsorgung gemäß den behördlichen Vorschriften.

### ABSCHNITT 14: Angaben zum Transport

- **14.1 UN-Nummer**
- **ADR, ADN, IMDG, IATA** entfällt
- **14.2 Ordnungsgemäße UN-Versandbezeichnung**
- **ADR, ADN, IMDG, IATA** entfällt
- **14.3 Transportgefahrenklassen**
- **ADR, ADN, IMDG, IATA**
- **Klasse** entfällt
- **14.4 Verpackungsgruppe**
- **ADR, IMDG, IATA** entfällt
- **14.5 Umweltgefahren:** Nicht anwendbar.
- **14.6 Besondere Vorsichtsmaßnahmen für den Verwender** Nicht anwendbar.
- **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.
- **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 européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

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*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: 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*

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### 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
- **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: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://www.emsdiasum.com)
- **Società Italiana Chimici**  
Via Rio Nell Ellba 140  
00138 Rome, Italy  
Tel: 39 06 8800211  
Fax: 39 30 06 8815313  
Web: [www.sichim.com](http://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**  
Il prodotto non è classificato conformemente al regolamento CLP.
- **2.2 Elementi dell'etichetta**
- **Etichettatura secondo il regolamento (CE) n. 1272/2008 non applicabile**
- **Pittogrammi di pericolo non applicabile**
- **Avvertenza non applicabile**
- **Indicazioni di pericolo non applicabile**
- **Consigli di prudenza**  
P261 Evitare di respirare la polvere/i fumi/i gas/la nebbia/i vapori/gli aerosol.  
P304+P312 IN CASO DI INALAZIONE: Contattare un CENTRO ANTIVELENI/un medico in caso di malessere.  
P403+P235 Conservare in luogo fresco e ben ventilato.  
P501 Smaltire il prodotto/recipiente in conformità con le disposizioni locali / regionali / nazionali / internazionali.
- **Ulteriori dati:**  
Scheda dati di sicurezza disponibile su richiesta.
- **2.3 Altri pericoli**
- **Risultati della valutazione PBT e vPvB**
- **PBT:** Non applicabile.
- **vPvB:** Non applicabile.

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### SEZIONE 3: Composizione/informazioni sugli ingredienti

- **3.2 Caratteristiche chimiche: Miscela**
- **Descrizione:** Miscela delle seguenti sostanze con additivi non pericolosi.

· <b>Sostanze pericolose:</b>		
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.  
Non sono necessari provvedimenti specifici.
- **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:** Generalmente il prodotto non è irritante per la pelle.
- **Contatto con gli occhi:** Lavare con acqua corrente per alcuni minuti tenendo le palpebre ben aperte.
- **Ingestione:** Se il dolore persiste consultare 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:**  
CO<sub>2</sub>, polvere o acqua nebulizzata. Estinguere gli incendi di grosse dimensioni con acqua nebulizzata o con schiuma resistente all'alcool.
- **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 Riferimento 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.

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Per informazioni relative allo smaltimento vedere Capitolo 13.

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

- **7.1 Precauzioni per la manipolazione sicura**  
 Non sono richiesti provvedimenti particolari.  
 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**

- **Ulteriori indicazioni sulla struttura di impianti tecnici:** Nessun dato ulteriore, vedere punto 7.
- **8.1 Parametri di controllo**
- **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.
- **Maschera protettiva:**  
 Nelle esposizioni brevi e minime utilizzare la maschera; nelle esposizioni più intense e durature indossare l'autorespiratore.
- **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.

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### SEZIONE 9: Proprietà fisiche e chimiche

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

**· Indicazioni generali**

**· Aspetto:**

<b>Forma:</b>	Liquido
<b>Colore:</b>	Traslucido
· <b>Odore:</b>	Inodore
· <b>Soglia olfattiva:</b>	Non definito.

· **valori di pH a 20 °C:** 7,4

**· Cambiamento di stato**

<b>Temperatura di fusione/ambito di fusione:</b>	Non definito.
<b>Temperatura di ebollizione/ambito di ebollizione:</b>	100 °C

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

· **Infiammabilità (solido, gassoso):** Non applicabile.

**· Temperatura di accensione:**

**Temperatura di decomposizione:** Non definito.

· **Autoaccensione:** Prodotto non autoinfiammabile.

· **Pericolo di esplosione:** Prodotto non esplosivo.

**· Limiti di infiammabilità:**

<b>Inferiore:</b>	Non definito.
<b>Superiore:</b>	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 del vapore** Non definito.

· **Velocità di evaporazione** Non definito.

