

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/28/2021

Reviewed on 07/28/2021

## 1 Identification

- **Product identifier**
- **Trade name:** PHOSPHATE BUFFER, 0.1M
- **Article number:** 19340-72
- **CAS Number:**  
7778-77-0
- **EC number:**  
231-913-4
- **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: sgkck@aol.com  
www.emsdiasum.com
- **Information department:** Product safety department
- **Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS07

- Acute Tox. 4 H302 Harmful if swallowed.
- Acute Tox. 4 H312 Harmful in contact with skin.
- Acute Tox. 4 H332 Harmful if inhaled.
- Eye Irrit. 2A H319 Causes serious eye irritation.

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



GHS07

- **Signal word** Warning
- **Hazard statements**  
Harmful if swallowed, in contact with skin or if inhaled.  
Causes serious eye irritation.
- **Precautionary statements**  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Wash thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves/protective clothing/eye protection/face protection.  
If swallowed: Call a poison center/doctor if you feel unwell.

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If on skin: Wash with plenty of water.

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

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Specific treatment (see on this label).

Rinse mouth.

Take off contaminated clothing and wash it before reuse.

If eye irritation persists: Get medical advice/attention.

Store in a dry place. Store in a closed container.

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

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 0

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 2

Fire = 0

Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

### 3 Composition/information on ingredients

· **Chemical characterization: Substances**

· **CAS No. Description**

7778-77-0 potassium dihydrogenorthophosphate

· **Identification number(s)**

· **EC number:** 231-913-4

### 4 First-aid measures

· **Description of first aid measures**

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

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

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **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.

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## 5 Fire-fighting measures

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

## 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).  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

· PAC-1:

9.6 mg/m<sup>3</sup>

· PAC-2:

110 mg/m<sup>3</sup>

· PAC-3:

630 mg/m<sup>3</sup>

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the creation were used as basis.

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- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
 Keep away from foodstuffs, beverages and feed.  
 Immediately remove all soiled and contaminated clothing.  
 Wash hands before breaks and at the end of work.  
 Avoid contact with the eyes.  
 Avoid contact with the eyes and skin.
- **Breathing equipment:**  
 In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:**  
 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.
- **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:**



Tightly sealed goggles

## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
- **Form:** Solid
- **Color:** Not determined.
- **Odor:** Characteristic
- **Odor threshold:** Not determined.
- **pH-value:** Not determined.
- **Change in condition**
- **Melting point/Melting range:** Undetermined.
- **Boiling point/Boiling range:** Undetermined.
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** Not flammable.
- **Decomposition temperature:** Not determined.
- **Auto igniting:** Not determined.
- **Danger of explosion:** Product does not present an explosion hazard.

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· <b>Explosion limits:</b>	
· <b>Lower:</b>	Not determined.
· <b>Upper:</b>	Not determined.
· <b>Vapor pressure:</b>	Not determined.
· <b>Density at 20 °C (68 °F):</b>	2.338 g/cm <sup>3</sup> (19.51061 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>VOC content:</b>	0.00 % 0.0 g/l / 0.00 lb/gal
· <b>Solids content:</b>	0.0 %
· <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:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
- **Carcinogenic categories**

· <b>IARC (International Agency for Research on Cancer)</b>
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Substance is not listed.
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· <b>NTP (National Toxicology Program)</b>
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Substance is not listed.
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- **OSHA-Ca (Occupational Safety Health Administration)**
- Substance is not 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 (Assessment by list): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

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

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· UN "Model Regulation": Void

## 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

- Section 355 (extremely hazardous substances):

Substance is not listed.

- Section 313 (Specific toxic chemical listings):

Substance is not listed.

- TSCA (Toxic Substances Control Act):

ACTIVE

- Hazardous Air Pollutants

Substance is not listed.

- Proposition 65

- Chemicals known to cause cancer:

Substance is not listed.

- Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

- Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

- Chemicals known to cause developmental toxicity:

Substance is not listed.

- Carcinogenic categories

- EPA (Environmental Protection Agency)

Substance is not listed.

- TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

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

Substance is not listed.

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

- Hazard pictograms



GHS07

- Signal word Warning

- Hazard statements

Harmful if swallowed, in contact with skin or if inhaled.

Causes serious eye irritation.

- Precautionary statements

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

Wash thoroughly after handling.

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**Trade name: PHOSPHATE BUFFER, 0.1M**

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

*Use only outdoors or in a well-ventilated area.*

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

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

*If on skin: Wash with plenty of water.*

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

*If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.*

*Continue rinsing.*

*Specific treatment (see on this label).*

*Rinse mouth.*

*Take off contaminated clothing and wash it before reuse.*

*If eye irritation persists: Get medical advice/attention.*

*Store in a dry place. Store in a closed container.*

*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** 07/28/2021 / -

· **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

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety **Health**

**TLV: Threshold Limit Value**

**PEL: Permissible Exposure Limit**

**REL: Recommended Exposure Limit**

**Acute Tox. 4: Acute toxicity – Category 4**

**Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A**



# Safety Data Sheet

## according to WHS Regulations

Printing date 28.07.2021

Revision: 28.07.2021

### 1 Identification

- **Product identifier**
- **Trade name:** PHOSPHATE BUFFER, 0.1M
- **Article number:** 19340-72
- **CAS Number:**  
7778-77-0
- **EC number:**  
231-913-4
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- ProSciTech Pty Ltd  
11 Carlton Street, Kirwan QLD 4817 Australia  
Telephone Number: (07) 4773 9444 - 8:30am - 5:00pm, Monday to Friday (excluding Public Holidays)  
Emergency Contact: (07) 4773 9444 - 8:30am - 5:00pm, Monday to Friday (excluding Public Holidays)  
Website: ems.proscitech.com
- 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
- **Further information obtainable from:** Product safety department
- **Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2 Hazard(s) Identification

- **Classification of the substance or mixture**



Acute Tox. 4 H302 Harmful if swallowed.  
 Acute Tox. 4 H312 Harmful in contact with skin.  
 Acute Tox. 4 H332 Harmful if inhaled.  
 Eye Irrit. 2A H319 Causes serious eye irritation.

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

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· **Hazard pictograms**

GHS07

· **Signal word** Warning· **Hazard statements***Harmful if swallowed.**Harmful in contact with skin.**Harmful if inhaled.**Causes serious eye irritation.*· **Precautionary statements***Avoid breathing dust/fume/gas/mist/vapours/spray.**Wash thoroughly after handling.**Do not eat, drink or smoke when using this product.**Use only outdoors or in a well-ventilated area.**Wear protective gloves/protective clothing/eye protection/face protection.**IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.**IF ON SKIN: Wash with plenty of water.**IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.**IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.**Continue rinsing.**Specific treatment (see on this label).**Rinse mouth.**Take off contaminated clothing and wash it before reuse.**If eye irritation persists: Get medical advice/attention.**Store in a dry place. Store in a closed container.**Dispose of contents/container in accordance with local/regional/national/international regulations.*· **Other hazards**· **Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.

### 3 Composition and Information on Ingredients

· **Chemical characterisation: Substances**· **CAS No. Description**

7778-77-0 potassium dihydrogenorthophosphate

· **Identification number(s)**· **EC number:** 231-913-4

### 4 First Aid Measures

· **Description of first aid measures**· **After inhalation:** Supply fresh air; consult doctor in case of complaints.· **After skin contact:** Generally the product does not irritate the skin.· **After eye contact:***Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.*· **After swallowing:** If symptoms persist consult doctor.

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- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Fire Fighting Measures

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

### 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).  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and Storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls and personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **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.

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Trade name: **PHOSPHATE BUFFER, 0.1M**

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*Immediately remove all soiled and contaminated clothing*

*Wash hands before breaks and at the end of work.*

*Avoid contact with the eyes.*

*Avoid contact with the eyes and skin.*

**· Respiratory protection:**

*In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.*

**· Protection of hands:**

*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.*

**· 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:**



Tightly sealed goggles

### 9 Physical and Chemical Properties

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

**· General Information**

**· Appearance:**

**· Form:**

Solid

**· Colour:**

Not determined.

**· Odour:**

Characteristic

**· Odour threshold:**

Not determined.

**· pH-value:**

Not determined.

**· Change in condition**

**· Melting point/freezing point:**

Undetermined.

**· Initial boiling point and boiling range:**

Undetermined.

**· Flash point:**

Not applicable.

**· Flammability (solid, gas):**

Not applicable.

**· Decomposition temperature:**

Not determined.

**· Auto-ignition temperature:**

Not determined.

**· Explosive properties:**

Product does not present an explosion hazard.

**· Explosion limits:**

**· Lower:**

Not determined.

**· Upper:**

Not determined.

**· Vapour pressure:**

Not determined.

**· Density at 20 °C:**

2.338 g/cm<sup>3</sup>

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· <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>VOC (EC)</b>	0.00 %
· <b>Solids content:</b>	0.0 %
· <b>Other information</b>	No further relevant information available.

### 10 Stability and Reactivity

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

### 11 Toxicological Information

- **Information on toxicological effects**
- **Acute toxicity**
- **Primary irritant effect:**
- **Skin corrosion/irritation** No irritant effect.
- **Serious eye damage/irritation** Irritating effect.
- **Respiratory or skin sensitisation** No sensitising effects known.

### 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) (Assessment by list): 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.

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· **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

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

### 15 Regulatory information

· <b>Safety, health and environmental regulations/legislation specific for the substance or mixture</b>	
· <b>Australian Inventory of Industrial Chemicals</b>	Substance is listed.
· <b>Standard for the Uniform Scheduling of Medicines and Poisons</b>	Substance is not listed.
· <b>Australia: Priority Existing Chemicals</b>	Substance is not listed.
· <b>GHS label elements</b>	The substance is classified and labelled according to the Globally Harmonised System (GHS).

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# Safety Data Sheet

## according to WHS Regulations

Printing date 28.07.2021

Revision: 28.07.2021

Trade name: **PHOSPHATE BUFFER, 0.1M**

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· **Hazard pictograms**

GHS07

· **Signal word** Warning· **Hazard statements***Harmful if swallowed.**Harmful in contact with skin.**Harmful if inhaled.**Causes serious eye irritation.*· **Precautionary statements***Avoid breathing dust/fume/gas/mist/vapours/spray.**Wash thoroughly after handling.**Do not eat, drink or smoke when using this product.**Use only outdoors or in a well-ventilated area.**Wear protective gloves/protective clothing/eye protection/face protection.**IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.**IF ON SKIN: Wash with plenty of water.**IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.**IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**Specific treatment (see on this label).**Rinse mouth.**Take off contaminated clothing and wash it before reuse.**If eye irritation persists: Get medical advice/attention.**Store in a dry place. Store in a closed container.**Dispose of contents/container in accordance with local/regional/national/international regulations.*· **Directive 2012/18/EU**· **Named dangerous substances - ANNEX I** Substance is not 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*

*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 - oral – Category 4*

*Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A*

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 07/28/2021

Reviewed on 07/28/2021

### 1 Identification

- **Product identifier**
- **Trade name:** PHOSPHATE BUFFER, 0.1M
- **Article number:** 19340-72
- **CAS Number:**  
7778-77-0
- **EC number:**  
231-913-4
- **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: sgkck@aol.com  
www.emsdiasum.com
- **Information department:** Product safety department
- **Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2 Hazard identification

- **Classification of the substance or mixture**



GHS07

Acute Toxicity (Oral) - Category 4      H302 Harmful if swallowed.  
 Acute Toxicity (Dermal) – Category 4      H312 Harmful in contact with skin.  
 Acute Toxicity (Inhalation) - Category 4      H332 Harmful if inhaled.  
 Eye Irritation - Category 2B      H320 Causes eye irritation.

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



GHS07

- **Signal word** Warning
- **Hazard statements**  
Harmful if swallowed, in contact with skin or if inhaled.  
Causes eye irritation.
- **Precautionary statements**  
Avoid breathing dust/fume/gas/mist/vapours/spray.  
Wash thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves/protective clothing/eye protection/face protection.

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# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 07/28/2021

Reviewed on 07/28/2021

Trade name: **PHOSPHATE BUFFER, 0.1M**

(Contd. of page 1)

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

*Rinse mouth.*

*If on skin: Wash with plenty of water.*

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

*IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*

*Specific measures (see on this label).*

*If eye irritation persists: Get medical advice/attention.*

*Take off immediately all contaminated clothing.*

*Wash contaminated clothing before reuse.*

*Store in a dry place. Store in a closed container.*

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

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 0

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 2

Fire = 0

Reactivity = 0

### 3 Composition/Information on ingredients

· **Chemical characterization: Substances**

· **CAS No. Description**

7778-77-0 potassium dihydrogenorthophosphate

· **Identification number(s)**

· **EC number:** 231-913-4

### 4 First-aid measures

· **Description of first aid measures**

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

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

· **After eye contact:**

*Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.*

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

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

(Contd. on page 3)

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 07/28/2021

Reviewed on 07/28/2021

**Trade name: PHOSPHATE BUFFER, 0.1M**

(Contd. of page 2)

- **Advice for firefighters**
- **Protective equipment:** No special measures required.

### 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).  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/ Personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes.  
Avoid contact with the eyes and skin.
- **Breathing equipment:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:**  
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.

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## Safety Data Sheet according to HPR, Schedule 1

Printing date 07/28/2021

Reviewed on 07/28/2021

Trade name: **PHOSPHATE BUFFER, 0.1M**

(Contd. of page 3)

*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.*

- **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:**



Tightly sealed goggles

### 9 Physical and chemical properties

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

- **General Information**

- **Appearance:**

· <b>Form:</b>	Solid
· <b>Color:</b>	Not determined.
· <b>Odor:</b>	Characteristic
· <b>Odor threshold:</b>	Not determined.

· <b>pH-value:</b>	Not determined.
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- **Change in condition**

· <b>Melting point/Melting range:</b>	Undetermined.
· <b>Boiling point/Boiling range:</b>	Undetermined.

· <b>Flash point:</b>	Not applicable.
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· <b>Flammability (solid, gaseous):</b>	Not flammable.
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· <b>Decomposition temperature:</b>	Not determined.
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· <b>Auto igniting:</b>	Not determined.
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· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
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- **Explosion limits:**

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

· <b>Vapor pressure:</b>	Not determined.
--------------------------	-----------------

· <b>Density at 20 °C:</b>	2.338 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.

- **Solubility in / Miscibility with**

· <b>Water:</b>	Not miscible or difficult to mix.
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· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
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- **Viscosity:**

· <b>Dynamic:</b>	Not determined.
· <b>Kinematic:</b>	Not determined.

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CA

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 07/28/2021

Reviewed on 07/28/2021

**Trade name: PHOSPHATE BUFFER, 0.1M**

(Contd. of page 4)

- **Solids content:** 0.0 %
- **Other information** 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:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)**

Substance is not listed.

- **NTP (National Toxicology Program)**

Substance is not 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 (Assessment by list): 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.

CA

(Contd. on page 6)

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 07/28/2021

Reviewed on 07/28/2021

Trade name: PHOSPHATE BUFFER, 0.1M

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### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

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

### 15 Regulatory information

· <b>Safety, health and environmental regulations/legislation specific for the substance or mixture</b> · <b>Sara</b>	
· <b>Section 355 (extremely hazardous substances):</b>	Substance is not listed.
· <b>Section 313 (Specific toxic chemical listings):</b>	Substance is not listed.
· <b>TSCA (Toxic Substances Control Act):</b>	ACTIVE
· <b>Canadian substance listings:</b>	
· <b>Canadian Domestic Substances List (DSL)</b>	Substance is listed.
· <b>Canadian Ingredient Disclosure list (limit 0.1%)</b>	Substance is not listed.
· <b>Canadian Ingredient Disclosure list (limit 1%)</b>	Substance is not listed.
· <b>GHS label elements</b> The substance is classified and labeled according to the Globally Harmonized System (GHS).	

