Safety Data Sheet
acc. to OSHA HCS

Printing date 01/14/2016 Reviewed on 05/29/2015

1 Identification

· **Product identifier**

· **Trade name:** **Sorensen's Phosphate Buffer 0.2M. pH 7.2**

· **Article number:** 11600-05, 11600-10, 11600-40
· **Application of the substance / the mixture** Laboratory chemicals

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com

· **Information department:** Product safety department
· **Emergency telephone number:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 Hazard(s) identification

· **Classification of the substance or mixture**

GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2B H320 Causes eye irritation.

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

GHS07

· **Signal word** Warning
· **Hazard statements**
Causes skin and eye irritation.
· **Precautionary statements**
Wear protective gloves.
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).
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
IF ON SKIN: Wash with plenty of water.
Take off contaminated clothing and wash it before reuse.
Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)

Safety Data Sheet
acc. to OSHA HCS

Printing date 01/14/2016 Reviewed on 05/29/2015

Trade name: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Contd. of page 1)

· **Classification system:**
· **NFPA ratings (scale 0 - 4)**

Health = 1
Fire = 0
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 1
Fire = 0
Reactivity = 0

· **Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

3 Composition/information on ingredients

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

· **Dangerous components:** Void

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:**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **Special hazards arising from the substance or mixture** No further relevant information available.
· **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.

(Contd. on page 3)

Safety Data Sheet
acc. to OSHA HCS

Printing date 01/14/2016 Reviewed on 05/29/2015

Trade name: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Contd. of page 2)

· **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:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the 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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

(Contd. on page 4)

Safety Data Sheet
acc. to OSHA HCS

Printing date 01/14/2016 Reviewed on 05/29/2015

Trade name: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Contd. of page 3)

· **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:	Fluid
Color:	Colorless
· **Odor:**	Odorless
· **Odor threshold:**	Not determined.
· **pH-value at 20 °C (68 °F):**	7.2
· **Change in condition**	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (212 °F)
· **Flash point:**	Not applicable.
· **Flammability (solid, gaseous):**	Not flammable.
· **Ignition temperature:**	
Decomposition temperature:	Not determined.
· **Auto igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Product does not present an explosion hazard.
· **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
· **Vapor pressure at 20 °C (68 °F):**	23 hPa (17 mm Hg)
· **Density:**	Not determined.
· **Relative density**	Not determined.
· **Vapor density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in / Miscibility with**	
Water:	Not miscible or difficult to mix.
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Solvent content:**	
Organic solvents:	0.0 %

(Contd. on page 5)

Safety Data Sheet
acc. to OSHA HCS

Printing date 01/14/2016 Reviewed on 05/29/2015

Trade name: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Contd. of page 4)

Water:	92.0 %
Solids content:	4.0 %
· **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:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**
None of the ingredients is listed.

· **NTP (National Toxicology Program)**
None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety** Health Administration)
None of the ingredients is listed.

12 Ecological information

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

(Contd. on page 6)

Safety Data Sheet
acc. to OSHA HCS

Printing date 01/14/2016 Reviewed on 05/29/2015

Trade name: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Contd. of page 5)

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

13 Disposal considerations

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

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

14 Transport information

· **UN-Number** · **DOT, ADR, ADN, IMDG, IATA**	Void
· **UN proper shipping name** · **DOT, ADR, ADN, IMDG, IATA**	Void
· **Transport hazard class(es)** · **DOT, ADR, ADN, IMDG, IATA** · **Class**	Void
· **Packing group** · **DOT, ADR, IMDG, IATA**	Void
· **Environmental hazards:** · **Marine pollutant:**	No
· **Special precautions for user**	Not applicable.
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **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):**

None of the ingredients is listed.

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

None of the ingredients is listed.

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

All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

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

None of the ingredients is listed.

(Contd. on page 7)

Safety Data Sheet
acc. to OSHA HCS

Printing date 01/14/2016 Reviewed on 05/29/2015

Trade name: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Contd. of page 6)

· **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**
None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**
None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**
None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**
None of the ingredients is listed.

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

GHS07

· **Signal word** Warning
· **Hazard statements**
Causes skin and eye irritation.
· **Precautionary statements**
Wear protective gloves.
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).
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
IF ON SKIN: Wash with plenty of water.
Take off contaminated clothing and wash it before reuse.
Store in a well-ventilated place. Keep container tightly closed.
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** 01/14/2016 / -
· **Abbreviations and acronyms:**
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)

(Contd. on page 8)

Safety Data Sheet
acc. to OSHA HCS

Printing date 01/14/2016 Reviewed on 05/29/2015

Trade name: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Contd. of page 7)

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
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B

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

Printing date 29.05.2015 Revision: 29.05.2015

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

· **Product identifier**

· **Trade name:** **Sorensen's Phosphate Buffer 0.2M. pH 7.2**

· **Article number:** 11600-05, 11600-10, 11600-40
· **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)

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 Hazards identification

· **Classification of the substance or mixture**

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

Irritant
Irritating to eyes.
· **Information concerning particular hazards for human and environment:**
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
· **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

· **Label elements**

· **Labelling according to EU guidelines:**
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

(Contd. on page 2)

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

Printing date 29.05.2015 *Revision: 29.05.2015*

Trade name: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Contd. of page 1)

· **Code letter and hazard designation of product:**

Irritant

· **Risk phrases:**
Irritating to eyes.
· **Information concerning particular hazards for human and environment:**
· **Safety phrases:**
Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
This material and its container must be disposed of as hazardous waste.
· **Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** *Not applicable.*
· **vPvB:** *Not applicable.*

3 Composition/information on ingredients

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

· **Dangerous components:** *Void*
· **Additional information:** *For the wording of the listed risk phrases refer to section 16.*

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

5 Firefighting measures

· **Extinguishing media**
· **Suitable extinguishing agents:**
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **Special hazards arising from the substance or mixture** *No further relevant information available.*
· **Advice for firefighters**
· **Protective equipment:** *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.*

(Contd. on page 3)

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

Printing date 29.05.2015 Revision: 29.05.2015

Trade name: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Contd. of page 2)

· **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

· **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/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **Control parameters**
· **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
· **Additional information:** The lists valid during the making were used as basis.

· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

(Contd. on page 4)

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

Printing date 29.05.2015 Revision: 29.05.2015

Trade name: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Contd. of page 3)

· **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:	Fluid
Colour:	Colourless
· **Odour:**	Odourless
· **Odour threshold:**	Not determined.
· **pH-value at 20 °C:**	7.2
· **Change in condition**	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C
· **Flash point:**	Not applicable.
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	
Decomposition temperature:	Not determined.
· **Self-igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Product does not present an explosion hazard.
· **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
· **Vapour pressure at 20 °C:**	23 hPa
· **Density:**	Not determined.
· **Relative density**	Not determined.
· **Vapour density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in / Miscibility with water:**	Not miscible or difficult to mix.
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Solvent content:**	
Organic solvents:	0.0 %

(Contd. on page 5)

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

Printing date 29.05.2015 Revision: 29.05.2015

Trade name: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Contd. of page 4)

Water:	92.0 %
VOC (EC)	0.00 %
Solids content:	4.0 %
· **Other information**	No further relevant information available.

10 Stability and reactivity

· **Reactivity**
· **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.
· **Sensitisation:** No sensitising effects known.
· **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant

12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects** No further relevant information available.

13 Disposal considerations

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

(Contd. on page 6)

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

Printing date 29.05.2015 Revision: 29.05.2015

Trade name: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Contd. of page 5)

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

14 Transport information

· **UN-Number** · **ADG, ADN, IMDG, IATA**	Void
· **UN proper shipping name** · **ADG, ADN, IMDG, IATA**	Void
· **Transport hazard class(es)** · **ADG, ADN, IMDG, IATA** · **Class**	Void
· **Packing group** · **ADG, IMDG, IATA**	Void
· **Environmental hazards:** · **Marine pollutant:**	No
· **Special precautions for user**	Not applicable.
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.

15 Regulatory information

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

· **Australian Inventory of Chemical Substances**

All ingredients are listed.

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

None of the ingredients is listed.

· **Labelling according to EU guidelines:**
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· **Code letter and hazard designation of product:**

Irritant

· **Risk phrases:**
Irritating to eyes.

· **Safety phrases:**
Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
This material and its container must be disposed of as hazardous waste.

(Contd. on page 7)

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

Printing date 29.05.2015 Revision: 29.05.2015

Trade name: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Contd. of page 6)

· **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.

AU

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/29/2015 Reviewed on 05/29/2015

1 Identification

· **Product identifier**

· **Trade name:** **Sorensen's Phosphate Buffer 0.2M. pH 7.2**

· **Article number:** 11600-05, 11600-10, 11600-40
· **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

· **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

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2B H320 Causes eye irritation.

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

Irritant

Irritating to eyes.
· **Information concerning particular hazards for human and environment:**
The product has to be labeled due to the calculation procedure of international guidelines.
· **Classification system:**
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· **Label elements**

· **Labelling according to EU guidelines:**
The product has been classified and marked in accordance with directives on hazardous materials.

· **Code letter and hazard designation of product:**

Irritant

· **Risk phrases:**
Irritating to eyes.

· **Safety phrases:**
Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).

(Contd. on page 2)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/29/2015 Reviewed on 05/29/2015

Trade name: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Contd. of page 1)

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
This material and its container must be disposed of as hazardous waste.

· **Hazard description:**
· **WHMIS-symbols:**
D2B - Toxic material causing other toxic effects

· **Classification system:**
· **NFPA ratings (scale 0 - 4)**

Health = 1
Fire = 0
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 1
Fire = 0
Reactivity = 0

· **Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** *Not applicable.*
· **vPvB:** *Not applicable.*

3 Composition/information on ingredients

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

· **Dangerous components:** *Void*

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.*
· **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:**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **Special hazards arising from the substance or mixture** *No further relevant information available.*

(Contd. on page 3)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/29/2015 Reviewed on 05/29/2015

Trade name: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(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

· **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
· **Information about protection against explosions and fires:** No special measures required.

· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:** Keep receptacle tightly sealed.
· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Control parameters**
· **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the 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.

(Contd. on page 4)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/29/2015 Reviewed on 05/29/2015

Trade name: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Contd. of page 3)

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**

Tightly sealed goggles

9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	*Fluid*
Color:	*Colorless*
· **Odor:**	*Odorless*
· **Odour threshold:**	*Not determined.*
· **pH-value at 20 °C:**	*7.2*
· **Change in condition**	
Melting point/Melting range:	*Undetermined.*
Boiling point/Boiling range:	*100 °C*
· **Flash point:**	*Not applicable.*
· **Flammability (solid, gaseous):**	*Not flammable.*
· **Ignition temperature:**	
Decomposition temperature:	*Not determined.*
· **Auto igniting:**	*Product is not selfigniting.*
· **Danger of explosion:**	*Product does not present an explosion hazard.*
· **Explosion limits:**	
Lower:	*Not determined.*
Upper:	*Not determined.*
· **Vapor pressure at 20 °C:**	*23 hPa*
· **Density:**	*Not determined.*
· **Relative density**	*Not determined.*
· **Vapour density**	*Not determined.*
· **Evaporation rate**	*Not determined.*
· **Solubility in / Miscibility with**	
Water:	*Not miscible or difficult to mix.*

(Contd. on page 5)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/29/2015 Reviewed on 05/29/2015

Trade name: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Contd. of page 4)

· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Solvent content:**	
Organic solvents:	0.0 %
Water:	92.0 %
Solids content:	4.0 %
· **Other information**	No further relevant information available.