**· Solubilità in/Miscibilità con acqua:**

Poco e/o non miscibile.

· **Coefficiente di distribuzione (n-Octanol/acqua):** Non definito.

**· Viscosità:**

<b>Dinamica:</b>	Non definito.
<b>Cinematica:</b>	Non definito.

**· Tenore del solvente:**

<b>Solventi organici:</b>	0,0 %
<b>Acqua:</b>	91,5 %
<b>VOC (CE)</b>	0,00 %

**Contenuto solido:** 8,5 %

· **9.2 Altre informazioni** 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.

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- **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** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Irritabilità primaria:**
- **Corrosione/irritazione cutanea** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **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.
- **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.

### **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:** Piccole quantità di prodotto possono essere smaltite insieme ai rifiuti domestici.
- **Imballaggi non puliti:**
- **Consigli:** Smaltimento in conformità con le disposizioni amministrative.

IT

(continua a pagina 6)

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

Stampato il: 02.09.2016

Revisione: 02.09.2016

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

(Segue da pagina 5)

### SEZIONE 14: Informazioni sul trasporto

· <b>14.1 Numero ONU</b> · <b>ADR, ADN, IMDG, IATA</b>	<i>non applicabile</i>
· <b>14.2 Nome di spedizione dell'ONU</b> · <b>ADR, ADN, IMDG, IATA</b>	<i>non applicabile</i>
· <b>14.3 Classi di pericolo connesso al trasporto</b> · <b>ADR, ADN, IMDG, IATA</b> · <b>Classe</b>	<i>non applicabile</i>
· <b>14.4 Gruppo di imballaggio</b> · <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>

### 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.
- **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.*

· **Frasei 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 européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*
- IMDG: International Maritime Code for Dangerous Goods*
- IATA: International Air Transport Association*
- GHS: Globally 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*

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

Stampato il: 02.09.2016

Revisione: 02.09.2016

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

*Eye Irrit. 2: Gravi lesioni oculari/irritazione oculare – Categoria 2*  
*STOT SE 3: Tossicità specifica per organi bersaglio (esposizione singola) – Categoria 3*

(Segue da pagina 6)

IT

# 製品安全データシート

## JIS Z7253 による分類

印刷日: 2016.09.02

改訂日: 2016.09.02

### 1 化学物質等及び会社情報

- ・製品識別子
- ・商品名: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4
- ・製品番号: 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。
- ・成分の種類/調合/調製用化学物質
- ・安全データシートの供給元の詳細情報
- ・製造者/納入者:  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: info@emsdiasum.com  
www.emsdiasum.com
- ・その他の情報問い合わせ先: Product safety department
- ・緊急通報用電話番号:  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2 危険有害性の要約

- ・純物質または混合物の分類  
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)により分類されていません。
- ・ラベル要素
- ・GHS ラベル要素 無効
- ・危険図表 無効
- ・表示語 無効
- ・危険文句 無効
- ・注意文句  
粉じん/煙/ガス/ミスト/蒸気/スプレーの吸入を避けること。  
換気の良い場所で保管すること。涼しいところに置くこと。  
現地/地域/国/国際規定に従い内容物・容器の露出
- ・その他の危険性
- ・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
- ・vPvB (高残留性、高生物濃縮性物質): 情報なし

### 3 組成・成分情報

- ・化学的特性: 混合物  
説明説明説明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 ⚠ 急性毒性(経口) 区分4, H302; 急性毒性(経皮) 区分4, H312; 急性毒性(吸入) 区分4, H332; 重篤な眼の損傷性/眼刺激性 区分2B, H320	2.5-10%

# 製品安全データシート

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商品名: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4

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### 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

特別な措置は必要ない

##### ・吸い込んだ場合:

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

##### ・皮膚が触れた場合:

一般的にはこの製品は皮膚には刺激はない

##### ・眼に入った場合:

瞬を閉じたまま、流水で何分間か眼をすすぐ

##### ・飲み込んだ場合:

状態が好転しない場合には医師に相談する

##### ・医師への指示事項:

最も重要な急性及び慢性の症状及び影響 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。

### 5 火災時の措置

#### ・消火剤

##### ・適切な消火剤:

CO<sub>2</sub>, 消火粉末剤あるいは水放射。火が大きい場合には水放射もしくは耐アルコール性泡を使用

##### ・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。

##### ・消防士向けアドバイス

##### ・特別な保護装備: 呼吸保護マスクを着用

### 6 漏出時の措置

#### ・個人的予防措置、保護具及び応急処置法

必要ない

#### ・環境関連予防措置:

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ための方法及び材料:

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

廃棄処分に関しては 13 項参照

### 7 取扱い・保管上の注意

#### ・取り扱い方:

##### ・安全操作のための予防措置

特別な措置は必要ない

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

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# 製品安全データシート

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商品名: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4

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自然自然発火性:	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
・爆発限界:	
下限:	決まっていない.
上限:	決まっていない.
・蒸気圧 約 20 °C:	23 hPa
密度密度 20 °C:	1.0079 g/cm <sup>3</sup>
相対相対密度	決まっていない.
・蒸気密度	決まっていない.
・揮発速度	決まっていない.
以下成分における消和性混和性	
水:	混ぜ合わせられない、ほとんど混ぜ合わせられない
・分配係数 (nオクタノール/水)	決まっていない.
・粘性:	
学的学的	決まっていない.
運動運動	決まっていない.
・溶剤含有量:	
有機溶剤	0.0 %
水:	91.5 %
固形物含有量:	8.5 %
・他の情報	追加的な関連情報は得られていません。

## 10 安定性及び反応性

応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

分解分解 標準条件 規定どおりの使用では分解しない  
危険危険 危険な反応は起きていない

け避ける条件追加的な関連情報は得られていません。

・不適合物質: 追加的な関連情報は得られていません。

・危険な分解生成物: 危険な分解プロダクトはない

## 11 有害性情報

・毒性学的影響に関する情報

・急性毒性:

・初期刺激作用

・皮膚において: 刺激作用はない

・眼において: 刺激はない

・感作作用: 感作作用はない

・毒性に關補及補足補意事項:

調査に関する E U の最新の一般分類ガイドラインの計算によれば、プロダクトでは以下の危険が見込まれる

調査に関する E U の最新の一般分類ガイドラインの計算方式によれば、プロダクトには分類義務はない  
我々の経験並びに我々に提供された情報によれば、専門家知識を持って規定に従った使いかたをした場合には健康に影響を及ぼす作用はない

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# 製品安全データシート

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商品名: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4

毒性がある

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### 12 環境影響情報

#### 毒性 毒性 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。

持続持続性及び分解性 追加的な関連情報は得られていません。

- 環境システムに与える作用:

生体生体内蓄積能 追加的な関連情報は得られていません。

- 土壌内移動性 追加的な関連情報は得られていません。

- 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

- 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

他の他々副作用(副作用)的な関連情報は得られていません。

### 13 廃棄上の注意

#### 廃棄 廃棄物処理方法

勧告 勧告 勧告 少量なら、家庭ゴミと共に処分することができる

- 洗浄されていないガツケツツ:

勧告 勧告 勧告 関係当局の規則に従って処分する

### 14 輸送上の注意

番号番号番号	
ADR, ADN, IMDG, IATA	無効
国連出荷正式名	
ADR, ADN, IMDG, IATA	無効
輸送輸送輸危険性クラス	
ADR, ADN, IMDG, IATA	
分類分類分類	無効
ツガツケツツツの分類	
ADR, IMDG, IATA	無効
環境危険:	情報なし
ユーザー用特別予防措置	情報なし
マルポール条約 (MARPOL73/78) 付属書II及び及び IBCコードに準じたバ輸送輸送輸送	情報なし
UN "糞糞規制規制	無効

JP

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# 製品安全データシート

## JIS Z7253 による分類

印刷日: 2016.09.02

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商品名: MILLONIG'S PHOSPHATE BUFFER 0.2M, pH 7.4

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### 15 適用法令

- ・ 該当純物質または混合物に対する安全、衛生及び環境規制・法律
- ・ 化審法

#### 既存既存懸浮物質

7647-14-5	sodium chloride	1-236
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#### ・ 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

#### ・ 優先評価対象物質

内容成分はリストアップされていない

#### 物質物質物質

内容成分はリストアップされていない

#### 既存既存懸浮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

#### 既存既存懸浮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 Class 1 designated substances

##### PR制度制度制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 Class 2 designated substances

##### PR制度制度制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

#### ・ Poisonous and Deleterious Substances Control Act - Deleterious Substances

##### 毒物及劇物取締法 - 劇物

内容成分はリストアップされていない

#### ・ Poisonous and Deleterious Substances Control Act - Poisonous Substances

##### 毒物及劇物取締法 - 毒物

内容成分はリストアップされていない

#### ・ Poisonous and Deleterious Substances Control Act - Specified Poisonous Substances

##### 毒物及劇物取締法 - 特定毒物

内容成分はリストアップされていない

#### ・ GHS ラベル要素 無効

#### ・ 危険図表 無効

#### ・ 表示語 無効

#### ・ 危険文句 無効

#### ・ 注意文句

粉じん/煙/ガス/ミスト/蒸気/スプレーの吸入を避けること。

換気の良い場所で保管すること。涼しいところに置くこと。

現地/地域/国/国際規定に従い内容物・容器の露出

#### ・ 化学物質の安齋値評価評価化学物質安全性評価が遂行されていない

### 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

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# 製品安全データシート

## JIS Z7253 による分類

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

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**縮約縮約縮約文字語:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