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# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 07/28/2021

Reviewed on 07/28/2021

Trade name: **PHOSPHATE BUFFER, 0.1M**

(Contd. of page 6)

· **Hazard pictograms**

GHS07

· **Signal word** Warning· **Hazard statements***Harmful if swallowed, in contact with skin or if inhaled.**Causes eye irritation.*· **Precautionary statements***Avoid breathing dust/fume/gas/mist/vapours/spray.**Wash thoroughly after handling.**Do not eat, drink or smoke when using this product.**Use only outdoors or in a well-ventilated area.**Wear protective gloves/protective clothing/eye protection/face protection.**If swallowed: Call a poison center/doctor if you feel unwell.**Rinse mouth.**If on skin: Wash with plenty of water.**IF INHALED: Remove person to fresh air and keep comfortable for breathing.**IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.**Continue rinsing.**Specific measures (see on this label).**If eye irritation persists: Get medical advice/attention.**Take off immediately all contaminated clothing.**Wash contaminated clothing before reuse.**Store in a dry place. Store in a closed container.**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 the latest revision of the safety data sheet** 07/28/2021 / -· **Abbreviations and acronyms:***IMDG: International Maritime Code for Dangerous Goods**DOT: US Department of Transportation**IATA: International Air Transport Association**EINECS: European Inventory of Existing Commercial Chemical Substances**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*

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

Printing date 28.07.2021

Revision: 28.07.2021

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

- **1.1 Product identifier**
- **Trade name:** PHOSPHATE BUFFER, 0.1M
- **Article number:** 19340-72
- **CAS Number:**  
7778-77-0
- **EC number:**  
231-913-4
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Further information obtainable from:** Product safety department
- **1.4 Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**  
The substance 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
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

- **3.1 Chemical characterisation: Substances**
- **CAS No. Description**  
7778-77-0 potassium dihydrogenorthophosphate
- **Identification number(s)**
- **EC number:** 231-913-4

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.

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GB



# Safety data sheet

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

Printing date 28.07.2021

Revision: 28.07.2021

**Trade name: PHOSPHATE BUFFER, 0.1M**

(Contd. of page 1)

- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **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:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

### 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).  
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**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **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:** Not required.
- **Additional information:** The lists valid during the making were used as basis.

(Contd. on page 3)



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

Printing date 28.07.2021

Revision: 28.07.2021

Trade name: **PHOSPHATE BUFFER, 0.1M**

(Contd. of page 2)

· **8.2 Exposure controls**· **Personal protective equipment:**· **General protective and hygienic measures:***Keep away from foodstuffs, beverages and feed.**Immediately remove all soiled and contaminated clothing**Wash hands before breaks and at the end of work.**Avoid contact with the eyes.**Avoid contact with the eyes and skin.*· **Respiratory protection:***In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.*· **Protection of hands:***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.*· **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:***Tightly sealed goggles*

## SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**· **General Information**· **Appearance:**· **Form:***Solid*· **Colour:***Not determined.*· **Odour:***Characteristic*· **Odour threshold:***Not determined.*· **pH-value:***Not determined.*· **Change in condition**· **Melting point/freezing point:***Undetermined.*· **Initial boiling point and boiling range:***Undetermined.*· **Flash point:***Not applicable.*· **Flammability (solid, gas):***Not applicable.*· **Decomposition temperature:***Not determined.*· **Auto-ignition temperature:***Not determined.*· **Explosive properties:***Product does not present an explosion hazard.*

(Contd. on page 4)

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

Printing date 28.07.2021

Revision: 28.07.2021

Trade name: PHOSPHATE BUFFER, 0.1M

(Contd. of page 3)

· <b>Explosion limits:</b>	
· <b>Lower:</b>	Not determined.
· <b>Upper:</b>	Not determined.
· <b>Vapour pressure:</b>	Not determined.
· <b>Density at 20 °C:</b>	2.338 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>VOC (EC)</b>	0.00 %
· <b>Solids content:</b>	0.0 %
· <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.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

GB

(Contd. on page 5)

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

Printing date 28.07.2021

Revision: 28.07.2021

Trade name: **PHOSPHATE BUFFER, 0.1M**

(Contd. of page 4)

### 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) (Assessment by list): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information

- |  |                 |
|--|-----------------|
| · <b>14.1 UN-Number</b>  |                 |
| · <b>ADR, IMDG, IATA</b>   | not regulated   |
| · <b>14.2 UN proper shipping name</b>  |                 |
| · <b>ADR, 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. |
| · <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b> | Not applicable. |
| · <b>UN "Model Regulation":</b>  | not regulated   |

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

Printing date 28.07.2021

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Trade name: **PHOSPHATE BUFFER, 0.1M**

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### **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 Substance is not listed.**
- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**
- **Substance is not 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.*

- **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
- 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

GB

**Sikkerhedsdatablad**  
ifølge 1907/2006/EF, Artikel 31

Trykdato: 28.07.2021

Revision: 28.07.2021

### PUNKT 1: Identifikation af stoffet/blandingen og af selskabet/virksomheden

- **1.1 Produktidentifikator**
- **Handelsnavn:** PHOSPHATE BUFFER, 0.1M
- **Artikelnummer:** 19340-72
- **CAS-nummer:**  
7778-77-0
- **EC-nummer:**  
231-913-4
- **1.2 Relevante identificerede anvendelser for stoffet eller blandingen samt anvendelser, der frarådes**  
Der står ingen yderligere, relevante informationer til rådighed.
- **Stoffets/præparatets anvendelse** Laboratoriekemikalier
- **1.3 Nærmere oplysninger om leverandøren af sikkerhedsdatabladet**
- **Producent/leverandør**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **For yderligere information:** Product safety department
- **1.4 Nødtelefon:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### PUNKT 2: Fareidentifikation

- **2.1 Klassificering af stoffet eller blandingen**
- **Klassificering i henhold til forordning (EF) nr. 1272/2008**  
Denne substans er ikke klassificeret iht. CLP-forordningen.
- **2.2 Mærkningselementer**
- **Mærkning i henhold til forordning (EF) nr. 1272/2008** Ikke relevant
- **Farepiktogrammer** Ikke relevant
- **Signalord** Ikke relevant
- **Faresætninger** Ikke relevant
- **2.3 Andre farer**
- **Resultater af PBT- og vPvB-vurdering**
- **PBT:** Ikke relevant.
- **vPvB:** Ikke relevant.

### PUNKT 3: Sammensætning af/oplysning om indholdsstoffer

- **3.1 Kemisk betegnelse: Stoffer**
- **CAS-nr. betegnelse**  
7778-77-0 kaliumdihydrogenorthosphat
- **Identifikationsnummer (-numre)**
- **EC-nummer:** 231-913-4

### PUNKT 4: Førstehjælpsforanstaltninger

- **4.1 Beskrivelse af førstehjælpsforanstaltninger**
- **Efter indånding:** Tilførsel af frisk luft, i tilfælde af symptomer skal der søges læge.

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# Sikkerhedsdatablad

## ifølge 1907/2006/EF, Artikel 31

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**Handelsnavn: PHOSPHATE BUFFER, 0.1M**

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- **Efter hudkontakt:** Almindeligvis virker produktet ikke irriterende på huden.
- **Efter øjenkontakt:**  
Skyl øjnene med åbent øjenlåg i flere minutter under rindende vand. Søg læge, hvis problemerne er vedvarende.
- **Efter indtagelse:** Søg læge, hvis problemerne er vedvarende.
- **4.2 Vigtigste symptomer og virkninger, både akutte og forsinkede**  
Der står ingen yderligere, relevante informationer til rådighed.
- **4.3 Angivelse af om øjeblikkelig lægehjælp og særlig behandling er nødvendig**  
Der står ingen yderligere, relevante informationer til rådighed.

### PUNKT 5: Brandbekæmpelse

- **5.1 Slukningsmidler**
- **Egnede slukningsmidler:** Tilpas foranstaltningerne til brandbekæmpelse efter omgivelserne.
- **5.2 Særlige farer i forbindelse med stoffet eller blandingen**  
Der står ingen yderligere, relevante informationer til rådighed.
- **5.3 Anvisninger for brandmandskab**
- **Særlige værnemidler:** Der kræves ingen særlige forholdsregler.

### PUNKT 6: Forholdsregler over for udslip ved uheld

- **6.1 Personlige sikkerhedsforanstaltninger, personlige værnemidler og nødprocedurer** Ikke påkrævet.
- **6.2 Miljøbeskyttelsesforanstaltninger:** Må ikke udledes i kloaksystemet/overfladevand/grundvand.
- **6.3 Metoder og udstyr til inddæmning og oprensning:**  
Opsamles med væskebindende materiale (sand, kiselgur, syrebindemiddel, universalbindemiddel, savsmuld).  
Sørg for tilstrækkelig udluftning.
- **6.4 Henvisning til andre punkter**  
Information om sikker håndtering se kapitel 7.  
Informationer vedrørende personlige værnemidler se kapitel 8.  
Informationer om bortskaffelse se kapitel 13.

### PUNKT 7: Håndtering og opbevaring

- **7.1 Forholdsregler for sikker håndtering**  
Sørg for god udluftning/udsugning på arbejdspladsen.  
Undgå aerosoldannelse.
- **Anvisninger vedrørende brand- og eksplosionsbeskyttelse:** Der kræves ingen særlige forholdsregler.
- **7.2 Betingelser for sikker opbevaring, herunder eventuel uforenelighed**
- **Opbevaring:**
- **Krav til opbevaringsrum og beholdere:** Ingen særlige krav.
- **Henvisninger vedrørende opbevaring med andre stoffer:** Ikke påkrævet.
- **Yderligere oplysninger vedrørende opbevaringsbetingelserne:** Hold beholderen tætsluttende lukket.
- **7.3 Særlige anvendelser** Der står ingen yderligere, relevante informationer til rådighed.

### PUNKT 8: Eksponeringskontrol/personlige værnemidler

- **Yderligere anvisninger vedrørende udformning af tekniske anlæg:** Ingen yderligere oplysninger, se punkt 7.
- **8.1 Kontrolparametre**
- **Indholdsstoffer med arbejdspladsrelaterede grænseværdier, der skal overvåges:** Ikke relevant.
- **Yderligere anvisninger:** Baseret på de lister, der var gældende på tidspunktet for udarbejdelsen.

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# Sikkerhedsdatablad

ifølge 1907/2006/EF, Artikel 31

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**Handelsnavn: PHOSPHATE BUFFER, 0.1M**

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- **8.2 Eksponeringskontrol**
- **Personlige værnemidler:**
- **Generelle forholdsregler vedrørende beskyttelse og hygiejne:**  
 Skal holdes borte fra føde- og drikkevarer og foderstoffer.  
 Forurenet, gennemvædet tøj skal det tages af med det samme.  
 Vask hænder inden der holdes pause og ved arbejdsophør.  
 Undgå kontakt med øjnene.  
 Undgå kontakt med øjne og hud.
- **Åndedrætsværn:**  
 Ved kortvarig eller ringe belastning skal der benyttes åndedrætsværn med filter, ved intensiv eller længere eksponering skal der benyttes luftforsynet åndedrætsværn.
- **Håndbeskyttelse:**  
 Handskematerialet skal være uigennemtrængeligt og kunne tåle produktet/stoffet/præparatet.  
 På grund af manglende tests kan der ikke anbefales noget handskemateriale til produktet/præparatet/kemikalieblandingen.  
 Ved valg af handskematerialet skal der tages højde for gennemtrængningstider, permeabilitetstal og nedbrydning.
- **Handskemateriale:**  
 Valg af en egnet handske afhænger ikke blot af materialet, men også af yderligere kvalitetskriterier og er forskelligt fra den ene fabrikant til den anden.
- **Handskematerialets gennemtrængningstid**  
 Hos handskefabrikanten skal man forespørge om den nøjagtige gennemtrængningstid og overholde denne.
- **Øjenbeskyttelse:**



Tætsluttende beskyttelsesbriller

## PUNKT 9: Fysiske og kemiske egenskaber

- **9.1 Oplysninger om grundlæggende fysiske og kemiske egenskaber**
- **Generelle oplysninger**
- **Udseende:**
- **Form:** Fast
- **Farve:** Ikke bestemt.
- **Lugt:** Karakteristisk
- **Lugttærskel:** Ikke bestemt.
- **pH-værdi:** Ikke bestemt.
- **Tilstandsændring**
- **Smeltepunkt/frysepunkt:** Ikke bestemt.
- **Begyndelseskogepunkt og kogepunktsinterval:** Ikke bestemt.
- **Flammepunkt:** Ikke relevant.
- **Antændelighed (fast stof, luftart):** Ikke relevant.
- **Dekomponeringstemperatur:** Ikke bestemt.
- **Selvantændelsestemperatur:** Ikke bestemt.
- **Eksplorative egenskaber:** Produktet er ikke eksplosivt.
- **Eksplisionsgrænser:**
- **Nedre:** Ikke bestemt.

(Fortsættes på side 4)

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# Sikkerhedsdatablad

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· <b>Øvre:</b>	Ikke bestemt.
· <b>Damptryk:</b>	Ikke bestemt.
· <b>Densitet ved 20 °C:</b>	2,338 g/cm <sup>3</sup>
· <b>Relativ massefylde:</b>	Ikke bestemt.
· <b>Dampmassefylde:</b>	Ikke bestemt.
· <b>Fordampningshastighed</b>	Ikke bestemt.
· <b>Opløselighed i/blandbarhed med vand:</b>	Ikke eller kun lidt blandbar.
· <b>Fordelingskoefficient: n-oktanol/vand:</b>	Ikke bestemt.
· <b>Viskositet:</b>	
· <b>dynamisk:</b>	Ikke bestemt.
· <b>kinematisk:</b>	Ikke bestemt.
· <b>Opløsningsmiddelindhold:</b>	
· <b>VOC (EU)</b>	0,00 %
· <b>Tørstofindhold:</b>	0,0 %
· <b>9.2 Andre oplysninger</b>	Der står ingen yderligere, relevante informationer til rådighed.

## PUNKT 10: Stabilitet og reaktivitet

- **10.1 Reaktivitet** Der står ingen yderligere, relevante informationer til rådighed.
- **10.2 Kemisk stabilitet**
- **Termisk nedbrydning/forhold, der bør undgås** Ingen nedbrydning ved formålsbestemt brug.
- **10.3 Risiko for farlige reaktioner** Der er ikke kendskab til nogen farlige reaktioner.
- **10.4 Forhold, der skal undgås** Der står ingen yderligere, relevante informationer til rådighed.
- **10.5 Materialer, der skal undgås:** Der står ingen yderligere, relevante informationer til rådighed.
- **10.6 Farlige nedbrydningsprodukter:** Der er ikke kendskab til nogen farlige nedbrydningsprodukter.

## PUNKT 11: Toksikologiske oplysninger

- **11.1 Oplysninger om toksikologiske virkninger**
- **Akut toksicitet**  
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Primær irritationsvirkning:**
- **Hudætsning/irritation**  
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Alvorlig øjenskade/øjenirritation**  
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Respiratorisk sensibilisering eller hudsensibilisering**  
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **CMR-virkninger (kræftfremkaldende egenskaber, mutagenitet og reproduktionstoksicitet)**
- **Kimcellemutagenitet**  
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Kræftfremkaldende egenskaber**  
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Reproduktionstoksicitet**  
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Enkel STOT-eksponering**  
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.

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# Sikkerhedsdatablad

## ifølge 1907/2006/EF, Artikel 31

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- **Gentagne STOT-eksponeringer**  
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Aspirationsfare**  
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.

### PUNKT 12: Miljøoplysninger

- **12.1 Toksicitet**
- **Toksicitet i vand:** Der står ingen yderligere, relevante informationer til rådighed.
- **12.2 Persistens og nedbrydelighed** Der står ingen yderligere, relevante informationer til rådighed.
- **12.3 Bioakkumuleringspotentiale** Der står ingen yderligere, relevante informationer til rådighed.
- **12.4 Mobilitet i jord** Der står ingen yderligere, relevante informationer til rådighed.
- **Yderligere økologiske oplysninger:**
- **Generelle anvisninger:**  
Fareklasse for vand 1 (klassificering ifølge listen): svagt vandforurenende  
Må ikke udledes i grundvandet, vandløb eller kloaksystemet uforyndet eller i større mængder.
- **12.5 Resultater af PBT- og vPvB-vurdering**
- **PBT:** Ikke relevant.
- **vPvB:** Ikke relevant.
- **12.6 Andre negative virkninger** Der står ingen yderligere, relevante informationer til rådighed.

### PUNKT 13: Bortskaffelse

- **13.1 Metoder til affaldsbehandling**
- **Anbefaling:** Må ikke bortskaffes sammen med husholdningsaffald. Må ikke udledes i kloaksystemet.
- **Urensede emballager:**
- **Anbefaling:** Bortskaffes i overensstemmelse med myndighedernes forskrifter.