10 Stability and reactivity

· **Reactivity**
· **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:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**
None of the ingredients is listed.

· **NTP (National Toxicology Program)**
None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety** Health Administration)
None of the ingredients is listed.

12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** No further relevant information available.

(Contd. on page 6)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/29/2015 Reviewed on 05/29/2015

Trade name: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Contd. of page 5)

· **Additional ecological information:**
· **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects** No further relevant information available.

13 Disposal considerations

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

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

14 Transport information

· **UN-Number** · **DOT, TDG, ADN, IMDG, IATA**	Void
· **UN proper shipping name** · **DOT, TDG, ADN, IMDG, IATA**	Void
· **Transport hazard class(es)** · **DOT, TDG, ADN, IMDG, IATA** · **Class**	Void
· **Packing group** · **DOT, TDG, IMDG, IATA**	Void
· **Environmental hazards:** · **Marine pollutant:**	No
· **Special precautions for user**	Not applicable.
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **UN "Model Regulation":**	-

15 Regulatory information

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

· **Section 355 (extremely hazardous substances):**
None of the ingredients is listed.
· **Section 313 (Specific toxic chemical listings):**
None of the ingredients is listed.

(Contd. on page 7)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/29/2015 Reviewed on 05/29/2015

Trade name: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Contd. of page 6)

· **TSCA (Toxic Substances Control Act):**
All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**
None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**
None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**
None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**
None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**
None of the ingredients is listed.

· **Canadian substance listings:**

· **Canadian Domestic Substances List (DSL)**
All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 0.1%)**
None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 1%)**
None of the ingredients is listed.

· **Product related hazard informations:**
The product has been classified and marked in accordance with directives on hazardous materials.

· **Hazard symbols:**

Irritant

· **Risk phrases:**
Irritating to eyes.

· **Safety phrases:**
Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
This material and its container must be disposed of as hazardous waste.

· **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.

(Contd. on page 8)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/29/2015 Reviewed on 05/29/2015

Trade name: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Contd. of page 7)

· **Date of preparation / last revision** 05/29/2015 / -

· **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B

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

Printing date 29.05.2015 Revision: 29.05.2015

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

· **1.1 Product identifier**

· **Trade name:** **Sorensen's Phosphate Buffer 0.2M. pH 7.2**

· **Article number:** 11600-05, 11600-10, 11600-40

· **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**

GHS07

Skin Irrit. 2 H315 Causes skin irritation.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.

· **Hazard pictograms**

GHS07

· **Signal word** Warning

· **Hazard statements**
H315 Causes skin irritation.

· **Precautionary statements**

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P321	Specific treatment (see on this label).
P362	Take off contaminated clothing and wash before reuse.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

(Contd. on page 2)

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

Printing date 29.05.2015 *Revision: 29.05.2015*

Trade name: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Contd. of page 1)

· ***vPvB:*** *Not applicable.*

SECTION 3: Composition/information on ingredients

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

· ***Dangerous components:*** *Void*

SECTION 4: First aid measures

· ***4.1 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.*
· ***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:***
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· ***5.2 Special hazards arising from the substance or mixture*** *No further relevant information available.*
· ***5.3 Advice for firefighters***
· ***Protective equipment:*** *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.*

(Contd. on page 3)

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

Printing date 29.05.2015 Revision: 29.05.2015

Trade name: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Contd. of page 2)

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:** Keep container tightly sealed.
· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **8.1 Control parameters**
· **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
· **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:**

Tightly sealed goggles

(Contd. on page 4)

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

Printing date 29.05.2015 Revision: 29.05.2015

Trade name: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Contd. of page 3)

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Fluid
Colour:	Colourless
· **Odour:**	Odourless
· **Odour threshold:**	Not determined.
· **pH-value at 20 °C:**	7.2
· **Change in condition**	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C
· **Flash point:**	Not applicable.
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	
Decomposition temperature:	Not determined.
· **Self-igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Product does not present an explosion hazard.
· **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
· **Vapour pressure at 20 °C:**	23 hPa
· **Density:**	Not determined.
· **Relative density**	Not determined.
· **Vapour density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in / Miscibility with water:**	Not miscible or difficult to mix.
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Solvent content:**	
Organic solvents:	0.0 %
Water:	92.0 %
VOC (EC)	0.00 %
Solids content:	4.0 %
· **9.2 Other information**	No further relevant information available.

SECTION 10: Stability and reactivity

· **10.1 Reactivity**
· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

(Contd. on page 5)

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

Printing date 29.05.2015 *Revision: 29.05.2015*

Trade name: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Contd. of page 4)

· **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:**
· **Primary irritant effect:**
· **on the skin:** *No irritant effect.*
· **on the eye:** *Irritating effect.*
· **Sensitisation:** *No sensitising effects known.*
· **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant

SECTION 12: Ecological information

· **12.1 Toxicity**
· **Aquatic toxicity:** *No further relevant information available.*
· **12.2 Persistence and degradability** *No further relevant information available.*
· **12.3 Bioaccumulative potential** *No further relevant information available.*
· **12.4 Mobility in soil** *No further relevant information available.*
· **Additional ecological information:**
· **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
· **12.5 Results of PBT and vPvB assessment**
· **PBT:** *Not applicable.*
· **vPvB:** *Not applicable.*
· **12.6 Other adverse effects** *No further relevant information available.*

SECTION 13: Disposal considerations

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

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

SECTION 14: Transport information

· **14.1 UN-Number**	
· **ADR, ADN, IMDG, IATA**	*Void*
· **14.2 UN proper shipping name**	
· **ADR, ADN, IMDG, IATA**	*Void*

(Contd. on page 6)

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

Printing date 29.05.2015 Revision: 29.05.2015

Trade name: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Contd. of page 5)

· **14.3 Transport hazard class(es)**	
· **ADR, ADN, IMDG, IATA**	
· **Class**	Void
· **14.4 Packing group**	
· **ADR, IMDG, IATA**	Void
· **14.5 Environmental hazards:**	
· **Marine pollutant:**	No
· **14.6 Special precautions for user**	Not applicable.
· **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **UN "Model Regulation":**	-

SECTION 15: Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
· **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
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Sikkerhedsdatablad
ifølge 1907/2006/EF, Artikel 31

Trykdato: 29.05.2015 Revision: 29.05.2015

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

· **1.1 Produktidentifikator**

· **Handelsnavn:** **Sorensen's Phosphate Buffer 0.2M. pH 7.2**

· **Artikelnummer:** 11600-05, 11600-10, 11600-40
· **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**

GHS07

Skin Irrit. 2 H315 Forårsager hudirritation.