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

PRTR/化管法: 化学物質排出把握管理促進法

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 라다

기압점: 2016.09.02

개정: 2016.09.02

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

(1 쪽부터 계속)

· 위험요소요소		
7782-85-6	Disodium Orthophosphate Heptahydrate ⚠ 피부 부식성/피부 자극성 - 구분 2, H315; 심한 눈 손상성/눈 자극성 - 구분 2, H319; 특정표적장기 독성 - 1회 노출 - 구분 3, H335	2.5-10%
10049-21-5	Sodium Phosphate Monobasic Monohydrate ⚠ 급성 독성 - 경구 - 구분 4, H302; 급성 독성 - 경피 - 구분 4, H312; 급성 독성 - 흡입 - 구분 4, H332; 심한 눈 손상성/눈 자극성 - 구분 2, H319	2.5-10%

### 4 응급조치 요령

- **응급조치요령 내용내용**
- **일반정보정보**  
중독 증상은 몇 시간이 지난 뒤에 발생할 수 있다. 따라서 사고가 발생한 후에 적어도 48 시간 동안은 의료진의 관찰을 받아야 한다.  
특별한 조치가 필요 없음.
- **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:** 일반적으로 이 제품은 피부에 자극적이지 않다.
- **눈에 눈에 들어갔을 때:** 흐르는 물에 눈을 몇 분 동안 씻어낸다.
- **먹었을 때:** 증상이 지속될 경우에는 의사와 상담한다.
- **기타 기타 각각의 주의사항:**  
가장 가장 중요한 것은 응급조치요령에 대한 정보가 존재하지 않습니다.
- **즉각적인 의료처치 및 특별치료가 필요함을 시사하는 징후 징후**적인 정보가 존재하지 않습니다.

### 5 폭발·화재시 대처방법

- **소화제**
- **적절한 소화제:**  
이산화탄소, 진화용 석회 가루 또는 물 방사를 사용하고, 더 큰 화재는 물을 분사하거나 알코올 이함유된 거품으로 끈다.
- **본 화학물질이나 혼합물에서 발생시킬 특별한 위험 특성** 추가적인 정보가 존재하지 않습니다.
- **소방관에게 대한 대안고사항**
- **화재 화재 예방 및 예방조치:** 호흡보호장비 설치.

### 6 누출 사고 시 대처방법

- **개인적 예방조치, 보호장비 및 응급 처치 절차** 없음.
- **환경 환경 안전 관리 조치:** 하수도망/해수면 위 의 물/지하수로 도달하지 않게 한다.
- **밀폐 밀폐 및 환경 정화 정화** 소재 소재  
액체가 혼합된 물질 (모래, 규조토, 산성 결합물, 일반 결합물, 톱밥)에 흡입되도록 한다.  
항목 13에 따라 오염된 물질을 쓰레기로 처분한다.  
충분한 환기가 되도록 한다.
- **식별 식별 참조**  
안전 관리에 대한 정보는 제7 장을 참고하십시오.  
개인 보호 장비에 대한 정보는 제8 장을 참고하십시오.  
쓰레기 처리에 대한 정보는 제13 장을 참고하십시오.

# 물질안전보건자료 GHS에 따라라따

기압점: 2016.09.02

개정: 2016.09.02

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

(2 쪽부터계속)

## 7 취급 및 저장방법

취급 취급 취급

안전안전안전을 위한 예방 조치

· 특별한 조치가 필요없음.

· 작업장에서는 통풍이 잘 되고/습기 제거가 잘 되게 주의한다.

· 연무 질이 형성되는 것을 피한다.

화재 화재 화재를 예방하고 예방 대책에 관한 정보는 특별한 조치가 필요없음.

· 혼합 위험성 및 안정성 조건

보관 보관 보관

· 안전장 저장성 정보 특별한 요구사항이 없음.

· 하중 및 포장 포장 시설에 대한 특별한 정보 없음

· 보관 조건에 관한 추가적인 정보를 기재하지 않음

· 구체적 최종 사용자 추가적인 정보가 존재하지 않습니다.