### PUNKT 14: Transportoplysninger

- |  |                |
|--|----------------|
| · <b>14.1 UN-nummer</b>  |                |
| · <b>ADR, IMDG, IATA</b>   | Ikke relevant  |
| · <b>14.2 UN-forsendelsesbetegnelse (UN proper shipping name)</b>          |                |
| · <b>ADR, IMDG, IATA</b>   | Ikke relevant  |
| · <b>14.3 Transportfareklasse(r)</b>                                       |                |
| · <b>ADR, ADN, IMDG, IATA</b>  |                |
| · <b>klasse</b>  | Ikke relevant  |
| · <b>14.4 Emballagegruppe</b>  |                |
| · <b>ADR, IMDG, IATA</b>   | Ikke relevant  |
| · <b>14.5 Miljøfarer:</b>  | Ikke relevant. |
| · <b>14.6 Særlige forsigtighedsregler for brugeren</b>                     | Ikke relevant. |
| · <b>14.7 Bulktransport i henhold til bilag II til MARPOL og IBC-koden</b> | Ikke relevant. |
| · <b>UN "Model Regulation":</b>  | Ikke relevant  |

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# Sikkerhedsdatablad

ifølge 1907/2006/EF, Artikel 31

Trykdato: 28.07.2021

Revision: 28.07.2021

**Handelsnavn: PHOSPHATE BUFFER, 0.1M**

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## PUNKT 15: Oplysninger om regulering

· **15.1 Særlige bestemmelser/særlig lovgivning for stoffet eller blandingen med hensyn til sikkerhed, sundhed og miljø**

· **Direktiv 2012/18/EU**

· **Navngivne farlige stoffer - BILAG I** Stoffet er ikke optaget i listen.

· **Direktiv 2011/65/EU om begrænsning af anvendelsen af visse farlige stoffer i elektrisk og elektronisk udstyr - Bilag II**

Stoffet er ikke optaget i listen.

· **Nationale forskrifter:**

· **MAL-Code:** 00-1

· **15.2 Kemikaliesikkerhedsvurdering:** Der er ikke udført kemikaliesikkerhedsvurdering.

## PUNKT 16: Andre oplysninger

Alle ovenstående angivelser er baseret på vores aktuelle viden, udgør dog ikke nogen tilsikring af produktgenskaber og stifter heller ikke noget kontraktligt retsforhold.

· **Forkortelser og akronymer:**

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

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

VOC: Volatile Organic Compounds (USA, EU)

Måleteknisk Arbejdshygiejnisk Luftbehov

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

DK

# Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 28.07.2021

Herziening van: 28.07.2021

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

- **1.1 Productidentificatie**
- **Handelsnaam:** PHOSPHATE BUFFER, 0.1M
- **Artikelnummer:** 19340-72
- **CAS-nummer:**  
7778-77-0
- **EC-nummer:**  
231-913-4
- **1.2 Relevant geïdentificeerd gebruik van de stof of het mengsel en ontraden gebruik**  
Geen verdere relevante informatie verkrijgbaar.
- **Toepassing van de stof / van de bereiding** Laboratoriumchemicaliën
- **1.3 Details betreffende de verstrekker van het veiligheidsinformatieblad**
- **Fabrikant/leverancier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Aurion**  
Binnenhaven 5  
6709 PD Wageningen  
The Netherlands  
Tel: 31 317 415094  
Fax: 31 317 415955  
email: info@aurion.nl
- **Inlichtingengevende sector:** Product safety department
- **1.4 Telefoonnummer voor noodgevallen:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## RUBRIEK 2: Identificatie van de gevaren

- **2.1 Indeling van de stof of het mengsel**
- **Indeling overeenkomstig Verordening (EG) nr. 1272/2008**  
De stof is niet geïdentificeerd 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
- **2.3 Andere gevaren**
- **Resultaten van PBT- en zPzB-beoordeling**
- **PBT:** Niet bruikbaar.
- **zPzB:** Niet bruikbaar.

## RUBRIEK 3: Samenstelling en informatie over de bestanddelen

- **3.1 Chemische karakterisering: Stoffen**
- **CAS-Nr. omschrijving**  
7778-77-0 kaliumdihydrogeenorthofosfaat

(Vervolg op blz. 2)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 28.07.2021

Herziening van: 28.07.2021

**Handelsnaam: PHOSPHATE BUFFER, 0.1M**

(Vervolg van blz. 1)

- **Identificatienummer(s)**
- **EC-nummer:** 231-913-4

### RUBRIEK 4: Eerstehulpmaatregelen

- **4.1 Beschrijving van de eerstehulpmaatregelen**
- **Na het inademen:** Frisse lucht toedienen; bij klachten arts ontbieden.
- **Na huidcontact:** Over het algemeen is het produkt niet prikkelend voor de huid
- **Na oogcontact:**  
De ogen gedurende verscheidene minuten onder stromend water afspoelen terwijl de oogspleet geopend blijft. Bij aanhoudende klachten een dokter raadplegen.
- **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:** Brandblusmaatregelen op omgeving afstemmen.
- **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:** Geen bijzondere maatregelen nodig.

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

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

### RUBRIEK 7: Hantering en opslag

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

(Vervolg op blz. 3)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

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(Vervolg van blz. 2)

· 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:** Vervalt.
- **Aanvullende gegevens:** Als basis dienden lijsten die bij opstelling geldig waren.
- **8.2 Maatregelen ter beheersing van blootstelling**
- **Persoonlijke beschermingsvoorzieningen:**
- **Algemene beschermings- en gezondheidsmaatregelen:**
  - Verwijderd houden van eet- en drinkwaren.
  - Verontreinigde kleding onmiddellijk uittrekken.
  - Vóór de pauze en aan het einde van werktijd handen wassen.
  - Aanraking met de ogen vermijden.
  - Aanraking met de ogen en de huid vermijden.
- **Ademhalingsbescherming:**
  - Bij korte of geringe belasting ademfiltertoestel; bij intensieve resp. langdurige expositie een van de omringende lucht onafhankelijk ademhalingstoestel gebruiken.
- **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 chemicaliën-mengsel 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.
- **Doordringingstijd van het handschoenmateriaal**
  - De precieze penetratietijd kunt u te weten komen bij de handschoenfabrikant; houd er rekening mee.
- **Oogbescherming:**



Nauw aansluitende veiligheidsbril

### RUBRIEK 9: Fysische en chemische eigenschappen

- **9.1 Informatie over fysische en chemische basiseigenschappen**
- **Algemene gegevens**
- **Voorkomen:**
- **Vorm:** Vast
- **Kleur:** Niet bepaald.
- **Geur:** Karakteristiek
- **Geurdrempelwaarde:** Niet bepaald.
- **pH-waarde:** Niet bepaald.
- **Toestandsverandering**
- **Smelt-/vriespunt:** Niet bepaald.
- **Beginkookpunt en kooktraject:** Niet bepaald.

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· <b>Vlampunt:</b>	Niet bruikbaar.
· <b>Ontvlambaarheid (vast, gas):</b>	Niet bruikbaar.
· <b>Ontledingstemperatuur:</b>	Niet bepaald.
· <b>Zelfontbrandingstemperatuur:</b>	Niet bepaald.
· <b>Ontploffingseigenschappen:</b>	Het produkt is niet ontploffingsgevaarlijk.
· <b>Ontploffingsgrenzen:</b>	
· <b>Onderste:</b>	Niet bepaald.
· <b>Bovenste:</b>	Niet bepaald.
· <b>Dampspanning:</b>	Niet bepaald.
· <b>Dichtheid bij 20 °C:</b>	2,338 g/cm <sup>3</sup>
· <b>Relatieve dichtheid</b>	Niet bepaald.
· <b>Dampdichtheid</b>	Niet bepaald.
· <b>Verdampingssnelheid</b>	Niet bepaald.
· <b>Oplosbaarheid in/mengbaarheid met</b>	
· <b>Water:</b>	Niet resp. gering mengbaar.
· <b>Verdelingscoëfficiënt: n-octanol/water:</b>	Niet bepaald.
· <b>Viscositeit</b>	
· <b>Dynamisch:</b>	Niet bepaald.
· <b>Kinematisch:</b>	Niet bepaald.
· <b>Oplosmiddelgehalte:</b>	
· <b>VOC (EG)</b>	0,00 %
· <b>Gehalte aan vaste bestanddelen:</b>	0,0 %
· <b>9.2 Overige informatie</b>	Geen verdere relevante informatie verkrijgbaar.

### RUBRIEK 10: Stabiliteit en reactiviteit

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

### RUBRIEK 11: Toxicologische informatie

- **11.1 Informatie over toxicologische effecten**
- **Acute toxiciteit** 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.

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- **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): A(4) Weinig schadelijk voor in water levende organismen kan in het aquatische milieu op lange termijn schadelijke effecten veroorzaken  
Gevaar voor water klasse 1 (D) (Lijstclassificatie): gevaar voor water klein  
Niet onverdund of in grote hoeveelheden lozen in grondwater, in oppervlaktewater of in de riolering.
- **12.5 Resultaten van PBT- en zPzB-beoordeling**
- **PBT:** Niet bruikbaar.
- **zPzB:** Niet bruikbaar.
- **12.6 Andere schadelijke effecten** Geen verdere relevante informatie verkrijgbaar.

### RUBRIEK 13: Instructies voor verwijdering

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

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

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

(Vervolg op blz. 6)



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· 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

De stof is niet aanwezig.

· SZW-lijst van mutagene stoffen

De stof is niet aanwezig.

· NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Vruchtbaarheid

De stof is niet aanwezig.

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

De stof is niet aanwezig.

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

De stof is niet aanwezig.

· Lijst Zeer Zorgwekkende Stoffen (ZZS)

De stof is niet aanwezig.

· Lijst van Potentieel Zeer Zorgwekkende Stoffen

De stof is niet aanwezig.

· Richtlijn 2012/18/EU

· Gevaarlijke stoffen die met naam genoemd worden - BIJLAGE I De stof is niet aanwezig.

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

De stof is niet aanwezig.

· Nationale voorschriften:

· Gevaarklasse v. water:

Waterbezwaarlijkheid (NL): A(4) Weinig schadelijk voor in water levende organismen kan in het aquatische milieu op lange termijn schadelijke effecten veroorzaken

· 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.

· 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

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



# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

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

- **1.1 Identificateur de produit**
- **Nom du produit:** PHOSPHATE BUFFER, 0.1M
- **Code du produit:** 19340-72
- **No CAS:**  
7778-77-0
- **Numéro CE:**  
231-913-4
- **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: sgkcck@aol.com  
www.emsdiasum.com
- **Service chargé des renseignements:** Product safety department
- **1.4 Numéro d'appel d'urgence:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### RUBRIQUE 2: Identification des dangers

- **2.1 Classification de la substance ou du mélange**
- **Classification selon le règlement (CE) n° 1272/2008** La substance n'est pas classifiée selon le règlement CLP.
- **2.2 Éléments d'étiquetage**
- **Etiquetage selon le règlement (CE) n° 1272/2008** néant
- **Pictogrammes de danger** néant
- **Mention d'avertissement** néant
- **Mentions de danger** néant
- **2.3 Autres dangers**
- **Résultats des évaluations PBT et vPvB**
- **PBT:** Non applicable.
- **vPvB:** Non applicable.

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

- **3.1 Caractérisation chimique: Substances**
- **No CAS Désignation**  
7778-77-0 dihydrogénéorthophosphate de potassium
- **Code(s) d'identification**
- **Numéro CE:** 231-913-4

### RUBRIQUE 4: Premiers secours

- **4.1 Description des premiers secours**
- **Après inhalation:** Donner de l'air frais, consulter un médecin en cas de troubles.
- **Après contact avec la peau:** En règle générale, le produit n'irrite pas la peau.

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- **Après contact avec les yeux:**  
Rincer les yeux, pendant plusieurs minutes, sous l'eau courante en écartant bien les paupières. Si les troubles persistent, consulter un médecin.
- **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:** Adapter les mesures d'extinction d'incendie à l'environnement.
- **5.2 Dangers particuliers résultant de la substance ou du mélange**  
Pas d'autres informations importantes disponibles.
- **5.3 Conseils aux pompiers**
- **Équipement spécial de sécurité:** Aucune mesure particulière n'est requise.

### 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).  
Assurer une aération suffisante.
- **6.4 Référence à d'autres rubriques**  
Afin d'obtenir des informations pour une manipulation sûre, consulter le chapitre 7.  
Afin d'obtenir des informations sur les équipements de protection personnels, consulter le chapitre 8.  
Afin d'obtenir des informations sur l'élimination, consulter le chapitre 13.

### RUBRIQUE 7: Manipulation et stockage

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

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

- **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:** Néant

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· **Remarques supplémentaires:**

Le présent document s'appuie sur les listes en vigueur au moment de son élaboration.

· **8.2 Contrôles de l'exposition**

· **Équipement de protection individuel:**

· **Mesures générales de protection et d'hygiène:**

Tenir à l'écart des produits alimentaires, des boissons et de la nourriture pour animaux.

Retirer immédiatement les vêtements souillés ou humectés.

Se laver les mains avant les pauses et en fin de travail.

Éviter tout contact avec les yeux.

Éviter tout contact avec les yeux et avec la peau.

· **Protection respiratoire:**

En cas d'exposition faible ou de courte durée, utiliser un filtre respiratoire; en cas d'exposition intense ou durable, utiliser un appareil de respiration indépendant de l'air ambiant.

· **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 ne dépend pas seulement du matériau, mais également d'autres critères de qualité qui peuvent varier d'un fabricant à l'autre.

· **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 hermétiques

### RUBRIQUE 9: Propriétés physiques et chimiques

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

· **Indications générales**

· **Aspect:**

· **Forme:**

Solide

· **Couleur:**

Non déterminé.

· **Odeur:**

Caractéristique

· **Seuil olfactif:**

Non déterminé.

· **valeur du pH:**

Non déterminé.

· **Changement d'état**

· **Point de fusion/point de congélation:**

Non déterminé.

· **Point initial d'ébullition et intervalle d'ébullition:** Non déterminé.

· **Point d'éclair**

Non applicable.

· **Inflammabilité (solide, gaz):**

Non applicable.

· **Température de décomposition:**

Non déterminé.

· **Température d'auto-inflammabilité:**

Non déterminé.

· **Propriétés explosives:**

Le produit n'est pas explosif.

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· <b>Limites d'explosion:</b>	
· <b>Inférieure:</b>	Non déterminé.
· <b>Supérieure:</b>	Non déterminé.
· <b>Pression de vapeur:</b>	Non déterminé.
· <b>Densité à 20 °C:</b>	2,338 g/cm <sup>3</sup>
· <b>Densité relative</b>	Non déterminé.
· <b>Densité de vapeur:</b>	Non déterminé.
· <b>Taux 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>VOC (CE)</b>	0,00 %
· <b>Teneur en substances solides:</b>	0,0 %
· <b>9.2 Autres informations</b>	Pas d'autres informations importantes disponibles.

### RUBRIQUE 10: Stabilité et réactivité

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

### RUBRIQUE 11: Informations toxicologiques

- **11.1 Informations sur les effets toxicologiques**
- **Toxicité aiguë** 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.

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- **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 selon liste): peu polluant  
Ne pas laisser le produit, non dilué ou en grande quantité, pénétrer la nappe phréatique, les eaux ou les canalisations.
- **12.5 Résultats des évaluations PBT et VPVB**
- **PBT:** Non applicable.
- **vPvB:** Non applicable.
- **12.6 Autres effets néfastes** Pas d'autres informations importantes disponibles.

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

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

### RUBRIQUE 14: Informations relatives au transport

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

(suite page 6)

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 28.07.2021

Révision: 28.07.2021

**Nom du produit: PHOSPHATE BUFFER, 0.1M**

(suite de la page 5)

· "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 la substance n'est pas comprise

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

la substance n'est pas comprise

· **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.