· **2.2 Mærkningselementer**
· **Mærkning i henhold til forordning (EF) nr. 1272/2008**
Dette produkt er klassificeret og mærket iht. CLP-forordningen.
· **Farepiktogrammer**

GHS07

· **Signalord** Advarsel
· **Risikosætninger**
H315 Forårsager hudirritation.
· **Sikkerhedssætninger**
P280 Bær beskyttelseshandsker/beskyttelsestøj/øjenbeskyttelse/ansigtsbeskyttelse.
P321 Særlig behandling (se på denne etiket).
P362 Forurenet tøj tages af og vaskes, før det bruges igen.
P332+P313 Ved hudirritation: Søg lægehjælp.
P403+P233 Opbevares på et godt ventileret sted. Hold beholderen tæt lukket.
P501 Bortskaffelse af indholdet/beholderen i henhold til de lokale/regionale/nationale/internationale forskrifter.
· **2.3 Andre farer**
· **Resultater af PBT- og vPvB-vurdering**
· **PBT:** Ikke relevant.

(Fortsættes på side 2)

Sikkerhedsdatablad
ifølge 1907/2006/EF, Artikel 31

Trykdato: 29.05.2015 Revision: 29.05.2015

Handelsnavn: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Fortsat fra side 1)

· **vPvB:** Ikke relevant.

PUNKT 3: Sammensætning af/oplysning om indholdsstoffer

· **3.2 Kemisk betegnelse: Blandinger**
· **Beskrivelse:** Blanding med nedenstående stoffer med ufarlige tilsætningsstoffer.

· **Farlige indholdsstoffer:** Ikke relevant

PUNKT 4: Førstehjælpsforanstaltninger

· **4.1 Beskrivelse af førstehjælpsforanstaltninger**
· **Efter indånding:** Tilførsel af frisk luft, i tilfælde af symptomer skal der søges læge.
· **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:**
CO_2, slukningspulver eller vandsprayråle. Større brande bekæmpes med vandsprayråle eller alkoholbestandigt skum.
· **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.

(Fortsættes på side 3)

Sikkerhedsdatablad
ifølge 1907/2006/EF, Artikel 31

Trykdato: 29.05.2015 Revision: 29.05.2015

Handelsnavn: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Fortsat fra side 2)

· **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:**
Produktet indeholder ingen relevante mængder af stoffer med arbejdspladsrelaterede grænseværdier, der skal overvåges.
· **Yderligere anvisninger:** Baseret på de lister, der var gældende på tidspunktet for udarbejdelsen.

· **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. Da produktet er et præparat af flere forskellige stoffer, kan handskematerialernes bestandighed ikke beregnes på forhånd og skal derfor efterprøves inden brugen.
· **Handskematerialets gennemtrængningstid**
Hos handskefabrikanten skal man forespørge om den nøjagtige gennemtrængningstid og overholde denne.
· **Øjenbeskyttelse:**

Tætsluttende beskyttelsesbriller

(Fortsættes på side 4)

Sikkerhedsdatablad
ifølge 1907/2006/EF, Artikel 31

Trykdato: 29.05.2015 Revision: 29.05.2015

Handelsnavn: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Fortsat fra side 3)

PUNKT 9: Fysisk-kemiske egenskaber

· **9.1 Oplysninger om grundlæggende fysiske og kemiske egenskaber**	
· **Generelle oplysninger**	
· **Udseende:**	
Form:	Flydende
Farve:	Farveløs
· **Lugt:**	Lugtfri
· **Lugttærskel:**	Ikke bestemt.
· **pH-værdi ved 20 °C:**	7,2
· **Tilstandsændring**	
Smeltepunkt/smelteområde	Ikke bestemt.
Kogepunkt/kogeområde	100 °C
· **Flammepunkt:**	Ikke relevant.
· **Antændelighed (fast, i luftform):**	Ikke relevant.
· **Antændelsespunkt:**	
Nedbrydningstemperatur:	Ikke bestemt.
· **Selvantændelighed:**	Produktet er ikke selvantændeligt.
· **Eksplosionsfare:**	Produktet er ikke eksplosivt.
· **Eksplosionsgrænser:**	
Nedre:	Ikke bestemt.
Øvre:	Ikke bestemt.
· **Damptryk ved 20 °C:**	23 hPa
· **Densitet:**	Ikke bestemt.
· **Relativ densitet**	Ikke bestemt.
· **Damptæthed**	Ikke bestemt.
· **Fordampningshastighed**	Ikke bestemt.
· **Opløselighed i/blandbarhed med vand:**	Ikke eller kun lidt blandbar.
· **Fordelingskoefficient (n-octanol/vand):**	Ikke bestemt.
· **Viskositet:**	
dynamisk:	Ikke bestemt.
kinematisk:	Ikke bestemt.
· **Opløsningsmiddelindhold:**	
Organiske opløsningsmidler:	0,0 %
Vand	92,0 %
VOC (EU)	0,00 %
Tørstofindhold:	4,0 %
· **9.2 Andre oplysninger**	Der står ingen yderligere, relevante informationer til rådighed.