## 8 노출방지 및 개인보호구

· 첨단시설 디자인에 대한 추가 정보: 더 이상 의 자료는 없음. 항목 7 을 참고하시 오.

통제 통제 통제 변수

· 화학물질의 노출기준, 생물학적 노출기준 등:

· 본 제품에는 작업장에서 감시가 필요한 주요한 가치의 어떤 해당 재료의 양을 함유하고 있지 않다.

· 추가 정보 정보 호 할 당시에 유효한 목록을 기초로 사용했다.

노출 통제 통제 통제

개인 개인 개인 보호구

· 일반적 보호 조치 및 위생 조치: 식료품, 음료수와 사료로부터 멀리 떨어져 놓는다.

· 호흡기 보호 보호

· 단 시간 또는 경 미한 오염의 경우에는 호흡 여과기를 사용한다. 심각한 또는 장 기간 노출시에는

· 호흡 보호 장비를 사용한다.

보호 보호 보호

· 장갑재질은 제품 / 원료 / 조제를 통과시키지 않아야 하고, 내구성이 있어야 한다.

· 테스트를 하지 않았기 때문에 제품 / 조제 / 화학 혼합물에 적합한 장갑재질에 대한 추천이 없다.

· 투과 시간, 침투율과 저하를 고려해서 장갑 재료를 선택한다.

· 장갑 의 재료

· 적합한 장갑 의 선정은 재질 차이 뿐 아니라 품질 기준의 차이도 고려하여 이루어져야 하고 제조업종에 따라서도 다

· 르게 선정되어야 한다. 제품은 다양한 재료로부터의 조제가 이루어지는 것이기 때문에, 장갑재질의 안정성은 사

· 전에 예측되어질 수 있는 것이 아니고, 반드시 사용 전에 (그 안전성이) 체크되어야 한다.

· 장갑 재료의 투과 시간 정확한 관통 시간은 보호 장갑 제조자에 의 하여 인 지 되고, 준수 되어야 한다.

· 보호 보호 보호 거부울 경우 추천 할 만한 보호안경.

## 9 물리화학적 특성

기본 기본 기본 물리화학적 특성에 대한 정보

· 일반 정보

외형 외형 외형

· 물리적 상태 상태

액체

· 색:

투명한

냄새 냄새 냄새

무취의

· 후각역치

알맞지 않다.

(4 쪽에 계속)



# 물질안전보건자료

## GHS에 따라라따

기압점: 2016.09.02

개정: 2016.09.02

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

(3 쪽부터계속)

· pH 의경우 20 °C:	7.4
· 상태변화 · 녹는점/어는점: 초기초기 녹는 점과 끝 녹는점범위범위	맞지않는 100 °C
· 인화점:	해당사항 없음.
· 인화성(고체)기체기체	해당사항 없음.
· 점화온도:	
분해온도	알맞지않다.
· 자기점화:	이제품은자연발화성이없다.
· 폭발위험:	이제품은폭발위험성이없다
인화안화안정성폭발위험성상호반응성 아래로: 위로위로	하한 알맞지않다. 알맞지않다.
· 증기압 의경우 20 °C:	23 hPa
밀도 밀도 의경우 20 °C: 비중 비중 비중	1.0079 g/cm <sup>3</sup> 알맞지않다.
· 증기밀도: 증발 증발 증발 속도	알맞지않다. 알맞지않다.
· 용해도: 물:	각각의경우에따라서는거의혼합할수없는
· n 옥탄올/물 분배계수:	알맞지않다.
점도 점도 점도 역학성: 동점성:	알맞지않다. 알맞지않다.
· 용매 내용물 유기용매: 물: VOC (EU)	0.0 % 91.5 % 0.00 %
고체 양 함량 함량 기타 정보 정보	8.5 % 추가적인 정보가 존재하지 않습니다.

### 10 안정성 및 반응성

- 반응성 추가적인 정보가 존재하지 않습니다.
- 화학적 안정성
- 화학적 안정성 유해 반응의 가능성 / 피해 야 할 조건 조건에 따라 사용 할 경우 해체는 없다
- 유해 반응 가능성 위험한 반응으로는 알려지지 않았다.
- 피해 야 할 조건 조건 추가적인 정보가 존재하지 않습니다.
- 혼합 혼합 혼합 혼합 혼합 추가적인 정보가 존재하지 않습니다.
- 유해 분해 물질: 위험성 있는 분해물 들은 알려지지 않았다.