· **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

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

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 28.07.2021

überarbeitet am: 28.07.2021

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

- **1.1 Produktidentifikator**
- **Handelsname:** ***PHOSPHATE BUFFER, 0.1M***
- **Artikelnummer:** 19340-72
- **CAS-Nummer:**  
7778-77-0
- **EG-Nummer:**  
231-913-4
- **1.2 Relevante identifizierte Verwendungen des Stoffs oder Gemischs und Verwendungen, von denen abgeraten wird**  
Keine weiteren relevanten Informationen verfügbar.
- **Verwendung des Stoffes / des Gemisches Laborchemikalien**
- **1.3 Einzelheiten zum Lieferanten, der das Sicherheitsdatenblatt bereitstellt**
- **Hersteller/Lieferant:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com  
  
Science Services GmbH  
Unterhachinger Str. 75  
81737 München Germany  
  
Tel: +49(0)89 18 93 668-0  
safety@scienceservices.de  
  
Deutschland: +49 (0)89 19240, 24h Giftnotruf Munchen, www.toxinfo.org  
Osterreich: +43 1406 43 43, Gesundheit Osterreich GmbH, 24 h
- **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** Der Stoff ist gemäß CLP-Verordnung nicht eingestuft.
- **2.2 Kennzeichnungselemente**
- **Kennzeichnung gemäß Verordnung (EG) Nr. 1272/2008** entfällt
- **Gefahrenpiktogramme** entfällt
- **Signalwort** entfällt
- **Gefahrenhinweise** entfällt
- **2.3 Sonstige Gefahren**
- **Ergebnisse der PBT- und vPvB-Beurteilung**
- **PBT:** Nicht anwendbar.
- **vPvB:** Nicht anwendbar.

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(Fortsetzung auf Seite 2)



# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 28.07.2021

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Handelsname: **PHOSPHATE BUFFER, 0.1M**

(Fortsetzung von Seite 1)

### ABSCHNITT 3: Zusammensetzung/Angaben zu Bestandteilen

- **3.1 Chemische Charakterisierung: Stoffe**
- **CAS-Nr. Bezeichnung**  
7778-77-0 Kaliumbiphosphat
- **Identifikationsnummer(n)**
- **EG-Nummer:** 231-913-4

### ABSCHNITT 4: Erste-Hilfe-Maßnahmen

- **4.1 Beschreibung der Erste-Hilfe-Maßnahmen**
- **Nach Einatmen:** Frischluftzufuhr, bei Beschwerden Arzt aufsuchen.
- **Nach Hautkontakt:** Im allgemeinen ist das Produkt nicht hautreizend.
- **Nach Augenkontakt:**  
Augen mehrere Minuten bei geöffnetem Lidspalt unter fließendem Wasser spülen. Bei anhaltenden Beschwerden Arzt konsultieren.
- **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:** Feuerlöschmaßnahmen auf die Umgebung abstimmen.
- **5.2 Besondere vom Stoff oder Gemisch ausgehende Gefahren**  
Keine weiteren relevanten Informationen verfügbar.
- **5.3 Hinweise für die Brandbekämpfung**
- **Besondere Schutzausrüstung:** Keine besonderen Maßnahmen erforderlich.

### 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.  
Für ausreichende Lüftung sorgen.
- **6.4 Verweis auf andere Abschnitte**  
Informationen zur sicheren Handhabung siehe Abschnitt 7.  
Informationen zur persönlichen Schutzausrüstung siehe Abschnitt 8.  
Informationen zur Entsorgung siehe Abschnitt 13.

### ABSCHNITT 7: Handhabung und Lagerung

- **7.1 Schutzmaßnahmen zur sicheren Handhabung**  
Für gute Belüftung/Absaugung am Arbeitsplatz sorgen.  
Aerosolbildung vermeiden.
- **Hinweise zum Brand- und Explosionsschutz:** Keine besonderen Maßnahmen erforderlich.

(Fortsetzung auf Seite 3)



# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

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**Handelsname: PHOSPHATE BUFFER, 0.1M**

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- **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:** Entfällt.
- **Zusätzliche Hinweise:** Als Grundlage dienen die bei der Erstellung gültigen Listen.
- **8.2 Begrenzung und Überwachung der Exposition**
- **Persönliche Schutzausrüstung:**
- **Allgemeine Schutz- und Hygienemaßnahmen:**  
 Von Nahrungsmitteln, Getränken und Futtermitteln fernhalten.  
 Beschmutzte, getränkte Kleidung sofort ausziehen.  
 Vor den Pausen und bei Arbeitsende Hände waschen.  
 Berührung mit den Augen vermeiden.  
 Berührung mit den Augen und der Haut vermeiden.
- **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.
- **Durchdringungszeit des Handschuhmaterials**  
 Die genaue Durchbruchzeit ist beim Schutzhandschuhhersteller zu erfahren und einzuhalten.
- **Augenschutz:**



Dichtschließende Schutzbrille

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## gemäß 1907/2006/EG, Artikel 31

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### ABSCHNITT 9: Physikalische und chemische Eigenschaften

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

##### · Allgemeine Angaben

##### · Aussehen:

- **Form:** Fest
- **Farbe:** Nicht bestimmt.
- **Geruch:** Charakteristisch
- **Geruchsschwelle:** Nicht bestimmt.

· **pH-Wert:** Nicht bestimmt.

##### · Zustandsänderung

- **Schmelzpunkt/Gefrierpunkt:** Nicht bestimmt.
- **Siedebeginn und Siedebereich:** Nicht bestimmt.

· **Flammpunkt:** Nicht anwendbar.

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

· **Zersetzungstemperatur:** Nicht bestimmt.

· **Selbstentzündungstemperatur:** Nicht bestimmt.

· **Explosive Eigenschaften:** Das Produkt ist nicht explosionsgefährlich.

##### · Explosionsgrenzen:

- **Untere:** Nicht bestimmt.
- **Obere:** Nicht bestimmt.

· **Dampfdruck:** Nicht bestimmt.

- **Dichte bei 20 °C:** 2,338 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:

· **VOC (EU)** 0,00 %

· **Festkörpergehalt:** 0,0 %

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

### ABSCHNITT 10: Stabilität und Reaktivität

· **10.1 Reaktivität** Keine weiteren relevanten Informationen verfügbar.

· **10.2 Chemische Stabilität**

· **Thermische Zersetzung / zu vermeidende Bedingungen:**

Keine Zersetzung bei bestimmungsgemäßer Verwendung.

· **10.3 Möglichkeit gefährlicher Reaktionen** Keine gefährlichen Reaktionen bekannt.

· **10.4 Zu vermeidende Bedingungen** Keine weiteren relevanten Informationen verfügbar.

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# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

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(Fortsetzung von Seite 4)

- **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 (Listeneinstufung): schwach wassergefährdend  
Nicht unverdünnt bzw. in größeren Mengen in das Grundwasser, in Gewässer oder in die Kanalisation gelangen lassen.
- **12.5 Ergebnisse der PBT- und vPvB-Beurteilung**
- **PBT:** Nicht anwendbar.
- **vPvB:** Nicht anwendbar.
- **12.6 Andere schädliche Wirkungen** Keine weiteren relevanten Informationen verfügbar.

### ABSCHNITT 13: Hinweise zur Entsorgung

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

### ABSCHNITT 14: Angaben zum Transport

- **14.1 UN-Nummer**
- **ADR, IMDG, IATA** entfällt

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# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

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**Handelsname: PHOSPHATE BUFFER, 0.1M**

(Fortsetzung von Seite 5)

- |  |                  |
|--|------------------|
| <ul style="list-style-type: none"> <li>· <b>14.2 Ordnungsgemäße UN-Versandbezeichnung</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>                   | entfällt         |
| <ul style="list-style-type: none"> <li>· <b>14.3 Transportgefahrenklassen</b></li> <li>· <b>ADR, ADN, IMDG, IATA</b></li> <li>· <b>Klasse</b></li> </ul> | entfällt         |
| <ul style="list-style-type: none"> <li>· <b>14.4 Verpackungsgruppe</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>                                      | entfällt         |
| <ul style="list-style-type: none"> <li>· <b>14.5 Umweltgefahren:</b></li> </ul>  | Nicht anwendbar. |
| <ul style="list-style-type: none"> <li>· <b>14.6 Besondere Vorsichtsmaßnahmen für den Verwender</b></li> </ul>   | Nicht anwendbar. |
| <ul style="list-style-type: none"> <li>· <b>14.7 Massengutbeförderung gemäß Anhang II des MARPOL-Übereinkommens und gemäß IBC-Code</b></li> </ul>        | Nicht anwendbar. |
| <ul style="list-style-type: none"> <li>· <b>UN "Model Regulation":</b></li> </ul>  | 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** Der Stoff ist nicht enthalten.
- **Richtlinie 2011/65/EU zur Beschränkung der Verwendung bestimmter gefährlicher Stoffe in Elektro- und Elektronikgeräten – Anhang II**
- Der Stoff ist nicht enthalten.
- **Nationale Vorschriften:**
- **Wassergefährdungsklasse: WGK 1 (Listeneinstufung):** 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.

- **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)
- 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
- 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

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

Stampato il: 28.07.2021

Revisione: 28.07.2021

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

- **1.1 Identificatore del prodotto**
- **Denominazione commerciale:** PHOSPHATE BUFFER, 0.1M
- **Articolo numero:** 19340-72
- **Numero CAS:**  
7778-77-0
- **Numeri CE:**  
231-913-4
- **1.2 Usi identificati pertinenti della sostanza o della miscela e usi sconsigliati**  
Non sono disponibili altre informazioni.
- **Utilizzazione della Sostanza / del Preparato** Prodotti chimici per laboratorio
- **1.3 Informazioni sul fornitore della scheda di dati di sicurezza**
- **Produttore/fornitore:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Società Italiana Chimici**  
Via Rio Nell Ellba 140  
00138 Rome, Italy  
Tel: 39 06 8800211  
Fax: 39 30 06 8815313  
Web: www.sichim.com
- **Informazioni fornite da:** Product safety department
- **1.4 Numero telefonico di emergenza:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### SEZIONE 2: Identificazione dei pericoli

- **2.1 Classificazione della sostanza o della miscela**
- **Classificazione secondo il regolamento (CE) n. 1272/2008**  
La sostanza non è classificata 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**
- **2.3 Altri pericoli**
- **Risultati della valutazione PBT e vPvB**
- **PBT:** Non applicabile.
- **vPvB:** Non applicabile.

### SEZIONE 3: Composizione/informazioni sugli ingredienti

- **3.1 Caratteristiche chimiche: Sostanze**
- **Numero CAS**  
7778-77-0 diidrogenoortofosfato di potassio

(continua a pagina 2)

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

Stampato il: 28.07.2021

Revisione: 28.07.2021

**Denominazione commerciale: PHOSPHATE BUFFER, 0.1M**

(Segue da pagina 1)

- Numeroli di identificazione
- Numeri CE: 231-913-4

#### **SEZIONE 4: Misure di primo soccorso**

- **4.1 Descrizione delle misure di primo soccorso**
- **Inalazione:** Portare in zona ben areata, in caso di disturbi consultare il medico.
- **Contatto con la pelle:** Generalmente il prodotto non è irritante per la pelle.
- **Contatto con gli occhi:**  
Lavare con acqua corrente per diversi minuti tenendo le palpebre ben aperte. Se persiste il dolore consultare il medico.
- **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:** Adottare provvedimenti antiincendio nei dintorni della zona colpita.
- **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:** Non sono richiesti provvedimenti particolari.

#### **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).  
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.  
Per informazioni relative allo smaltimento vedere Capitolo 13.

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

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

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### 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:** Non Necessario.
- **Ulteriori indicazioni:** Le liste valide alla data di compilazione sono state usate come base.
- **8.2 Controlli dell'esposizione**
- **Mezzi protettivi individuali:**
- **Norme generali protettive e di igiene del lavoro:**
  - Tenere lontano da cibo, bevande e foraggi.
  - Togliere immediatamente gli abiti contaminati.
  - Lavarsi le mani prima dell'intervallo o a lavoro terminato.
  - Evitare il contatto con gli occhi.
  - Evitare il contatto con gli occhi e la pelle.
- **Maschera protettiva:**
  - Nelle esposizioni brevi e minime utilizzare la maschera; nelle esposizioni più intense e durature indossare l'autorespiratore.
- **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.
- **Tempo di permeazione del materiale dei guanti**
  - Richiedere dal fornitore dei guanti il tempo di passaggio preciso il quale deve essere rispettato.
- **Occhiali protettivi:**



Occhiali protettivi a tenuta

### SEZIONE 9: Proprietà fisiche e chimiche

- **9.1 Informazioni sulle proprietà fisiche e chimiche fondamentali**
- **Indicazioni generali**
- **Aspetto:**
- **Forma:** Solido
- **Colore:** Non definito.
- **Odore:** Caratteristico
- **Soglia olfattiva:** Non definito.
- **valori di pH:** Non definito.
- **Cambiamento di stato**
- **Punto di fusione/punto di congelamento:** Non definito.
- **Punto di ebollizione iniziale e intervallo di ebollizione:** Non definito.
- **Punto di infiammabilità:** Non applicabile.

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· <b>Infiammabilità (solidi, gas):</b>	Non applicabile.
· <b>Temperatura di decomposizione:</b>	Non definito.
· <b>Temperatura di autoaccensione:</b>	Non definito.
· <b>Proprietà esplosive:</b>	Prodotto non esplosivo.
· <b>Limiti di infiammabilità:</b>	
· <b>Inferiore:</b>	Non definito.
· <b>Superiore:</b>	Non definito.
· <b>Tensione di vapore:</b>	Non definito.
· <b>Densità a 20 °C:</b>	2,338 g/cm <sup>3</sup>
· <b>Densità relativa</b>	Non definito.
· <b>Densità di vapore:</b>	Non definito.
· <b>Velocità di evaporazione</b>	Non definito.
· <b>Solubilità in/Miscibilità con acqua:</b>	Poco e/o non miscibile.
· <b>Coefficiente di ripartizione: n-ottanolo/acqua:</b>	Non definito.
· <b>Viscosità:</b>	
· <b>Dinamica:</b>	Non definito.
· <b>Cinematica:</b>	Non definito.
· <b>Tenore del solvente:</b>	
· <b>VOC (CE)</b>	0,00 %
· <b>Contenuto solido:</b>	0,0 %
· <b>9.2 Altre informazioni</b>	Non sono disponibili altre informazioni.

### SEZIONE 10: Stabilità e reattività

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

### SEZIONE 11: Informazioni tossicologiche

- **11.1 Informazioni sugli effetti tossicologici**
- **Tossicità acuta** 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.

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- **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) (Classif. secondo le liste): poco pericoloso  
Non immettere nelle acque freatiche, nei corsi d'acqua o nelle fognature non diluito o in grandi quantità.
- **12.5 Risultati della valutazione PBT e vPvB**
- **PBT:** Non applicabile.
- **vPvB:** Non applicabile.
- **12.6 Altri effetti avversi** Non sono disponibili altre informazioni.

### SEZIONE 13: Considerazioni sullo smaltimento

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

### SEZIONE 14: Informazioni sul trasporto

- |  |                  |
|--|------------------|
| · <b>14.1 Numero ONU</b>                               |                  |
| · <b>ADR, IMDG, IATA</b>                               | non applicabile  |
| · <b>14.2 Nome di spedizione dell'ONU</b>              |                  |
| · <b>ADR, IMDG, IATA</b>                               | non applicabile  |
| · <b>14.3 Classi di pericolo connesso al trasporto</b> |                  |
| · <b>ADR, ADN, IMDG, IATA</b>                          |                  |
| · <b>Classe</b>  | non applicabile  |
| · <b>14.4 Gruppo di imballaggio</b>                    |                  |
| · <b>ADR, IMDG, IATA</b>                               | non applicabile  |
| · <b>14.5 Pericoli per l'ambiente:</b>                 | Non applicabile. |

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- |   |                         |
|---|-------------------------|
| · <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** La sostanza non è contenuta
  - **Direttiva 2011/65/UE sulla restrizione dell'uso di determinate sostanze pericolose nelle apparecchiature elettriche ed elettroniche - Allegato II**  
 La sostanza non è contenuta
- **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.*

· **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  
 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

IT

# 물질안전보건자료

## GHS에 따라

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### 1 화학제품과 회사에 관한 정보

- 제품 식별자
  - 제품명: **PHOSPHATE BUFFER, 0.1M**
  - 상품번호: 19340-72
  - CAS-번호  
7778-77-0
  - EC 의번호:  
231-913-4
  - 해당 순물질이나 혼합물의 관련 하위용도 및 사용금지용도 추가적인 정보가 존재하지 않습니다.
  - 제품의 권고 용도와 사용상의 제한: 실험실 화학품
  - 안전데이터표(Safety Data Sheet)내 공급업체 관련 상세 정보
  - 제조자/수입자/유통업자 정보:  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
  - Samchang Commercial Co., Ltd.  
Yeo Eui Do  
PO Box 1110  
Seoul, Korea  
Tel: 82 2 703 3040  
Fax: 82 2 717 3298
- 
- Daedok Science, Co. Ltd.  
34141 E10 Korea Advanced Institute of Science  
Guseong-Dong, Yuseong-gu, Daejeon,  
Korea  
Phone: 82 42 710 2091  
Fax: 82 42 367 0005  
Website: www.labsmro.com
  - 추가적인 정보 획득 가능: Product safety department
  - 비상연락 전화번호:  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2 유해성·위험성

- 순물질 또는 혼합물의 분류



심한 눈 손상성/눈 자극성 - 구분 2 H319 눈에 심한 자극을 일으킴

- 라벨표기 요소
- GHS 라벨 요소

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

(2 쪽에 계속)

# 물질안전보건자료

## GHS에 따라

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**제품명: PHOSPHATE BUFFER, 0.1M**

(1 쪽부터계속)

### · 그림문자



GHS07

- **신호어 경고**
- **유해.위험 문구**  
눈에 심한 자극을 일으킴
- **예방조치 문구**  
취급 후에는 취급 부위를 철저히 씻으시오.  
눈 보호대 / 안면 보호구 착용.  
눈에 물으면 몇 분간 물로 조심해서 씻으시오. 가능하면 콘택트렌즈를 제거하시오. 계속 씻으시오.  
눈에 대한 자극이 지속되면 의학적인 조언·주의를 받으시오.  
건조한 장소에 보관하시오. 밀폐된 용기에 보관하시오.  
(지방/지역/국가/국제 규정에 따라) 에 내용물/용기를 폐기하시오.
- **기타 유해성**
- **PBT(잔류성, 생물농축성, 독성 물질) 및 vPvB(고 잔류성, 고 생물농축성 물질) 평가 결과**
- **PBT(잔류성, 생물농축성, 독성 물질):** 해당사항 없음.
- **vPvB(고 잔류성, 고 생물농축성 물질):** 해당사항 없음.