PUNKT 10: Stabilitet og reaktivitet

· **10.1 Reaktivitet**
· **10.2 Kemisk stabilitet**
· **Termisk nedbrydning/forhold, der bør undgås** Ingen nedbrydning ved formålsbestemt brug.

(Fortsættes på side 5)

Sikkerhedsdatablad
ifølge 1907/2006/EF, Artikel 31

Trykdato: 29.05.2015 Revision: 29.05.2015

Handelsnavn: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Fortsat fra side 4)

· **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:**
· **Primær irritationsvirkning:**
· **på huden:** Ingen lokalirriterende virkning.
· **på øjet:** Virker lokalirriterende
· **Sensibilisering:** Der er ikke kendskab til nogen sensibiliserende virkning.
· **Yderligere toksikologiske oplysninger:**
Ifølge beregningsmetoden i henhold til beregningsmetoden i "EF's almindelige klassificeringsdirektiv for præparater" i sidste gældende udgave har produktet følgende farer:
Lokalirriterende

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 (Selvklassificering): svagt vandforurenende
Må ikke udledes i grundvandet, vandløb eller kloaksystemet ufortyndet 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: Forhold vedrørende 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

· **14.1 UN-nummer**	
· **ADR, ADN, IMDG, IATA**	Ikke relevant
· **14.2 UN-forsendelsesbetegnelse (UN proper shipping name)**	
· **ADR, ADN, IMDG, IATA**	Ikke relevant

(Fortsættes på side 6)

Sikkerhedsdatablad
ifølge 1907/2006/EF, Artikel 31

Trykdato: 29.05.2015 Revision: 29.05.2015

Handelsnavn: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Fortsat fra side 5)

· **14.3 Transportfareklasse(r)**	
· **ADR, ADN, IMDG, IATA**	
· **klasse**	Ikke relevant
· **14.4 Emballagegruppe**	
· **ADR, IMDG, IATA**	Ikke relevant
· **14.5 Miljøfarer:**	
· **Marine pollutant:**	Nej
· **14.6 Særlige forsigtighedsregler for brugeren**	Ikke relevant.
· **14.7 Bulktransport i henhold til bilag II i MARPOL 73/78 og IBC-koden**	Ikke relevant.
· **UN "Model Regulation":**	-

PUNKT 15: Oplysninger om regulering

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

· **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 produktegenskaber 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
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
Måleteknisk Arbejdshygiejnisk Luftbehov
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Veiligheidsinformatieblad
volgens 1907/2006/EG, Artikel 31

datum van de druk: 29.05.2015 Herziening van: 29.05.2015

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

· **1.1 Productidentificatie**

· **Handelsnaam:** **Sorensen's Phosphate Buffer 0.2M. pH 7.2**

· **Artikelnummer:** 11600-05, 11600-10, 11600-40

· **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** Laboratoriumchemcaliën

· **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**

GHS07

Skin Irrit. 2 H315 Veroorzaakt huidirritatie.

· **2.2 Etiketteringselementen**

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

· **Gevarenpictogrammen**

GHS07

· **Signaalwoord** Waarschuwing

· **Gevarenaanduidingen**
H315 Veroorzaakt huidirritatie.

· **Voorzorgsmaatregelen**

P280	Beschermende handschoenen/beschermende kleding/oogbescherming/gelaatsbescherming dragen.
P321	Specifieke behandeling vereist (zie op dit etiket).
P362	Verontreinigde kleding uittrekken en wassen alvorens deze opnieuw te gebruiken.

(Vervolg op blz. 2)

Veiligheidsinformatieblad
volgens 1907/2006/EG, Artikel 31

datum van de druk: 29.05.2015 *Herziening van: 29.05.2015*

Handelsnaam: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Vervolg van blz. 1)

P332+P313 Bij huidirritatie: een arts raadplegen.
P403+P233 Op een goed geventileerde plaats bewaren. In goed gesloten verpakking bewaren.
P501 De inhoud en de verpakking verwerken volgens de plaatselijke/regionale/nationale/internationale voorschriften.

· **2.3 Andere gevaren**
· **Resultaten van PBT- en zPzB-beoordeling**
· **PBT:** Niet bruikbaar.
· **zPzB:** Niet bruikbaar.

RUBRIEK 3: Samenstelling en informatie over de bestanddelen

· **3.2 Chemische karakterisering: Mengsels**
· **Beschrijving:** Mengsel van na elkaar aangevoerde stoffen met ongevaarlijke bijmengingen.

· **Gevaarlijke inhoudstoffen:** Niet van toepassing

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:**
CO_2, bluspoeder of waterstraal. Grotere brand met waterstraal bestrijden of met schuim, dat tegen alcohol bestand is.
· **5.2 Speciale gevaren die door de stof of het mengsel worden veroorzaakt**
Geen verdere relevante informatie verkrijgbaar.
· **5.3 Advies voor brandweerlieden**
· **Speciale beschermende kleding:** Geen bijzondere maatregelen nodig.

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

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

(Vervolg op blz. 3)

Veiligheidsinformatieblad
volgens 1907/2006/EG, Artikel 31

datum van de druk: 29.05.2015 *Herziening van: 29.05.2015*

Handelsnaam: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Vervolg van blz. 2)

Informatie inzake berging - zie hoofdstuk 13.