KR

(5 쪽에 계속)

# 물질안전보건자료 GHS에 따라라따

기압점: 2016.09.02

개정: 2016.09.02

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

(4 쪽부터계속)

## 11 독성에 관한 정보

· **독성학적 영향에 대한 정보**

급성 독성 독성 독성

· **일차적 자극 효과**

피부 피부 부작상 또는 자극 성: 무자극

심한 심한 부작상 또는 자극 성: 무자극.

· **감각화:** 민감한영향이없는것으로알려져있다.

· **추가적인 독성에 관한 정보**

이제 품은 유럽공동체의공동분류원칙의합법적인절차에근거하여최근에발 호된원고에서아래위험들 의사전 준비에대하여제시하고있다.

이제 품은 공동분류원칙에근거하여최근에발 호된원고에서유럽공동체의사전준비에대하여특성표시의무가 없다.

적절한범위내에서그리고규정에맞게사용된다면이제 품은우리의경험과우리에게제출된정보에따라서건강 에해로운영향을야기하지않는다

건강에해로운

## 12 환경에 미치는 영향

독성독성독성

· **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.

· **추가적인 생태학 정보정보**

일반 열대 열대 열대 특징

수질오염등급 1 (자체등급분류): 약하게수질오염이된

회색시키지않은채대량으로지하수나, 하천으로그리고하수도망에도달하지않게한다.

· PBT(잔류성, 생물농 축성, 물질물질물질) vPvB(고 잔류성, 고 생물농 축물질물질물질) 결과

· PBT(잔류성, 생물농 축성, 물질물질물질) 당사항 없음.

· vPvB(고 잔류성, 고 생물농 축물질물질물질) 당사항 없음.

기타기타 부대용 추가적인 정보가 존재하지 않습니다.

## 13 폐기시 주의사항

· **폐기물 처리 방법**

권고 권고 권고 다적은양은보편적으로생활쓰레기와함께보관될수있다

· **비위생적 포장포장**

권고 권고 권고 의지침에입각한쓰레기처리.

## 14 운송에 필요한 정보

유엔 유엔 유엔 번호

· ADR, ADN, IMDG, IATA

누락되다

· **적정적정 적정명**

· ADR, ADN, IMDG, IATA

누락되다

(6 쪽에계속)

# 물질안전보건자료

## GHS에 따라라따

기압점: 2016.09.02

개정: 2016.09.02

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

(5 쪽부터 계속)

**교통 규정 (운송) 및 위험성**

· ADR, ADN, IMDG, IATA 등급등급등급	누락되다
· 용기등급 · ADR, IMDG, IATA	누락되다
· 환경적 유해물질:	해당사항 없음.
· 이동시 특별 취급 조치	해당사항 없음.
· MARPOL73/78(선박으로부터의 해양오염방지협약) 부속서2 및 IBC Code(국제선적화물코드)에 따른 벌크물질 운송 운송	해당사항 없음.
· IBC Code에 따른 벌크물질 운송 운송	누락되다

### 15 법적 규제 현황

해당 해당 물질 또는 혼합물에 대한 국내 및 국제 환경 및 건강 관련 법률

· Korean Existing Chemical Inventory		
7647-14-5	sodium chloride	KE-31387
7732-18-5	water, distilled, conductivity or of similar purity	KE-35400
· 화학물질관리법		
· 사고대비물질 어떠한 내용물도 목록화되어있지않다		
· 금지물질 어떠한 내용물도 목록화되어있지않다		
· 제한물질 어떠한 내용물도 목록화되어있지않다		
· 유독물질 어떠한 내용물도 목록화되어있지않다		
· 허가물질 어떠한 내용물도 목록화되어있지않다		
· 라벨링 및 표시 요		
· 그림문자 누락되다		
· 신호어 누락되다		
· 유해 위험성 문구 누락되다		
· 예방 조치 문구 문구 (분진·흙·가스·미스트·증기·스프레이)의 흡입을 피하십시오. 환기가 잘 되는 곳에 보관하고 저온으로 유지하십시오 현지/지역/국가/국제 규정에 따라서 내용물/용기 노출		
· 화학물질 안전성 평가 화학물질 안전성 평가가 수행되지 않음		

### 16 그 밖의 참고사항

이 보고서는 우리 지식에 대한 오늘날의 상태에 대하여 평가하고 있다, 하지만 이 보고서는 생산 특성에 관한 보증은 기술하지 않았으며 계약적인 법률 관계에 기반을 두고 있지 않다

최초 최초 작성 일자: 2016.09.02

(7 쪽에 계속)