## 3 구성성분의 명칭 및 함유량

- **화 학 적 특 성:** 화학물질
- **CAS-번호표시**  
7778-77-0 potassium dihydrogenorthophosphate
- **식별 번호**
- **EC 의번호:** 231-913-4

## 4 응급조치 요령

- **응급조치요령 내용**
- **흡입했을 때:** 신선한 공기를 쉼, 통증이 있을 때는 의료진의 도움을 구한다.
- **피부에 접촉했을 때:** 일반적으로 이제품은 피부에 자극적이지 않다.
- **눈에 들어갔을 때:** 흐르는 물에 눈을 몇분동안 씻어내고나서, 증상이 지속될 경우에는 의사와 상담한다
- **먹었을 때:** 증상이 지속될 경우에는 의사와 상담한다.
- **기타 의사의 주의사항:**
- **가장 중요한 급·만성 증상 및 영향** 추가적인 정보가 존재하지 않습니다.
- **즉각적인 의료처치 및 특별치료가 필요함을 시사하는 징후** 추가적인 정보가 존재하지 않습니다.

## 5 폭발·화재시 대처방법

- **소화제**
- **적절한 소화제:** 주변 환경에 맞는 화재 진화방법을 사용한다.
- **본 화학물질이나 혼합물에서 발생하는 특별 유해성** 추가적인 정보가 존재하지 않습니다.
- **소방관에 대한 권고사항**
- **화재 진압 시 착용할 보호구 및 예방조치:** 특별한 조치가 필요없음.

KR

(3 쪽에계속)

# 물질안전보건자료

## GHS에 따라

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**제품명: PHOSPHATE BUFFER, 0.1M**

(2 쪽부터 계속)

### 6 누출 사고 시 대처방법

- **개인적 예방조치, 보호장비 및 응급처치 절차 필요없음.**
- **환경 관련 예방조치:** 하수도망/해수면위의물/지하수로도달하지않게한다.
- **밀폐 및 정화 방법과 소재:**  
액체가 혼합된 물 질(모래, 규 조 토, 산 성 결 합 물, 일 반 결 합 물, 톱 밥)에 흡입되도록 한다.  
충분한 환기가 되도록 한다.
- **타 섹션 참조**  
안 전 관 리 에 대 한 정 보 는 제 7 장 을 참 고 하 시 오.  
개 인 보 호 장 비 에 대 한 정 보 는 제 8 장 을 참 고 하 시 오.  
쓰 레 기 처 리 에 대 한 정 보 는 제 13 장 을 참 고 하 시 오.

### 7 취급 및 저장방법

- **취급:**
- **안전 취급을 위한 예방조치**  
작업장에서는 통풍이 잘 되고/습기 제거가 잘 되게 주의한다.  
연무질이 형성되는 것을 피한다.
- **화재 및 폭발 사고 예방대책에 관한 정보:** 특별한 조치가 필요없음.
- **혼합위험성 등 안전 저장 조건**
- **보관:**
- **안전한 저장 방법:** 특별한 요구사항이 없음.
- **하나의 공동 보관 시설에 대한 보관 관련 정보:** 필요없음
- **보관 조건에 관한 추가적인 정보:** 용기를 새지 않게 밀폐한 채 보관한다.
- **구체적 최종 사용자** 추가적인 정보가 존재하지 않습니다.

### 8 노출방지 및 개인보호구

- **첨단시설 디자인에 대한 추가정보:** 더 이상 의 자료는 없음. 항 목 7 을 참 고 하 시 오.
- **통제 변수**
- **화학물질의 노출기준, 생물학적 노출기준 등:** 생략
- **추 가 정 보:** 제 조 할 당 시 에 유 효 한 목 록 을 기 초 로 사 용 했 다.
- **노출 통제**
- **개인 보호구**
- **일반적보호조치및위생조치:**  
식료품, 음료수와 사료로부터 멀리 떨어져 두어 놓는다.  
더러워지거나 음료수가 묻은 옷은 즉시 탈의한다.  
휴식 전 이 나 작 업 이 끝 날 때 마 다 손 을 씻 는 다.  
눈과 의 접 촉 을 피 한 다.  
눈 과 피 부 와 의 접 촉 은 피 한 다.
- **호흡기 보호:**  
단 시간 또는 경미한 오염의 경우에는 호흡여과기를 사용한다. 심각한 또는 장기간 노출시에는 호흡보호장비를 사용한다.
- **손 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.
- **장갑의재료**  
적합한 장갑의 선정은 재질 차이뿐 아니라 품질 기준의 차이도 고려하여 이루어져야 하고 제조업자에 따라서도 다르게 선정되어야 한다.

(4 쪽에 계속)

KR

# 물질안전보건자료

## GHS에 따라

인쇄일자: 2021.07.28

개정: 2021.07.28

**제품명: PHOSPHATE BUFFER, 0.1M**

- 장갑재료의 투과시간 정확한관통시간은보호장갑제조자에의하여인지되고, 준수되어야한다. (3 쪽부터계속)
- 눈 보호:



팍조이는보안경

### 9 물리화학적 특성

· 기본 물리 및 화학적 특성에 대한 정보	
· 일반정보	
· 외형	
· 물리적 상태:	고체
· 색:	알맞지않다.
· 냄새:	특색있는
· 후각역치	알맞지않다.
· pH:	알맞지않다.
· 상태변화	
· 녹는점/어는점:	맞지않는
· 초기 끓는점과 끓는점 범위:	맞지않는
· 인화점:	해당사항 없음.
· 인화성(고체, 기체):	해당사항 없음.
· 분해 온도:	알맞지않다.
· 자기점화:	알맞지않다.
· 폭발위험:	이제품은폭발위험성이없다
· 인화 또는 폭발 범위의 상한/하한	
· 아래로:	알맞지않다.
· 위로:	알맞지않다.
· 증기압:	알맞지않다.
· 밀도 의경우 20 °C:	2.338 g/cm <sup>3</sup>
· 비중:	알맞지않다.
· 증기밀도:	알맞지않다.
· 증발 속도:	알맞지않다.
· 용해도:	
· 물:	각각의경우에따라서는거의혼합할수없는
· n 옥탄올/물 분배계수:	알맞지않다.
· 점도:	
· 역학성:	알맞지않다.
· 동점성:	알맞지않다.
· 용매내용물	
· VOC (EU)	0.00 %
· 고체의 함량:	0.0 %

(5 쪽에계속)

# 물질안전보건자료

## GHS에 따라

인쇄일자: 2021.07.28

개정: 2021.07.28

**제품명: PHOSPHATE BUFFER, 0.1M**

(4 쪽부터계속)

· 기타 정보

추가적인 정보가 존재하지 않습니다.

### 10 안정성 및 반응성

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

### 11 독성에 관한 정보

- 독성학적 영향에 대한 정보
- 급성 독성:
- 일차적 자극 효과:
- 피부 부식성 또는 자극성: 무자극
- 심한 눈 손상 또는 자극성: 자극
- 감각화: 민감한영향이없는것으로알려져있다.

### 12 환경에 미치는 영향

- 독성
- 수생독성: 추가적인 정보가 존재하지 않습니다.
- 지속성 및 분해성 추가적인 정보가 존재하지 않습니다.
- 환경 시스템에서의 행동:
- 생물농축 잠재성 추가적인 정보가 존재하지 않습니다.
- 토양내 이동성 추가적인 정보가 존재하지 않습니다.
- 추가적인 생태학 정보:
- 일반 특징:
  - 수질오염등급 1 (목록분류): 약하게수질오염이된
  - 희석시키지않은채대량으로지하수나, 하천으로그리고하수도망에도달하지않게한다.
- PBT(잔류성, 생물농축성, 독성 물질) 및 vPvB(고 잔류성, 고 생물농축성 물질) 평가 결과
- PBT(잔류성, 생물농축성, 독성 물질): 해당사항 없음.
- vPvB(고 잔류성, 고 생물농축성 물질): 해당사항 없음.
- 기타 부작용 추가적인 정보가 존재하지 않습니다.

### 13 폐기시 주의사항

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

# 물질안전보건자료 GHS에 따라

인쇄일자: 2021.07.28

개정: 2021.07.28

**제품명: PHOSPHATE BUFFER, 0.1M**

(5 쪽부터계속)

## 14 운송에 필요한 정보

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

## 15 법적 규제현황

· 산업안전보건법에 의한 규제:	
· 제조 등 금지물질:	성분이포함되어있지않다
· 허가대상물질:	성분이포함되어있지않다
· 관리대상유해물질:	성분이포함되어있지않다
· 작업환경측정 대상 유해인자	성분이포함되어있지않다
· 특수건강진단 대상 유해인자	성분이포함되어있지않다
· 해당 순물질 또는 혼합물에 대한 안전, 보건 및 환경 규제/법률	
· Korean Existing Chemical Inventory	KE-28622
· 화학물질관리법	
· 사고대비물질	성분이포함되어있지않다
· 금지물질	성분이포함되어있지않다
· 제한물질	성분이포함되어있지않다
· 유독물질	성분이포함되어있지않다

(7 쪽에계속)



# 물질안전보건자료

## GHS에 따라

인쇄일자: 2021.07.28

개정: 2021.07.28

**제품명: PHOSPHATE BUFFER, 0.1M**

(6 쪽부터계속)

**· 허가물질**

성분이포함되어있지않다

**· 등록 또는 신고 면제대상 화학물질**

성분이포함되어있지않다

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

성분이포함되어있지않다

**· 중점관리물질의 지정**

**· 표1 중점관리물질(제2조 관련)**

성분이포함되어있지않다

**· 표2 중점관리물질(제2조 관련)**

성분이포함되어있지않다

**· GHS 라벨 요소**

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

**· 그림문자**



GHS07

**· 신호어 경고**

**· 유해.위험 문구**

눈에 심한 자극을 일으킴

**· 예방조치 문구**

취급 후에는 취급 부위를 철저히 씻으시오.

눈 보호대 / 안면 보호구 착용.

눈에 묻으면 몇 분간 물로 조심해서 씻으시오. 가능하면 콘택트렌즈를 제거하시오. 계속 씻으시오.

눈에 대한 자극이 지속되면 의학적인 조언·주의를 받으시오.

건조한 장소에 보관하시오. 밀폐된 용기에 보관하시오.

(지방/지역/국가/국제 규정에 따라) 에 내용물/용기를 폐기하시오.

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

### 16 그 밖의 참고사항

이보고는우리지식에대한오늘날의상태에대하여평가하고있다, 하지만이보고서는생산특성에관한보증은 기술하지않았으며계약적인법률관계에기반을두고있지도않다

**· 최초 작성일자:** 2021.07.28

**· 개정 횟수 및 최종 개정일자:** 1 / 2021.07.28

**· 약어와 두문자어:**

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

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

# Helaiian Data Keselamatan

## menurut P.U.(A) 310/2013

Tarikh cetak 28.07.2021

Disemak semula pada 28.07.2021

### 1 Pengenalan bahan kimia berbahaya dan pembekal

- **Pengenal pasti produk**
- **Nama dagang:** *PHOSPHATE BUFFER, 0.1M*
- **Nombor artikel:** 19340-72
- **Nombor CAS:**  
7778-77-0
- **Nombor EC:**  
231-913-4
- **Kegunaan yang disarankan bagi bahan dan sekatan penggunaan** Tiadak maklumat lanjut yang diperoleh.
- **Penggunaan bahan/sediaan** Bahan kimia makmal
- **Perincian pembekal** risalah data keselamatan
- **Pengilang/Pembekal:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Maklumat lanjut dapat diperoleh daripada:** Product safety department
- **Nombor telefon kecemasan:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2 Pengenalan bahaya

- **Pengelasan bahan atau campuran** Bahan ini tidak dikelaskan menurut Sistem Terharmoni Global (GHS).
- **Melabelkan unsur**
- **Unsur label GHS** Tidak sah
- **Piktogram bahaya** Tidak sah
- **Kata isyarat** Tidak sah
- **Pernyataan Bahaya** Tidak sah
- **Bahaya lain**
- **Keputusan penilaian PBT dan vPvB**
- **PBT:** Tidak berkenaan
- **vPvB:** Tidak berkenaan

### 3 Komposisi dan maklumat mengenai ramuan bahan kimia berbahaya

- **Ciri kimia:** *Bahan*
- **Keterangan No. CAS**  
7778-77-0 potassium dihydrogenorthophosphate
- **Nombor pengenaltastian**
- **Nombor EC:** 231-913-4

### 4 Langkah-langkah pertolongan cemas

- **Keterangan langkah pertolongan cemas**
- **Jika tersedut:** Berikan udara bersih, hubungi doktor jika terdapat aduan.
- **Jika terkena kulit:** Biasanya produk tidak merengsakan kulit.

(Bersambung ke halaman 2)

## Helaiian Data Keselamatan menurut P.U.(A) 310/2013

Tarikh cetak 28.07.2021

Disemak semula pada 28.07.2021

**Nama dagang: PHOSPHATE BUFFER, 0.1M**

(Sambungan halaman 1)

- **Jika terkena mata:**  
Bilas mata sambil membukanya di bawah air yang mengalir selama beberapa minit. Jika gejala berterusan, hubungi doktor.
- **Jika tertelan:** Jika gejala berterusan, hubungi doktor.
- **Maklumat untuk doktor:**
- **Gejala dan kesan paling penting, akut dan lewat** Tiadak maklumat lanjut yang diperoleh.
- **Arahan bagi apa-apa rawatan perubatan dan rawatan khas yang diperlukan**  
Tiadak maklumat lanjut yang diperoleh.

### 5 Langkah-langkah pemadaman kebakaran

- **Bahan pemadam api**
- **Agen pemadam yang sesuai:** Gunakan kaedah pemadaman kebakaran yang sesuai dengan keadaan sekeliling.
- **Bahaya khusus yang timbul daripada bahan atau campuran** Tiadak maklumat lanjut yang diperoleh.
- **Panduan kepada pemadam kebakaran**
- **Kelengkapan perlindungan:** Tiada langkah khusus diperlukan.

### 6 Langkah-langkah pelepasan tidak sengaja

- **Langkah perlindungan diri, kelengkapan pelindung dan prosedur kecemasan** Tidak diperlukan.
- **Langkah perlindungan alam sekitar:** Jangan biarkannya memasuki pembentung/air permukaan atau tanah.
- **Kaedah dan bahan untuk pembendungan dan pembersihan:**  
Serap dengan bahan cecair pengikat (pasir, diatomit, pengikat asid, pengikat semesta, habuk papan)  
Pastikan pengalihudaraan mencukupi.
- **Rujukan ke bahagian lain**  
Lihat Bahagian 7 untuk maklumat pengendalian yang selamat.  
Lihat Bahagian 8 untuk maklumat kelengkapan perlindungan diri.  
Lihat Bahagian 13 untuk maklumat pelupusan.