RUBRIEK 7: Hantering en opslag

· **7.1 Voorzorgsmaatregelen voor het veilig hanteren van de stof of het mengsel**
Voor goede ventilatie/afzuiging op de werkplaatsen zorgen.
Aërosolvorming vermijden.
· **Informatie m.b.t. brand- en ontploffingsgevaar:** *Geen bijzondere maatregelen noodzakelijk.*

· **7.2 Voorwaarden voor een veilige opslag, met inbegrip van incompatibele producten**
· **Opslag:**
· **Eisen ten opzichte van opslagruimte en tanks:** *Geen bijzondere eisen.*
· **Informatie m.b.t. gezamenlijke opslag:** *Niet noodzakelijk.*
· **Verdere inlichtingen over eisen m.b.t. de opslag:** *Tanks ondoordringbaar gesloten houden.*
· **7.3 Specifiek eindgebruik** *Geen verdere relevante informatie verkrijgbaar.*

RUBRIEK 8: Maatregelen ter beheersing van blootstelling/persoonlijke bescherming

· **Aanvullende gegevens m.b.t. de inrichting van technische installaties:** *Geen aanvullende gegevens. Zie 7.*

· **8.1 Controleparameters**
· **Bestanddelen met grenswaarden die m.b.t. de werkruimte in acht genomen moeten worden:**
Het produkt bevat geen relevante hoeveelheden van stoffen, die met betrekking tot de werkplaatsen, qua grenswaarden gecontroleerd moeten worden.
· **Aanvullende gegevens:** *Als basis dienden lijsten die bij opstelling geldig waren.*

· **8.2 Maatregelen ter beheersing van blootstelling**
· **Persoonlijke beschermingsvoorzieningen:**
· **Algemene beschermings- en gezondheidsmaatregelen:**
Verwijderd houden van eet- en drinkwaren.
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 chemicaliënmengsel afgegeven worden.
Kies handschoenmateriaal rekening houdend met de penetratietijden, de permeatiegraden en de degradatie.
· **Handschoenmateriaal**
De keuze van een geschikte handschoen is niet alleen afhankelijk van het materiaal, maar ook van andere kwaliteitskenmerken en verschilt van fabrikant tot fabrikant. Aangezien het product uit meerdere stoffen is samengesteld, is de duurzaamheid van de handschoenmaterialen niet vooraf berekenbaar en moet derhalve vóór het gebruik worden getest.
· **Doordringingstijd van het handschoenmateriaal**
De precieze penetratietijd kunt u te weten komen bij de handschoenfabrikant; houd er rekening mee.

(Vervolg op blz. 4)

Veiligheidsinformatieblad
volgens 1907/2006/EG, Artikel 31

datum van de druk: 29.05.2015 Herziening van: 29.05.2015

Handelsnaam: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Vervolg van blz. 3)

· **Oogbescherming:**

Nauw aansluitende veiligheidsbril

RUBRIEK 9: Fysische en chemische eigenschappen

· **9.1 Informatie over fysische en chemische basiseigenschappen**	
· **Algemene gegevens**	
· **Voorkomen:**	
Vorm:	Vloeibaar
Kleur:	Kleurloos
· **Reuk:**	Reukloos
· **Geurdrempelwaarde:**	Niet bepaald.
· **pH-waarde bij 20 °C:**	7,2
· **Toestandsverandering**	
Smeltpunt/smeltbereik:	Niet bepaald.
Kookpunt/kookpuntbereik:	100 °C
· **Vlampunt:**	Niet bruikbaar.
· **Ontvlambaarheid (vast, gasvormig):**	Niet bruikbaar.
· **Ontstekingstemperatuur:**	
Ontbindingstemperatuur:	Niet bepaald.
· **Zelfonsteking:**	Het produkt ontbrandt niet uit zichzelf.
· **Ontploffingsgevaar:**	Het produkt is niet ontploffingsgevaarlijk.
· **Ontploffingsgrenzen:**	
Onderste:	Niet bepaald.
Bovenste:	Niet bepaald.
· **Dampspanning bij 20 °C:**	23 hPa
· **Dichtheid:**	Niet bepaald.
· **Relatieve dichtheid**	Niet bepaald.
· **Dampdichtheid**	Niet bepaald.
· **Verdampingssnelheid**	Niet bepaald.
· **Oplosbaarheid in/mengbaarheid met**	
Water:	Niet resp. gering mengbaar.
· **Verdelingscoëfficiënt (n-octanol/water):**	Niet bepaald.
· **Viscositeit**	
Dynamisch:	Niet bepaald.
Kinematisch:	Niet bepaald.
· **Oplosmiddelgehalte:**	
Organisch oplosmiddel:	0,0 %
Water:	92,0 %
VOC (EG)	0,00 %
Gehalte aan vaste bestanddelen:	4,0 %

(Vervolg op blz. 5)

Veiligheidsinformatieblad
volgens 1907/2006/EG, Artikel 31

datum van de druk: 29.05.2015 Herziening van: 29.05.2015

Handelsnaam: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Vervolg van blz. 4)

· **9.2 Overige informatie** Geen verdere relevante informatie verkrijgbaar.

RUBRIEK 10: Stabiliteit en reactiviteit

· **10.1 Reactiviteit**
· **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 ontbindingsprodukten bekend.

RUBRIEK 11: Toxicologische informatie

· **11.1 Informatie over toxicologische effecten**
· **Acute toxiciteit:**
· **Primaire aandoening:**
· **op de huid:** Geen prikkelend effect.
· **aan het oog:** Prikkeling
· **Overgevoeligheid:** Geen effect van overgevoeligheid bekend.
· **Aanvullende toxicologische informatie:**
Het produkt vertoont op grond van het berekeningsprocédé van de algemene classificatie-richtlijnen van de EG voor toebereidingen in de laatste geldige redactie de volgende gevaren:
Irriterend

RUBRIEK 12: Ecologische informatie

· **12.1 Toxiciteit**
· **Aquatische toxiciteit:** Geen verdere relevante informatie verkrijgbaar.
· **12.2 Persistentie en afbreekbaarheid** Geen verdere relevante informatie verkrijgbaar.
· **12.3 Bioaccumulatie** Geen verdere relevante informatie verkrijgbaar.
· **12.4 Mobiliteit in de bodem** Geen verdere relevante informatie verkrijgbaar.
· **Verdere ecologische informatie:**
· **Algemene informatie:**
Waterbezwaarlijkheid (NL) 11: Weinig schadelijk voor water levende organismen.
Gevaar voor water klasse 1 (D) (Zelfclassificatie): gevaar voor water klein
Niet onverdund of in grote hoeveelheden lozen in grondwater, in oppervlaktewater of in de riolering.
· **12.5 Resultaten van PBT- en zPzB-beoordeling**
· **PBT:** Niet bruikbaar.
· **zPzB:** Niet bruikbaar.
· **12.6 Andere schadelijke effecten** Geen verdere relevante informatie verkrijgbaar.