# Ficha de dados de segurança

Em conformidade com 1907/2006/CE, Artigo 31.º

data da impressão 02.09.2016

Revisão: 02.09.2016

## 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
- **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: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://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**  
O produto não foi classificado em conformidade com o regulamento CLP.
- **2.2 Elementos do rótulo**
- **Rotulagem em conformidade com o Regulamento (CE) n.º 1272/2008 não aplicável**
- **Pictogramas de perigo não aplicável**
- **Palavra-sinal não aplicável**
- **Advertências de perigo não aplicável**
- **Recomendações de prudência**  
P261 Evitar respirar as poeiras/fumos/gases/névoas/vapores/aerossóis.  
P304+P312 EM CASO DE INALAÇÃO: Caso sinta indisposição, contacte um CENTRO DE INFORMAÇÃO ANTIVENENOS/médico.  
P403+P235 Armazenar em local bem ventilado. Conservar em ambiente fresco.  
P501 Eliminar o conteúdo/recipiente de acordo com a legislação local/regional/nacional/internacional.
- **Indicações adicionais:**  
Ficha de segurança fornecida a pedido.
- **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	2,5-10%
	 Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	

(continuação na página 2)

# Ficha de dados de segurança

Em conformidade com 1907/2006/CE, Artigo 31.º

data da impressão 02.09.2016

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

(continuação da página 1)

10049-21-5	Sodium Phosphate Monobasic Monohydrate	2,5-10%
	⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	

· **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.  
Não são necessárias medidas especiais.
- **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:** Em geral o produto não é irritante para a pele.
- **Em caso de contacto com os olhos:**  
Enxaguar os olhos durante alguns minutos sob água corrente, mantendo as pálpebras abertas.
- **Em caso de ingestão:** Se os sintomas persistirem, consultar 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:**  
CO<sub>2</sub>, pó extintor ou jacto de água. Um incêndio de grandes dimensões deve ser combatido com jacto de água ou espuma resistente ao álcool.
- **5.2 Perigos especiais decorrentes da substância ou mistura**  
Não existe mais nenhuma informação relevante disponível.
- **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 accidentais

- **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.

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### SECÇÃO 7: Manuseamento e armazenagem

- **7.1 Precauções para um manuseamento seguro**  
*Não são necessárias medidas especiais.*  
*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

- **Indicações adicionais para concepção de instalações técnicas:** *Não existem outras informações, ver ponto 7.*
- **8.1 Parâmetros de controlo**
- **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.*
- **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.*
- **Protecção das mãos:**  
*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.*

### SECÇÃO 9: Propriedades físico-químicas

- **9.1 Informações sobre propriedades físicas e químicas de base**
- **Informações gerais**
- **Aspecto:**
- **Forma:** Líquido
- **Cor:** Transparente

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**Ficha de dados de segurança**  
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Revisão: 02.09.2016

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

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· <b>Odor:</b>	Inodoro
· <b>Limiar olfactivo:</b>	Não classificado.
· <b>valor pH em 20 °C:</b>	7,4
· <b>Mudança do estado:</b>	
<b>Ponto / intervalo de fusão:</b>	Não classificado.
<b>Ponto / intervalo de ebulição:</b>	100 °C
· <b>Ponto de inflamação:</b>	Não aplicável.
· <b>Inflamabilidade (sólido, gás):</b>	Não aplicável.
· <b>Temperatura de ignição:</b>	
<b>Temperatura de decomposição:</b>	Não classificado.
· <b>Auto-inflamabilidade:</b>	O produto não é auto-inflamável.
· <b>Perigos de explosão:</b>	O produto não corre o risco de explosão.
· <b>Limites de explosão:</b>	
<b>Inferior:</b>	Não classificado.
<b>Superior:</b>	Não classificado.
· <b>Pressão de vapor em 20 °C:</b>	23 hPa
· <b>Densidade em 20 °C:</b>	1,0079 g/cm <sup>3</sup>
· <b>Densidade relativa</b>	Não classificado.
· <b>Densidade de vapor</b>	Não classificado.
· <b>Velocidade de evaporação</b>	Não classificado.
· <b>Solubilidade em / miscibilidade com água:</b>	Pouco misturável.
· <b>Coefficiente de distribuição (n-octanol/água):</b>	Não classificado.
· <b>Viscosidade:</b>	
<b>Dinâmico:</b>	Não classificado.
<b>Cinemático:</b>	Não classificado.
· <b>Percentagem de solvente:</b>	
<b>Solventes orgânicos:</b>	0,0 %
<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.