### 7 Pengendalian dan penyimpanan

- **Pengendalian:**
- **Langkah perlindungan untuk pengendalian selamat**  
Pastikan pengalihudaraan/ekzos yang mencukupi di tempat kerja.  
Elakkan pembentukan aerosol.
- **Maklumat kebakaran dan perlindungan daripada letupan:** Tiada langkah berjaga-jaga yang khusus diperlukan.
- **Keadaan untuk penyimpanan selamat, termasuk apa-apa ketakserasian**
- **Penyimpanan:**
- **Keperluan yang mesti dipenuhi oleh bilik stor dan ruang simpanan.** Tiada keperluan khusus.
- **Maklumat penyimpanan di dalam satu tempat penyimpanan yang biasa:** Tidak diperlukan.
- **Maklumat lanjut tentang syarat penyimpanan:** Pastikan bekas sentiasa bertutup rapat.
- **Kegunaan akhir yang khusus** Tiadak maklumat lanjut yang diperoleh.

### 8 Kawalan pendedahan dan perlindungan diri

- **Maklumat tambahan tentang reka bentuk kemudahan teknikal:** Tiada maklumat lanjut, lihat perkara 7.
- **Parameter kawalan**
- **Ramuan dengan nilai had yang memerlukan pemantauan di tempat kerja:** Tidak diperlukan.
- **Maklumat tambahan:** Senarai yang sah semasa pembuatan digunakan sebagai asas.

(Bersambung ke halaman 3)

## Helaiian Data Keselamatan menurut P.U.(A) 310/2013

Tarikh cetak 28.07.2021

Disemak semula pada 28.07.2021

**Nama dagang: PHOSPHATE BUFFER, 0.1M**

(Sambungan halaman 2)

- **Kawalan pendedahan**
- **Kelengkapan perlindungan diri:**
- **Langkah perlindungan dan kebersihan am:**  
 Jauhkan daripada makanan, minuman dan makanan haiwan.  
 Segera tanggalkan semua pakaian yang tercemar dan kotor.  
 Basuh tangan sebelum berhenti rehat dan apabila kerja selesai.  
 Elakkan daripada terkena mata.  
 Elakkan daripada terkena mata dan kulit.
- **Perlindungan pernafasan:**  
 Jika berlaku pendedahan sekejap atau sedikit pencemaran, gunakan alat penapis pernafasan. Jika berlaku pendedahan yang intensif atau berpanjangan, gunakan alat pernafasan perlindungan serba lengkap.
- **Perlindungan tangan:**  
 Bahan sarung tangan hendaklah telus dan kalis terhadap produk/bahan/sediaan.  
 Oleh sebab tiada ujian yang dijalankan, maka tiada syor bagi bahan sarung tangan yang boleh diberikan untuk produk/sediaan/campuran kimia.  
 Pemilihan bahan sarung tangan berdasarkan waktu penembusan, kadar pembauran dan degradasi.
- **Bahan sarung tangan**  
 Pemilihan sarung tangan yang sesuai bukan hanya bergantung pada bahannya, tetapi juga tanda kualiti lainnya serta perbezaannya daripada satu pengeluaran dengan pengeluaran yang lain.
- **Jangka masa penyerapan bahan sarung tangan**  
 Waktu kemunculan yang tepat hendaklah diperoleh pengeluaran sarung tangan pelindung dan hendaklah dipatuhi.
- **Perlindungan mata:**



Gogal bertutup rapat

### 9 Sifat fizikal dan kimia

- |  |                                  |
|--|----------------------------------|
| · <b>Maklumat tentang ciri fizik dan kimia</b> |                                  |
| · <b>Maklumat Am</b>                           |                                  |
| · <b>Rupa:</b>                                 |                                  |
| · <b>Bentuk:</b>                               | pepejal                          |
| · <b>Warna:</b>                                | Tidak ditentukan.                |
| · <b>Bau:</b>                                  | Ciri                             |
| · <b>Ambang bau</b>                            | Tidak ditentukan.                |
| · <b>Nilai pH:</b>                             | Tidak ditentukan.                |
| · <b>Perubahan pada keadaan</b>                |                                  |
| · <b>Takat lebur/takat beku</b>                | Tidak ditentukan.                |
| · <b>Takat didih awal dan julat didih</b>      | Tidak ditentukan                 |
| · <b>Takat kilat:</b>                          | Tidak berkenaan                  |
| · <b>Kemudahbakaran (pepejal, gas)</b>         | Tidak berkenaan                  |
| · <b>Suhu penguraian:</b>                      | Tidak ditentukan.                |
| · <b>Suhu pengautocucuhan</b>                  | Tidak ditentukan.                |
| · <b>Bahaya letupan:</b>                       | Produk tidak ada bahaya letupan. |
| · <b>Had letupan :</b>                         |                                  |
| · <b>Bawah:</b>                                | Tidak ditentukan.                |

(Bersambung ke halaman 4)

## Helaiian Data Keselamatan menurut P.U.(A) 310/2013

Tarikh cetak 28.07.2021

Disemak semula pada 28.07.2021

**Nama dagang: PHOSPHATE BUFFER, 0.1M**

(Sambungan halaman 3)

· Atas:	Tidak ditentukan.
· Tekanan wap:	Tidak ditentukan.
· Ketumpatan pada 20 °C:	2.338 g/cm <sup>3</sup>
· Ketumpatan bandingan	Tidak ditentukan.
· Ketumpatan wap	Tidak ditentukan.
· Kadar penyejatan	Tidak ditentukan.
· Keterlarutan dalam / Keterlarutcampuran dengan Air:	Tidak terlarut campur atau sukar bercampur.
· Pekali sekatan: n-oktanol/air	Tidak ditentukan.
· Kelikatan:	Tidak ditentukan.
· Dinamik:	Tidak ditentukan.
· Kinematik:	Tidak ditentukan.
· Kandungan pepejal:	0.0 %
· Maklumat lain	Tiada maklumat lanjut yang diperoleh.

### 10 Kestabilan dan kereaktifan

- Kereaktifan Tiada maklumat lanjut yang diperoleh.
- Kestabilan kimia
- Penguraian terma/keadaan yang perlu dielakkan: Tiada penguraian jika digunakan mengikut spesifikasi.
- Kemungkinan tindak balas berbahaya Tiada tindak balas berbahaya yang diketahui.
- Keadaan yang perlu dielakkan Tiada maklumat lanjut yang diperoleh.
- Bahan tidak serasi: Tiada maklumat lanjut yang diperoleh.
- Produk penguraian yang berbahaya: Tiada produk penguraian berbahaya yang diketahui.

### 11 Maklumat toksikologi

- Maklumat tentang kesan toksikologi
- Ketoksikan akut:
- Kesan kerengsaan primer:
- Kakisan atau kerengsaan kulit Tiada kesan merengsa.
- Kerosakan atau kerengsaan mata yang serius Kesan merengsa.
- Pemekaan pernafasan / kulit Tiada kesan pemekaan yang diketahui.

### 12 Maklumat ekologi

- Ketoksikan
- Ketoksikan akuatik: Tiada maklumat lanjut yang diperoleh.
- Keterusan dan keterdegradasikan Tiada maklumat lanjut yang diperoleh.
- Kelakuan dalam sistem alam sekitar:
- Potensi bioakumulatif Tiada maklumat lanjut yang diperoleh.
- Mobiliti di dalam tanah Tiada maklumat lanjut yang diperoleh.
- Maklumat tambahan ekologi:
- Nota am:  
Bahaya air kelas 1 (Peraturan Jerman) (Penilaian mengikut senarai): sedikit berbahaya kepada air  
Jangan biarkan produk yang tidak dicairkan atau dalam kuantiti yang banyak memasuki air tanah, saluran air atau sistem pembetungan.

(Bersambung ke halaman 5)

## Helaiian Data Keselamatan menurut P.U.(A) 310/2013

Tarikh cetak 28.07.2021

Disemak semula pada 28.07.2021

**Nama dagang: PHOSPHATE BUFFER, 0.1M**

(Sambungan halaman 4)

- **Keputusan penilaian PBT dan vPvB**
- **PBT:** Tidak berkenaan
- **vPvB:** Tidak berkenaan
- **Kesan buruk yang lain** Tiada maklumat lanjut yang diperolehi.

### 13 Maklumat pelupusan

- **Kaedah rawatan sisa**
- **Syor:**  
Tidak boleh dilupuskan bersama dengan sampah isi rumah. Jangan biarkan produk memasuki sistem pembentungan.
- **Pembungkusan yang tidak bersih:**
- **Syor:** Pelupusan mestilah dijalankan menurut peraturan rasmi

### 14 Maklumat pengangkutan

· <b>Nombor UN</b>	
· <b>ADR, IMDG, IATA</b>	Tidak sah
· <b>Nama penghantaran UN yang betul</b>	
· <b>ADR, IMDG, IATA</b>	Tidak sah
· <b>pengangkutan kelas bahaya</b>	
· <b>ADR, ADN, IMDG, IATA</b>	
· <b>Kelas</b>	Tidak sah
· <b>Kumpulan pembungkusan</b>	
· <b>ADR, IMDG, IATA</b>	Tidak sah
· <b>Hazard persekitaran:</b>	Tidak berkenaan
· <b>Langkah perlindungan khas untuk pengguna</b>	Tidak berkenaan
· <b>Pengangkutan dalam pukal menurut Lampiran II MARPOL73/78 dan Kod IBC</b>	Tidak berkenaan
· <b>"Peraturan Model" UN:</b>	Tidak sah

### 15 Maklumat pengawalseliaan

- **Peraturan/undang-undang keselamatan, kesihatan dan persekitaran khusus untuk bahan atau campuran tersebut**

- **Senarai Rujukan Bahan Berbahaya Alam Sekitar**

Bahan tidak disenaraikan.

- **Unsur label GHS** Tidak sah
- **Piktogram hazard** Tidak sah
- **Perkataan isyarat** Tidak sah
- **Pernyataan hazard** Tidak sah
- **Penilaian keselamatan bahan kimia:** Penilaian Keselamatan Bahan Kimia belum dilakukan.

MY

(Bersambung ke halaman 6)

## **Helaiian Data Keselamatan** **menurut P.U.(A) 310/2013**

Tarikh cetak 28.07.2021

Disemak semula pada 28.07.2021

**Nama dagang: PHOSPHATE BUFFER, 0.1M**

(Sambungan halaman 5)

### **16 Maklumat lain**

*Maklumat ini berdasarkan maklumat kami yang terkini. Walau bagaimanapun, ini tidak akan menjadi jaminan bagi apa-apa ciri produk yang khusus dan tidak akan mewujudkan hubungan kontraktual yang sah dari segi undang-undang.*

· **Singkatan dan akronim:**

*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*

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

*PBT: Persistent, Bioaccumulative and Toxic*

*vPvB: very Persistent and very Bioaccumulative*

MY



# 安全資料表

## 根據 危害性化學品標示及通識規則

打印日期 2021.07.28

在 2021.07.28 審核

### 1 化學品與廠商資料

- 產品識別者
- 化學品中文(英文)名稱, 化學品俗名或商品名: PHOSPHATE BUFFER, 0.1M
- 商品編號: 19340-72
- CAS 編號:  
7778-77-0
- 歐盟編號:  
231-913-4
- 相應純物質或者混合物的相關下位用途及禁止用途 無相關詳細資料。
- 原材料的應用/準備工作進行 實驗室化學物
- 安全技術說明書內供應商詳細信息
- 企業名稱:  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- 可獲取更多資料的部門: Product safety department
- 緊急聯繫電話號碼:  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2 危害辨識資料

- 緊急情況概述:  
未決定. 固體, 造成嚴重眼睛刺激。

- GHS危險性類別



嚴重損傷/刺激眼睛物質 第2級 H319 造成嚴重眼睛刺激

- 標籤因素
- GHS標籤元素 本化學物質根據化學物質分類及標記全球協調制度(GHS)進行了分類及標記。
- 圖示



GHS07

- 名稱 警告
- 危險字句  
造成嚴重眼睛刺激
- 警戒字句
- 預防措施  
作業後徹底清洗。  
戴防護眼罩/防護面具。
- 事故響應  
如進入眼睛：用水小心清洗數分鐘。如帶隱形眼鏡且可方便地取出，取出隱型眼鏡。繼續清洗。  
如仍覺眼睛有刺激：求醫治療/諮詢。

(在 2 頁繼續)

# 安全資料表

## 根據 危害性化學品標示及通識規則

打印日期 2021.07.28

在 2021.07.28 審核

化學品中文(英文)名稱, 化學品俗名或商品名 : PHOSPHATE BUFFER, 0.1M

(在 1 頁繼續)

- **安全貯存**  
存放於乾燥處和/或密閉的容器中。
- **廢棄處置**  
按照地方/區域/國家/國際法規處理內容物之廢棄/容器。
- **其他有害性**
- **PBT(殘留性、生物濃縮性、毒性物質) 及 vPvB(高殘留性、高生物濃縮性物質) 評價結果**
- **PBT(殘留性、生物濃縮性、毒性物質)** 不適用的
- **vPvB(高殘留性、高生物濃縮性物質):** 不適用的

### 3 成分辨識資料

- **純品**
- **CAS號 化學名, 通用名**  
7778-77-0 磷酸二氫鉀
- **鑒別編號 :**
- **歐盟編號:** 231-913-4

### 4 急救措施

- **應急措施要領**
- **吸入:** 供給新鮮空氣;如果病人感到不適時要詢問醫生。
- **皮膚接觸:** 一般的產品不會刺激皮膚。
- **眼睛接觸:** 張開眼睛在流水下沖洗數分鐘. 如果症狀仍然持續,請諮詢醫生。
- **食入:** 如果症狀仍然持續,請諮詢醫生。
- **給醫生的資料:**
- **最重要的急慢性症狀及其影響** 無相關詳細資料。
- **需要及時的醫療處理及特別處理的症狀** 無相關詳細資料。

### 5 滅火措施

- **滅火方法**
- **滅火的方法和滅火劑:** 使用適合四周環境的滅火措施。
- **特別危險性** 無相關詳細資料。
- **特殊滅火方法**
- **消防人員特殊的防護裝備:** 沒有要求特別的措施。

### 6 洩漏處理方法

- **保護措施** 沒有要求。
- **環境保護措施:** 切勿讓其進入下水道/水面或地下水。
- **密封及淨化方法和材料:**  
吸收液體粘合原料 (沙粒、矽藻土、酸性粘合劑、通用粘合劑、鋸屑)。  
確保有足夠的通風裝置。
- **參照其他部分**
- 有關安全處理的資料請參閱第 7 節。
- 有關個人保護裝備的資料請參閱第 8 節。
- 有關棄置的資料請參閱第 13 節。

-TW-

(在 3 頁繼續)

# 安全資料表

## 根據 危害性化學品標示及通識規則

打印日期 2021.07.28

在 2021.07.28 審核

化學品中文(英文)名稱, 化學品俗名或商品名 : PHOSPHATE BUFFER, 0.1M

(在 2 頁繼續)

### 7 安全處置與儲存方法

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

### 8 暴露預防措施

- **工程控制方法:** 沒有進一步數據,見第 7 項。
- **控制變數**
- **在工作場需要監控的限值成分** 不要求。
- **額外的資料:** 制作期間有效的清單將作為基礎來使用。
- **遺漏控制**
- **個人防護設備:**
- **一般保護和衛生措施:**  
遠離食品、飲料和飼料。  
立即除去所有的不潔的和被汙染的衣服。  
在休息之前和工作完畢後請清洗雙手。  
避免和眼睛接觸。  
避免和眼睛及皮膚接觸。
- **呼吸系統防護:**  
如果會短暫接觸或在低汙染的情況下,請使用呼吸過濾裝置。如果會深入或較長時間接觸,請使用獨立的呼吸保護裝置。
- **手防護:**  
手套的物料必須是不滲透性的,且能抵抗該產品/物質/添加劑。  
基於缺乏測試,對於產品/制劑/化學混合物,並不會提供手套材料的建議  
選擇手套材料時,請注意材料的滲透時間,滲濾率和降解參數
- **手套材料** 選擇合適的手套不單取決於材料,亦取決於質量特征,以及來自哪一間生產廠家
- **滲入手套材料的時間** 請向勞保手套生產廠家獲取準確的破裂時間並觀察實際的破裂時間
- **眼睛防護:**



密封的護目鏡

### 9 物理及化學性質

- **有關基本物理及化學特性的資訊**
- **一般說明**
- **外觀:**
- **形狀:** 固體

(在 4 頁繼續)

# 安全資料表

## 根據 危害性化學品標示及通識規則

打印日期 2021.07.28

在 2021.07.28 審核

化學品中文(英文)名稱, 化學品俗名或商品名 : PHOSPHATE BUFFER, 0.1M

(在 3 頁繼續)

· 顏色:	未決定.
· 氣味:	有特性的
· 嗅覺閾限	未決定.
· pH值:	未決定.
· 條件的更改	
· 熔點:	未確定的
· 沸點/初沸點和沸程:	未確定的
· 閃點:	不適用的
· 可燃性 (固體、氣體):	不適用的
· 分解溫度:	未決定.
· 自燃溫度:	未決定.
· 爆炸的危險性:	該產品並沒有爆炸的危險
· 爆炸極限:	
· 較低:	未決定.
· 較高:	未決定.
· 蒸氣壓:	未決定.
· 密度 在 20 °C:	2.338 g/cm <sup>3</sup>
· 相對密度	未決定.
· 蒸氣密度	未決定.
· 蒸發速率	未決定.
· 溶解性	
· 水:	不能拌和的或難以拌和
· n-辛醇/水分配係數:	未決定.
· 黏性:	
· 動態:	未決定.
· 運動學的:	未決定.
· 固體成份:	0.0 %
· 其他資訊	無相關詳細資料。

## 10 安定性及反應性

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

TW

(在 5 頁繼續)

# 安全資料表

## 根據 危害性化學品標示及通識規則

打印日期 2021.07.28

在 2021.07.28 審核

化學品中文(英文)名稱, 化學品俗名或商品名 : PHOSPHATE BUFFER, 0.1M

(在 4 頁繼續)

### 11 毒性資料

- 對毒性學影響的資訊
- 急性毒性:
- 主要的刺激性影響:
- 皮膚: 沒有刺激性影響.
- 在眼睛上面: 刺激的影響.
- 致敏作用: 沒有已知的敏化影響.