RUBRIEK 13: Instructies voor verwijdering

· **13.1 Afvalverwerkingsmethoden**
· **Aanbeveling:** Mag niet tesamen met huisvuil gestort worden of in de riolering terechtkomen.

(Vervolg op blz. 6)

Veiligheidsinformatieblad
volgens 1907/2006/EG, Artikel 31

datum van de druk: 29.05.2015 Herziening van: 29.05.2015

Handelsnaam: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Vervolg van blz. 5)

· **Niet gereinigde verpakkingen:**
· **Aanbeveling:** Afvalverwijdering volgens overheidsbepalingen.

RUBRIEK 14: Informatie met betrekking tot het vervoer

· **14.1 VN-nummer**	
· **ADR, ADN, IMDG, IATA**	Niet van toepassing
· **14.2 Juiste ladingnaam overeenkomstig de modelreglementen van de VN**	
· **ADR, ADN, IMDG, IATA**	Niet van toepassing
· **14.3 Transportgevarenklasse(n)**	
· **ADR, ADN, IMDG, IATA**	
· **klasse**	Niet van toepassing
· **14.4 Verpakkingsgroep:**	
· **ADR, IMDG, IATA**	Niet van toepassing
· **14.5 Milieugevaren:**	
· **Marine pollutant:**	Neen
· **14.6 Bijzondere voorzorgen voor de gebruiker**	Niet bruikbaar.
· **14.7 Vervoer in bulk overeenkomstig bijlage II bij MARPOL 73/78 en de IBC-code**	Niet bruikbaar.
· **VN "Model Regulation":**	-

RUBRIEK 15: Regelgeving

· **15.1 Specifieke veiligheids-, gezondheids- en milieureglementen en -wetgeving voor de stof of het mengsel**

· **SZW-lijst van kankerverwekkende stoffen**

geen der bestanddelen staat op de lijst.

· **SZW-lijst van mutagene stoffen**

geen der bestanddelen staat op de lijst.

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

geen der bestanddelen staat op de lijst.

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

geen der bestanddelen staat op de lijst.

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

geen der bestanddelen staat op de lijst.

· **Nationale voorschriften:**

· **Gevaarklasse v. water:** Waterbezwaarlijkheid (NL) 11: Saneringsinspanning B
· **15.2 Chemischeveiligheidsbeoordeling:** Een chemische veiligheidsbeoordeling is niet uitgevoerd.

RUBRIEK 16: Overige informatie

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

(Vervolg op blz. 7)

Veiligheidsinformatieblad
volgens 1907/2006/EG, Artikel 31

datum van de druk: 29.05.2015 Herziening van: 29.05.2015

Handelsnaam: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Vervolg van blz. 6)

· **Afkortingen en acroniemen:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Fiche de données de sécurité
selon 1907/2006/CE, Article 31

Date d'impression : 29.05.2015 Révision: 29.05.2015

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

· **1.1 Identificateur de produit**

· **Nom du produit:** **Sorensen's Phosphate Buffer 0.2M. pH 7.2**

· **Code du produit:** 11600-05, 11600-10, 11600-40

· **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

SECTION 2: Identification des dangers

· **2.1 Classification de la substance ou du mélange**

· **Classification selon le règlement (CE) n° 1272/2008**

GHS07

Skin Irrit. 2 H315 Provoque une irritation cutanée.

· **2.2 Éléments d'étiquetage**

· **Etiquetage selon le règlement (CE) n° 1272/2008** Le produit est classifié et étiqueté selon le règlement CLP.

· **Pictogrammes de danger**

GHS07

· **Mention d'avertissement** Attention

· **Mentions de danger**
H315 Provoque une irritation cutanée.

· **Conseils de prudence**

P280	Porter des gants de protection/des vêtements de protection/un équipement de protection des yeux/du visage.
P321	Traitement spécifique (voir sur cette étiquette).
P362	Enlever les vêtements contaminés et les laver avant réutilisation.
P332+P313	En cas d'irritation cutanée: consulter un médecin.
P403+P233	Stocker dans un endroit bien ventilé. Maintenir le récipient fermé de manière étanche.
P501	Éliminer le contenu/récipient conformément à la réglementation locale/régionale/nationale/internationale.

· **2.3 Autres dangers**

· **Résultats des évaluations PBT et vPvB**

· **PBT:** Non applicable.

(suite page 2)

Fiche de données de sécurité
selon 1907/2006/CE, Article 31

Date d'impression : 29.05.2015 Révision: 29.05.2015

Nom du produit: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(suite de la page 1)

· ***vPvB:*** *Non applicable.*

SECTION 3: Composition/informations sur les composants

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

· **Composants dangereux:** *néant*

SECTION 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.*
· **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.

SECTION 5: Mesures de lutte contre l'incendie

· **5.1 Moyens d'extinction**
· **Moyens d'extinction:**
CO2, poudre d'extinction ou eau pulvérisée. Combattre les foyers importants avec de l'eau pulvérisée ou de la mousse résistant à l'alcool.
· **5.2 Dangers particuliers résultant de la substance ou du mélange**
Pas d'autres informations importantes disponibles.
· **5.3 Conseils aux pompiers**
· **Equipement spécial de sécurité:** *Aucune mesure particulière n'est requise.*

SECTION 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 sections**
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.