PT

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## SECÇÃO 11: Informação toxicológica

- **11.1 Informações sobre os efeitos toxicológicos**
- **Toxicidade aguda** Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Efeito de irritabilidade primário:**
- **Corrosão/irritação cutânea** Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **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.
- **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.
- **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:** Pequenas quantidades podem ser eliminadas juntamente com o lixo doméstico.
- **Embalagens contaminadas:**
- **Recomendação:** Eliminação residual conforme o regulamento dos serviços públicos.

## SECÇÃO 14: Informações relativas ao transporte

- **14.1 Número ONU**
- **ADR, ADN, IMDG, IATA** não aplicável

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· **14.2 Designação oficial de transporte da ONU**  
 · **ADR, ADN, IMDG, IATA** não aplicável

· **14.3 Classes de perigo para efeitos de transporte**  
 · **ADR, ADN, IMDG, IATA**  
 · **Classe** não aplicável

· **14.4 Grupo de embalagem**  
 · **ADR, IMDG, IATA** não aplicável

· **14.5 Perigos para o ambiente:** Não aplicável.

· **14.6 Precauções especiais para o utilizador** Não aplicável.

· **14.7 Transporte a granel em conformidade com o anexo II da Convenção MARPOL e o Código IBC** Não aplicável.

· **UN "Model Regulation":** 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.

· **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 européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally 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 02.09.2016

Revisión: 02.09.2016

### 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
- **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: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://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](mailto: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**  
El producto no se ha clasificado de conformidad con el reglamento CLP.
- **2.2 Elementos de la etiqueta**
- **Etiquetado con arreglo al Reglamento (CE) n° 1272/2008 suprimido**
- **Pictogramas de peligro** suprimido
- **Palabra de advertencia** suprimido
- **Indicaciones de peligro** suprimido
- **Consejos de prudencia**  
P261 Evitar respirar el polvo/el humo/el gas/la niebla/los vapores/el aerosol.  
P304+P312 EN CASO DE INHALACIÓN: Llamar a un CENTRO DE TOXICOLOGÍA/médico si la persona se encuentra mal.  
P403+P235 Almacenar en un lugar bien ventilado. Mantener en lugar fresco.  
P501 Eliminar el contenido o el recipiente conforme a la reglamentación local/regional/nacional/internacional.
- **Datos adicionales:**  
Puede solicitarse la ficha de datos de seguridad.
- **2.3 Otros peligros**
- **Resultados de la valoración PBT y mPmB**
- **PBT:** No aplicable.
- **mPmB:** No aplicable.

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### 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.  
No se precisan medidas especiales.
- **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:** Por regla general, el producto no irrita la piel.
- **En caso de con los ojos:** Limpiar los ojos abiertos durante varios minutos con agua corriente.
- **En caso de ingestión:** Consultar un médico si los trastornos persisten.
- **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:**  
CO<sub>2</sub>, polvo extintor o chorro de agua rociada. Combatir incendios mayores con chorro de agua rociada o espuma resistente al alcohol.
- **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.

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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**  
No se requieren medidas especiales.  
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

- **Instrucciones adicionales para el acondicionamiento de instalaciones técnicas:**  
Sin datos adicionales, ver punto 7.
- **8.1 Parámetros de control**
- **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.
- **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:**  
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.

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### 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 /campo de fusión:	Indeterminado.
Punto de ebullición /campo de ebullición:	100 °C

· Punto de inflamación: No aplicable.

· Inflamabilidad (sólido, gaseiforme): No aplicable.

##### · Temperatura de ignición:

Temperatura de descomposición: No determinado.

· Autoinflamabilidad: El producto no es autoinflamable.

· Peligro de explosión: 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.
· Velocidad de evaporación	No determinado.

· Solubilidad en / miscibilidad con agua: Poco o no mezclable.

· Coeficiente de reparto (n-octanol/agua): No determinado.

##### · Viscosidad:

Dinámica:	No determinado.
Cinemática:	No determinado.

##### · Concentración del disolvente:

Disolventes orgánicos:	0,0 %
Agua:	91,5 %
VOC (CE)	0,00 %

· Contenido de cuerpos sólidos: 8,5 %

· 9.2 Otros datos 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.

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- **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** A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Efecto estimulante primario:**
- **Corrosión o irritación cutáneas** A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **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.
- **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.

### 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 (autoclasiación): 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:** Pequeñas cantidades pueden ser desechadas con la basura doméstica.

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- **Embalajes sin limpiar:**
- **Recomendación:** Eliminar conforme a las disposiciones oficiales.

### SECCIÓN 14: Información relativa al transporte

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

### 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
- **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 européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - IMDG: International Maritime Code for Dangerous Goods
  - IATA: International Air Transport Association
  - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - ELINCS: European List of Notified Chemical Substances

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*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*

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