### 12 生態資料

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

### 13 廢棄處置方法

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

### 14 運送資料

· 聯合國危險貨物編號(UN號)	
· ADR, IMDG, IATA	無效
· UN適當裝船名	
· ADR, IMDG, IATA	無效
· 運輸危險等級	
· ADR, ADN, IMDG, IATA	
· 級別	無效
· 包裝組別	
· ADR, IMDG, IATA	無效
· 危害環境:	不適用的

(在 6 頁繼續)

# 安全資料表

## 根據 危害性化學品標示及通識規則

打印日期 2021.07.28

在 2021.07.28 審核

化學品中文(英文)名稱, 化學品俗名或商品名 : PHOSPHATE BUFFER, 0.1M

(在 5 頁繼續)

- |   |      |
|---|------|
| · 用戶特別預防措施  | 不適用的 |
| · MARPOL73/78(針對船舶引起的海洋污染預防協約) 附件書2及根據IBC Code(國際裝船貨物編碼)的大量運送 | 不適用的 |
| · UN "標準規定":  | 無效   |

### 15 法規資料

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

- 附表一-對於未滿十八歲及妊娠或分娩後未滿一年女性勞工工具危害性之化學品

沒有列出物質.

- 第二條第二款第一目

沒有列出物質.

- 第二條第二款第二目

沒有列出物質.

- 新化學物質及既有化學物質資料登錄辦法 英

沒有列出物質.

- 中國現有化學物質名錄

有列出物質.

- TCSCA

- 列管編號

沒有列出物質.

- 毒性分類

沒有列出物質.

- 管制濃度 ( w/w % )

沒有列出物質.

- 大量運作基準 ( 公斤 )

沒有列出物質.

- 新化學物質及既有化學物質資料登錄辦法, 附表六

沒有列出物質.

- TCSI - Taiwan Chemical Substance Inventory

有列出物質.

- GHS標識元素 本化學物質根據化學物質分類及標記全球協調制度(GHS)進行了分類及標記。

- 圖示



GHS07

- 名稱 警告
- 危險字句 造成嚴重眼睛刺激

(在 7 頁繼續)

# 安全資料表

## 根據 危害性化學品標示及通識規則

打印日期 2021.07.28

在 2021.07.28 審核

化學品中文(英文)名稱, 化學品俗名或商品名 : PHOSPHATE BUFFER, 0.1M

(在 6 頁繼續)

- **警戒字句**

- **預防措施**

作業後徹底清洗。  
戴防護眼罩/防護面具。

- **事故響應**

如進入眼睛：用水小心清洗數分鐘。如帶隱形眼鏡且可方便地取出，取出隱型眼鏡。繼續清洗。  
如仍覺眼睛有刺激：求醫治療/諮詢。

- **安全貯存**

存放於乾燥處和/或密閉的容器中。

- **廢棄處置**

按照地方/區域/國家/國際法規處理內容物之廢棄/容器。

- **化學物質安全性評價**: 尚未進行化學物質安全性評價

## 16 其他資料

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

- **縮寫:**

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

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

PBT: 持久性生物累積性有毒物質

vPvB: very Persistent and very Bioaccumulative

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

TW



# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 28.07.2021

Revisión: 28.07.2021

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

- **1.1 Identificador del producto**
- **Nombre comercial:** *PHOSPHATE BUFFER, 0.1M*
- **Número del artículo:** 19340-72
- **Número CAS:**  
7778-77-0
- **Número CE:**  
231-913-4
- **1.2 Usos pertinentes identificados de la sustancia o de la mezcla y usos desaconsejados**  
*No existen más datos relevantes disponibles.*
- **Utilización del producto / de la elaboración** *Sustancias químicas de laboratorio*
- **1.3 Datos del proveedor de la ficha de datos de seguridad**
- **Fabricante/distribuidor:**  
*Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com*
- **Aname**  
*C/ Perez Galdos no. 2  
28693 Quijorna  
Madrid, Spain  
Tel: +34.91.816.89.50  
Fax: +34.91.816.85.94  
email: ventas@aname.es*
- **Área de información:** *Product safety department*
- **1.4 Teléfono de emergencia:**  
*ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887*

### SECCIÓN 2: Identificación de los peligros

- **2.1 Clasificación de la sustancia o de la mezcla**
- **Clasificación con arreglo al Reglamento (CE) n° 1272/2008**  
*La sustancia 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*
- **2.3 Otros peligros**
- **Resultados de la valoración PBT y mPmB**
- **PBT:** *No aplicable.*
- **mPmB:** *No aplicable.*

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

- **3.1 Caracterización química: Sustancias**
- **Denominación N° CAS**  
*7778-77-0 dihidrogenoortofosfato de potasio*

( se continua en página 2 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 28.07.2021

Revisión: 28.07.2021

**Nombre comercial: PHOSPHATE BUFFER, 0.1M**

( se continua en página 1 )

- **Número(s) de identificación**
- **Número CE:** 231-913-4

### SECCIÓN 4: Primeros auxilios

- **4.1 Descripción de los primeros auxilios**
- **En caso de inhalación del producto:** Suministrar aire fresco. En caso de trastornos, consultar al médico.
- **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 trastornos persistentes consultar un médico.
- **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:** Combatir los incendios con medidas adaptados al ambiente circundante.
- **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:** No se requieren medidas especiales.

### 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).  
Asegurar suficiente ventilación.
- **6.4 Referencia a otras secciones**  
Ver capítulo 7 para mayor información sobre una manipulación segura.  
Ver capítulo 8 para mayor información sobre el equipo personal de protección.  
Para mayor información sobre cómo desechar el producto, ver capítulo 13.

### SECCIÓN 7: Manipulación y almacenamiento

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

( se continua en página 3 )

# Ficha de datos de seguridad

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**Nombre comercial: PHOSPHATE BUFFER, 0.1M**

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· **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:** Nulo.

· **Indicaciones adicionales:** Como base se han utilizado las listas vigentes en el momento de la elaboración.

· **8.2 Controles de la exposición**

· **Equipo de protección individual:**

· **Medidas generales de protección e higiene:**

Mantener alejado de alimentos, bebidas y alimentos para animales.

Quitarse de inmediato la ropa ensuciada o impregnada.

Lavarse las manos antes de las pausas y al final del trabajo.

Evitar el contacto con los ojos.

Evitar el contacto con los ojos y la piel.

· **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.

· **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:**



Gafas de protección herméticas

### SECCIÓN 9: Propiedades físicas y químicas

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

· **Datos generales**

· **Aspecto:**

· **Forma:**

Sólido

· **Color:**

No determinado.

· **Olor:**

Característico

· **Umbral olfativo:**

No determinado.

· **valor pH:**

No determinado.

· **Cambio de estado**

· **Punto de fusión/punto de congelación:**

Indeterminado.

( se continua en página 4 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

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**Nombre comercial: PHOSPHATE BUFFER, 0.1M**

( se continua en página 3 )

· <b>Punto inicial de ebullición e intervalo de ebullición:</b>	Indeterminado.
· <b>Punto de inflamación:</b>	No aplicable.
· <b>Inflamabilidad (sólido, gas):</b>	No aplicable.
· <b>Temperatura de descomposición:</b>	No determinado.
· <b>Temperatura de auto-inflamación:</b>	No determinado.
· <b>Propiedades explosivas:</b>	El producto no es explosivo.
· <b>Límites de explosión:</b>	
· <b>Inferior:</b>	No determinado.
· <b>Superior:</b>	No determinado.
· <b>Presión de vapor:</b>	No determinado.
· <b>Densidad a 20 °C:</b>	2,338 g/cm <sup>3</sup>
· <b>Densidad relativa</b>	No determinado.
· <b>Densidad de vapor</b>	No determinado.
· <b>Tasa de evaporación:</b>	No determinado.
· <b>Solubilidad en / miscibilidad con agua:</b>	Poco o no mezclable.
· <b>Coeficiente de reparto: n-octanol/agua:</b>	No determinado.
· <b>Viscosidad:</b>	
· <b>Dinámica:</b>	No determinado.
· <b>Cinemática:</b>	No determinado.
· <b>Concentración del disolvente:</b>	
· <b>VOC (CE)</b>	0,00 %
· <b>Contenido de cuerpos sólidos:</b>	0,0 %
· <b>9.2 Otros datos</b>	No existen más datos relevantes disponibles.

### SECCIÓN 10: Estabilidad y reactividad

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

### SECCIÓN 11: Información toxicológica

- **11.1 Información sobre los efectos toxicológicos**
- **Toxicidad aguda** 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.

( se continua en página 5 )

# Ficha de datos de seguridad

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**Nombre comercial: PHOSPHATE BUFFER, 0.1M**

( se continua en página 4 )

- **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 (clasificación de listas): escasamente peligroso para el agua  
En estado no diluido o no neutralizado, no dejar que se infiltre en aguas subterráneas, aguas superficiales o en alcantarillados.
- **12.5 Resultados de la valoración PBT y mPmB**
- **PBT:** No aplicable.
- **mPmB:** No aplicable.
- **12.6 Otros efectos adversos** No existen más datos relevantes disponibles.

### SECCIÓN 13: Consideraciones relativas a la eliminación

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

### SECCIÓN 14: Información relativa al transporte

- |  |               |
|--|---------------|
| · <b>14.1 Número ONU</b>   |               |
| · <b>ADR, IMDG, IATA</b>   | suprimido     |
| · <b>14.2 Designación oficial de transporte de las Naciones Unidas</b> |               |
| · <b>ADR, IMDG, IATA</b>   | suprimido     |
| · <b>14.3 Clase(s) de peligro para el transporte</b>                   |               |
| · <b>ADR, ADN, IMDG, IATA</b>  |               |
| · <b>Clase</b>   | suprimido     |
| · <b>14.4 Grupo de embalaje</b>  |               |
| · <b>ADR, IMDG, IATA</b>   | suprimido     |
| · <b>14.5 Peligros para el medio ambiente:</b>                         | No aplicable. |

( se continua en página 6 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

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**Nombre comercial: PHOSPHATE BUFFER, 0.1M**

( se continua en página 5 )

· **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** No contiene la sustancia.

· **Directiva 2011/65/UE sobre restricciones a la utilización de determinadas sustancias peligrosas en aparatos eléctricos y electrónicos - Anexo II**

No contiene la sustancia.

· **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.

· **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

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

# แผ่นข้อมูลความปลอดภัย

## ตาม GHS

วันที่พิมพ์ 2021.07.28

การปรับปรุงใหม่ : 2021.07.28

### 1 การปฐษึสารเดี่ยวหรือสารผสม และผู้ผลิต

- 1.1 ลักษณะเฉพาะของผลิตภัณฑ์
- ชื่อทางการค้า **PHOSPHATE BUFFER, 0.1M**
- เลขที่รายชื่อ 19340-72
- เลขที่ CAS: 7778-77-0
- จำนวน EC: 231-913-4
- 1.2 สารหรือสารผสมที่เกี่ยวข้องที่ระบุให้ใช้และที่ไม่ควรถือใช้ ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- การประยุกต์ใช้สาร/ การทำ เคมีภัณฑ์ห้องทดลอง
- 1.3 รายละเอียดของผู้จัดหาข้อมูลด้านความปลอดภัย
- ผู้ผลิต/ ผู้จัดหา  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- ข้อมูลรายละเอียดเพิ่มเติมหาได้จาก Product safety department
- 1.4 หมายเลขโทรศัพท์ฉุกเฉิน:  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2 การปฐษึความเป็นอันตราย

- 2.1 การจำแนกประเภทของสารหรือสารผสม
- การแบ่งประเภทตามข้อบังคับ (จีซี) เลขที่ 1272/2008 สารไม่ถูกจัดประเภทตามข้อบังคับของ CLP
- 2.2 องค์ประกอบของฉลาก
- ฉลากตามระเบียบ (EC) เลขที่ 1272/2008 ยกเลิก
- ภาพสัญลักษณ์ที่เป็นอันตราย ยกเลิก
- สัญลักษณ์คำ ยกเลิก
- ประกาศสิ่งที่เป็นอันตราย ยกเลิก
- 2.3 อันตรายอื่นๆ
- ผลของ PBT และการประเมิน vPvB
- PBT: ไม่สามารถใช้ได้
- vPvB: ไม่สามารถใช้ได้

### 3 องค์ประกอบและข้อมูลเกี่ยวกับส่วนผสม

- 3.1 คุณลักษณะทางเคมี: สาร
- การระบุเลขที่ CAS 7778-77-0 potassium dihydrogenorthophosphate
- เลขที่ที่ระบุ
- จำนวน EC: 231-913-4

### 4 มาตรการปฐมพยาบาล

- 4.1 คำอธิบายถึงมาตรการปฐมพยาบาล
- หลังจากการสูดหายใจเข้าไป หากบริเวณที่มีอากาศบริสุทธิ์ปรึกษาแพทย์ในกรณีที่อาการไม่ดีขึ้น
- หลังจากการสัมผัสผิวหนัง โดยทั่วๆ ไปผลิตภัณฑ์ไม่ก่อความระคายเคืองต่อผิวหนัง
- หลังจากการสัมผัสสูดดม ชะตาที่เปิดอยู่ใต้น้ำที่กำล้งไหลเป็นเวลาหลายนาที่ถ้าอาการไม่ดีขึ้นให้ปรึกษาแพทย์

(ต่อที่หน้า 2)



# แผนข้อมูลความปลอดภัย

## ตาม GHS

วันที่พิมพ์ 2021.07.28

การปรับปรุงใหม่ : 2021.07.28

### ชื่อทางการค้า PHOSPHATE BUFFER, 0.1M

(ต่อที่หน้า 1)

- หลังจากการกลืนเข้าไป: ถ้าอาการยังไม่บรรเทาให้ปรึกษาแพทย์
- 4.2 อาการสำคัญส่วนใหญ่และผลกระทบ ทั้งชนิดเฉียบพลันและค่อยๆ แสดงอาการ ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 4.3 ข้อบ่งชี้ของอาการที่ต้องเข้ารับการรักษากจากแพทย์ทันทีและการบำบัดพิเศษที่จำเป็น ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้

### 5 มาตรการผจญเพลิง

- 5.1 สารที่ใช้ดับเพลิง
- สารดับเพลิงที่เหมาะสม ใช้วิธีดับเพลิงที่เหมาะสมกับสภาพแวดล้อม
- 5.2 อันตรายเฉพาะอย่างที่เกิดจากสารหรือส่วนผสม ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 5.3 ค่าแนะนำสำหรับพนักงานดับเพลิง
- อุปกรณ์ป้องกันภัย ไม่ต้องมีมาตรการพิเศษ

### 6 มาตรการจัดการเมื่อมีการหกรั่วไหลของสาร

- 6.1 การป้องกันส่วนบุคคล อุปกรณ์ป้องกัน และขั้นตอนดำเนินการเมื่อเกิดกรณีฉุกเฉิน ไม่ได้กำหนด
- 6.2 การให้ความคุ้มครองสิ่งแวดล้อมสงวนหน้า: อย่าปล่อยให้เข้าไปในท่อน้ำทิ้ง/ น้ำบนดินหรือใต้ดิน
- 6.3 วิธีดำเนินการและวัสดุสำหรับการบรรจุและการทำความสะอาด: ดูระดับด้วยวัสดุที่สามารถยึดของเหลวไว้ (ทราย/ โดอะไตท์/ ไม้ที่ตัดยึดเกาะกรดตัวยึดทั่วๆ ไปซีลีย) ตรวจสอบให้แน่ใจว่ามีสารระบายอากาศที่ดีพอ
- 6.4 การอ้างอิงถึงส่วนอื่น  
ดูข้อมูลรายละเอียดเรื่องความปลอดภัยในการขนถ่ายจากส่วนที่ 7  
ดูข้อมูลรายละเอียดเรื่องอุปกรณ์ป้องกันส่วนบุคคลจากส่วนที่ 8  
ดูข้อมูลรายละเอียดเรื่องการจัดเก็บจากส่วนที่ 13

### 7 การขนถ่าย เคลื่อนย้าย ใช้งาน และเก็บรักษา

- 7.1 การป้องกันสงวนหน้าสำหรับการจัดการด้านความปลอดภัย  
ทำให้แน่ใจว่าสถานที่ทำงานมีการระบายอากาศ/ ไอเสียที่ดี  
ป้องกันการเกิดละอองสารฟุ้ง
- ข้อมูลรายละเอียดเกี่ยวกับการป้องกันอัคคีภัยและการระเบิด ไม่มีมาตรการพิเศษ
- 7.2 เงื่อนไขในการเก็บรักษาอย่างปลอดภัย, รวมถึงสิ่งที่เข้ากันไม่ได้ใดๆ  
· การจัดเก็บ  
· ข้อกำหนดที่ต้องปฏิบัติตามสำหรับห้องเก็บและภาชนะบรรจุ ไม่มีข้อกำหนดพิเศษ
- ข้อมูลรายละเอียดด้านการจัดเก็บในสถานที่จัดเก็บรวม ไม่ได้กำหนด
- ข้อมูลรายละเอียดเพิ่มเติมด้านสภาพการจัดเก็บ เก็บโดยปิดผนึกอย่างแน่นหนา
- 7.3 การระบุดังการสิ้นสุดการใช้ ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้

### 8 การควบคุมการสัมผัสและการป้องกันส่วนบุคคล

- ข้อมูลรายละเอียดเสริมสำหรับการออกแบบสิ่งอำนวยความสะดวกทางเทคนิค ไม่มีข้อมูลนอกเหนือจากนี้ดูรายการ 7
- 8.1 การควบคุมตัวแปร  
· ส่วนผสมพร้อมค่าขอบเขตที่ต้องเฝ้าดูในสถานที่ปฏิบัติงาน ไม่ได้กำหนด
- ข้อมูลรายละเอียดเสริม รายการถูกต้องระหว่างที่จัดทำโดยอาศัยการใช้งานเป็นหลัก
- 8.2 การควบคุมการสัมผัส  
· อุปกรณ์ป้องกันภัยส่วนบุคคล
- มาตรการการป้องกันและสุขอนามัยทั่วไป  
เก็บให้ห่างจากสิ่งของที่เป็นอาหาร เครื่องดื่มและอาหารสัตว์

(ต่อที่หน้า 3)

# แผ่นข้อมูลความปลอดภัย

## ตาม GHS

วันที่พิมพ์ 2021.07.28

การปรับปรุงใหม่ : 2021.07.28

### ชื่อทางการค้า PHOSPHATE BUFFER, 0.1M

(ต่อหน้า 2)

ให้ถอดเสื้อผ้าที่เปื้อนและเจือปนออกทันที  
ล้างมือก่อนที่จะหยุดพักและเมื่อสิ้นสุดเวลาทำงาน  
หลีกเลี่ยงการสัมผัสสุกตา  
หลีกเลี่ยงการสัมผัสสุกตาและผิวหนัง

#### • การป้องกันการสูดหายใจเข้าไป

ในกรณีที่อยู่เป็นเวลาสั้นหรืออากาศเป็นพิษระดับต่ำใช้หน้ากากกรองเพื่อช่วยหายใจในกรณีที่มีความเข้มข้นสูงหรืออยู่เป็นเวลานานให้ใช้เครื่องป้องกันที่มีอุปกรณ์ช่วยหายใจในตัว

#### • การป้องกันมือ

วัสดุของถุงมือจะต้องไม่ให้อากาศผ่านเข้าออกและทนทานต่อผลิตภัณฑ์/ สาร/ การผลิต  
เนื่องจากขาดการทดสอบจึงไม่มีคำแนะนำสำหรับวัสดุที่ใช้ทำถุงมือสำหรับผลิตภัณฑ์/ การผลิต/ ของผสมเคมี  
เลือกวัสดุสำหรับถุงมือโดยพิจารณาจากเวลาที่ใช้ในการซึมผ่านอัตราการแพร่และการเสื่อม

#### • วัสดุที่ใช้ทำถุงมือ

การเลือกใช้ถุงมือที่เหมาะสมไม่เพียงแต่ขึ้นอยู่กับวัสดุแต่ยังขึ้นกับมาตรฐานด้านคุณภาพและข้อแตกต่างระหว่างผู้ผลิตแต่ละแห่ง

#### • เวลาที่ใช้ในการทะลุผ่านวัสดุที่ใช้ทำถุงมือ

ผู้ผลิตถุงมือป้องกันจะต้องทดสอบหาเวลาแน่นอนที่ใช้ในการทะลุผ่านและจะต้องมีการตรวจสอบติดตาม

#### • การป้องกันตา



แว่นตาที่ขอบปิดสนิท

## 9 คุณสมบัติทางกายภาพและทางเคมี

### • 9.1 ข้อมูลคุณสมบัติพื้นฐานทางกายภาพและเคมี

#### • ข้อมูลรายละเอียดทั่วไป

##### • ลักษณะ :

##### • รูปสีพื้นฐาน

ของแข็ง

##### • สี

ไม่ได้กำหนดไว้.

##### • กลิ่น

ลักษณะพิเศษ

##### • เกณฑ์กลิ่น :

ไม่ได้กำหนดไว้.

##### • ค่า pH

ไม่ได้กำหนดไว้.

##### • การเปลี่ยนสภาวะ

##### • จุดหลอมเหลว/ ขอบเขตการหลอมละลาย

ไม่ได้กำหนด

##### • จุดเดือด/ ขอบเขตการเดือด

ไม่ได้กำหนด

##### • จุดวาบไฟ

ไม่สามารถใช้ได้

##### • ความสามารถติดไฟ (ของแข็งแกส)

ไม่สามารถใช้ได้

##### • อุณหภูมิสลายตัว

ไม่ได้กำหนดไว้.

##### • การเผาไหม้ด้วยตัวเอง

ไม่ได้กำหนดไว้.

##### • อันตรายจากการระเบิด

ผลิตภัณฑ์ไม่ได้มีอันตรายจากการระเบิด

##### • ขอบเขตการระเบิด

##### • ขั้วต่ำ

ไม่ได้กำหนดไว้.

##### • ขั้วสูง

ไม่ได้กำหนดไว้.

##### • ความดันไอ

ไม่ได้กำหนดไว้.

##### • ความหนาแน่น ที่ 20 °C

2.338 g/cm<sup>3</sup>

##### • ความหนาแน่นสัมพัทธ์

ไม่ได้กำหนดไว้.

##### • ความหนาแน่นของไอ

ไม่ได้กำหนดไว้.

(ต่อหน้า 4)

# แผนข้อมูลความปลอดภัย

## ตาม GHS

วันที่พิมพ์ 2021.07.28

การปรับปรุงใหม่ : 2021.07.28

### ชื่อทางการค้า PHOSPHATE BUFFER, 0.1M

(ต่อหน้า 3)

· อัตราการระเหย	ไม่ได้กำหนดไว้.
· ความสามารถในการละลายใน / ความสามารถผสมเป็นสารละลายเนื้อเดียวกันทุกส่วนผสมกับ	
· น้ำ	ไม่สามารถผสมกันได้หรือยากที่จะผสม
· สัมผัสประกิการแยกตัว (เฮน-ออกทานอล/น้ำ)	ไม่ได้กำหนดไว้.
· ความหนืด	ไม่ได้กำหนดไว้.
· (ไดนามิค) พลศาสตร์	ไม่ได้กำหนดไว้.
· (คิเนเมติก) จลนศาสตร์	ไม่ได้กำหนดไว้.
· ปริมาณส่วนประกอบตัวทำละลาย	
· VOC (EC)	0.00 %
· ส่วนประกอบที่เป็นของแข็ง	0.0 %
· 9.2 ข้อมูลอื่นๆ	ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้

### 10 ความเสถียรและการเกิดปฏิกิริยา

- 10.1 ปฏิกิริยาโต้ตอบ ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 10.2 เสถียรภาพทางเคมี
- การสลายตัวด้วยความร้อน / เจือปนที่ต้องหลีกเลี่ยง ไม่มีการสลายตัวถ้าใช้ตามรายละเอียดที่ระบุไว้
- 10.3 ความเป็นไปได้ของการเกิดปฏิกิริยาอันตราย ไม่มีปฏิกิริยาเป็นอันตรายที่รู้จัก
- 10.4 เจือปนเพื่อการหลีกเลี่ยง ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 10.5 วัสดุที่เข้ากันไม่ได้: ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 10.6 อันตรายจากการสลายตัวของผลิตภัณฑ์: ไม่มีสารจากการสลายตัวที่เป็นอันตรายที่รู้จัก

### 11 ข้อมูลด้านพิษวิทยา

- 11.1 ข้อมูลเกี่ยวกับผลกระทบทางพิษวิทยา
- ความเป็นพิษอย่างสูดหายใจ:
- อาการระคายเคืองเบื้องต้น
- บุนผิวหนัง
- ที่ดวงตา
- การทำให้แพ้
- ผลกระทบ CMR (การทำให้เกิดมะเร็งการผ่าเหล่าและพิษต่อการสืบพันธุ์)
- การผ่าเหล่าในเซลล์สืบพันธุ์
- การกระตุ้นให้เกิดมะเร็ง
- พิษต่อระบบสืบพันธุ์
- ความเป็นพิษต่ออวัยวะเป้าหมายเฉพาะ – การสัมผัสในครรภ์
- ความเป็นพิษต่ออวัยวะเป้าหมายเฉพาะ – การสัมผัสซ้ำหลาย
- อันตรายต่อระบบหายใจ

### 12 ข้อมูลด้านนิเวศวิทยา

- 12.1 ความเป็นพิษ
- ความเป็นพิษที่เกี่ยวข้องกับน้ำ ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 12.2 การคงอยู่และการย่อยสลาย ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 12.3 การสะสมทางชีวภาพที่อาจเกิดขึ้น ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้
- 12.4 การเปลี่ยนแปลงในดิน ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้

(ต่อหน้า 5)

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# แผนข้อมูลความปลอดภัย

## ตาม GHS

วันที่พิมพ์ 2021.07.28

การปรับปรุงใหม่ : 2021.07.28

### ชื่อทางการค้า PHOSPHATE BUFFER, 0.1M

(ต่อที่หน้า 4)

- ข้อมูลรายละเอียดเสริมเกี่ยวกับนิเวศวิทยา
- **หมายเหตุทั่วไป**  
เป็นอันตรายต่อน้ำชั้น 1 (กฎข้อบังคับของเยอรมัน)(การประเมินค่าตามรายการ):เป็นอันตรายเล็กน้อยกับน้ำ  
อยู่ป่าปล่อยให้ผลิตภัณฑ์ที่ยังไม่ได้เจือจางหรือผลิตภัณฑ์เป็นจำนวนมากไปถึงน้ำผิวดินเส้นทางน้ำหรือระบบระบายน้ำ  
เสีย
- 12.5 ผลของ PBT และการประเมิน vPvB
- PBT: ไม่สามารถใช้ได้
- vPvB: ไม่สามารถใช้ได้
- 12.6 ผลข้างเคียงอื่นๆ ไม่มีข้อมูลที่เกี่ยวข้องนอกเหนือจากนี้

### 13 ข้อพิจารณาในการกำจัด

- 13.1 วิธีการกำจัดของเสีย
- **คำแนะนำ** ต้องไม่ทิ้งไปพร้อมกับขยะจากบ้านเรือนอย่าปล่อยให้ผลิตภัณฑ์เข้าถึงระบบระบายน้ำเสีย
- **ภาชนะบรรจุที่ยังไม่ได้สร้างความสะอาด**
- **คำแนะนำ** การกำจัดจะต้องทำตามกฎระเบียบที่เป็นทางการ

### 14 ข้อมูลการขนส่ง

- |   |                 |
|---|-----------------|
| · 14.1 เลขที่ UN  |                 |
| · ADR, IMDG, IATA   | ยกเลิก          |
| · 14.2 ชื่อการจัดส่งสินค้าที่เหมาะสมของ UN                      |                 |
| · ADR, IMDG, IATA   | ยกเลิก          |
| · 14.3 ชั้นเรียนอันตรายจากการขนส่ง                              |                 |
| · ADR, ADN, IMDG, IATA  |                 |
| · ประเภท  | ยกเลิก          |
| · 14.4 กลุ่มของภาชนะบรรจุ                                       |                 |
| · ADR, IMDG, IATA   | ยกเลิก          |
| · 14.5 สิ่งที่เป็นอันตรายต่อสภาพแวดล้อม                         | ไม่สามารถใช้ได้ |
| · 14.6 การป้องกันพิเศษล่วงหน้าสำหรับผู้ใช้                      | ไม่สามารถใช้ได้ |
| · 14.7 การขนส่งขนาดใหญ่ตามภาคผนวก 2 ของ MARPOL73/78 และรหัส IBC | ไม่สามารถใช้ได้ |
| · “กฎระเบียบต้นแบบ” ของ UN                                      | ยกเลิก          |

### 15 ข้อมูลด้านกฎข้อบังคับ

- 15.1 ความปลอดภัย สุขภาพและระเบียบ/กฎหมายสิ่งแวดล้อมโดยเฉพาะของสารหรือสารผสม
- บัญชีรายชื่อวัตถุอันตราย

#### · กรมวิชาการเกษตร

สารที่ไม่ได้อยู่ในรายการ

#### · กรมประมง

สารที่ไม่ได้อยู่ในรายการ

#### · กรมปศุสัตว์

สารที่ไม่ได้อยู่ในรายการ

(ต่อที่หน้า 6)

# แผ่นข้อมูลความปลอดภัย

## ตาม GHS

วันที่พิมพ์ 2021.07.28

การปรับปรุงใหม่ : 2021.07.28

### ชื่อทางการค้า PHOSPHATE BUFFER, 0.1M

(ต่อที่หน้า 5)

- **อาหารและยา**

สารที่ไม่ได้อยู่ในรายการ

- **กรมโรงงานอุตสาหกรรม**

สารที่ไม่ได้อยู่ในรายการ

- **กรมธุรกิจพลังงาน**

สารที่ไม่ได้อยู่ในรายการ

- **ทำเนียบสารเคมีที่มีอยู่แล้วของประเทศไทย (กรมโรงงานอุตสาหกรรม)**

สารที่อยู่ในรายการ

- **15.2 การประเมินความปลอดภัยของสารเคมี:** ไม่ได้ดำเนินการตามการประเมินความปลอดภัยของสารเคมี

### 16 ข้อมูลอื่นๆ

ข้อมูลรายละเอียดนี้ใช้ความรู้ปัจจุบันของเราเป็นหลักอย่างไรก็ตามข้อมูลนี้ไม่ใช่การรับประกันจากสถาบันต่อคุณสมบัติเฉพาะของผลิตภัณฑ์และไม่สามารถยืนยันการบังคับใช้ตามกฎหมายที่เกี่ยวข้องกับสัญญา

- **คำย่อและชื่อย่อที่พบบ่อย**

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

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

-TH-