(suite page 3)

Fiche de données de sécurité
selon 1907/2006/CE, Article 31

Date d'impression : 29.05.2015 Révision: 29.05.2015

Nom du produit: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(suite de la page 2)

SECTION 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.

SECTION 8: Contrôles de l'exposition/protection individuelle

· **Indications complémentaires pour l'agencement des installations techniques:**
Sans autre indication, voir point 7.

· **8.1 Paramètres de contrôle**
· **Composants présentant des valeurs-seuil à surveiller par poste de travail:**
Le produit ne contient pas en quantité significative des substances présentant des valeurs-seuil à surveiller par poste de travail.
· **Remarques supplémentaires:**
Le présent document s'appuie sur les listes en vigueur au moment de son élaboration.

· **8.2 Contrôles de l'exposition**
· **Equipement de protection individuel:**
· **Mesures générales de protection et d'hygiène:**
Tenir à l'écart des produits alimentaires, des boissons et de la nourriture pour animaux.
Retirer immédiatement les vêtements souillés ou humectés.
Se laver les mains avant les pauses et en fin de travail.
Eviter tout contact avec les yeux.
Eviter tout contact avec les yeux et avec la peau.
· **Protection respiratoire:**
En cas d'exposition faible ou de courte durée, utiliser un filtre respiratoire; en cas d'exposition intense ou durable, utiliser un appareil de respiration indépendant de l'air ambiant.
· **Protection des mains:**
Le matériau des gants doit être imperméable et résistant au produit / à la substance / à la préparation.
À cause du manque de tests, aucune recommandation pour un matériau de gants pour le produit / la préparation / le mélange de produits chimiques ne peut être donnée.
Choix du matériau des gants en fonction des temps de pénétration, du taux de perméabilité et de la dégradation.
· **Matériau des gants**
Le choix de gants appropriés dépend non seulement du matériau, mais aussi d'autres critères de qualité qui peuvent varier d'un fabricant à l'autre. Puisque le produit représente une préparation composée de plusieurs substances, la résistance des matériaux des gants ne peut pas être calculée à l'avance et doit, alors, être contrôlée avant l'utilisation.
· **Temps de pénétration du matériau des gants**
Le temps de pénétration exact est à déterminer par le fabricant des gants de protection et à respecter.

(suite page 4)

Fiche de données de sécurité
selon 1907/2006/CE, Article 31

Date d'impression : 29.05.2015 Révision: 29.05.2015

Nom du produit: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(suite de la page 3)

· **Protection des yeux:**

Lunettes de protection hermétiques

SECTION 9: Propriétés physiques et chimiques

· **9.1 Informations sur les propriétés physiques et chimiques essentielles**	
· **Indications générales**	
· **Aspect:**	
Forme:	Liquide
Couleur:	Incolore
· **Odeur:**	Inodore
· **Seuil olfactif:**	Non déterminé.
· **valeur du pH à 20 °C:**	7,2
· **Changement d'état**	
Point de fusion:	Non déterminé.
Point d'ébullition:	100 °C
· **Point d'éclair**	Non applicable.
· **Inflammabilité (solide, gazeux):**	Non applicable.
· **Température d'inflammation:**	
Température de décomposition:	Non déterminé.
· **Auto-inflammation:**	Le produit ne s'enflamme pas spontanément.
· **Danger d'explosion:**	Le produit n'est pas explosif.
· **Limites d'explosion:**	
Inférieure:	Non déterminé.
Supérieure:	Non déterminé.
· **Pression de vapeur à 20 °C:**	23 hPa
· **Densité:**	Non déterminée.
· **Densité relative**	Non déterminé.
· **Densité de vapeur.**	Non déterminé.
· **Vitesse d'évaporation**	Non déterminé.
· **Solubilité dans/miscibilité avec l'eau:**	Pas ou peu miscible
· **Coefficient de partage (n-octanol/eau):**	Non déterminé.
· **Viscosité:**	
Dynamique:	Non déterminé.
Cinématique:	Non déterminé.
· **Teneur en solvants:**	
Solvants organiques:	0,0 %
Eau:	92,0 %
VOC (CE)	0,00 %
Teneur en substances solides:	4,0 %

(suite page 5)

Fiche de données de sécurité
selon 1907/2006/CE, Article 31

Date d'impression : 29.05.2015 Révision: 29.05.2015

Nom du produit: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(suite de la page 4)

· **9.2 Autres informations** Pas d'autres informations importantes disponibles.

SECTION 10: Stabilité et réactivité

· **10.1 Réactivité**
· **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

SECTION 11: Informations toxicologiques

· **11.1 Informations sur les effets toxicologiques**
· **Toxicité aiguë:**
· **Effet primaire d'irritation:**
· **de la peau:** Pas d'effet d'irritation.
· **des yeux:** Effet d'irritation.
· **Sensibilisation:** Aucun effet de sensibilisation connu.
· **Indications toxicologiques complémentaires:**
Selon le procédé de calcul de la dernière version en vigueur de la directive générale CEE sur la classification des préparations, le produit présente les dangers suivants:
Irritant

SECTION 12: Informations écologiques

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

SECTION 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.

(suite page 6)

Fiche de données de sécurité
selon 1907/2006/CE, Article 31

Date d'impression : 29.05.2015 Révision: 29.05.2015

Nom du produit: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(suite de la page 5)

· **Emballages non nettoyés:**
· **Recommandation:** Evacuation conformément aux prescriptions légales.

SECTION 14: Informations relatives au transport

· **14.1 No ONU** · **ADR, ADN, IMDG, IATA**	néant
· **14.2 Nom d'expédition des Nations unies** · **ADR, ADN, IMDG, IATA**	néant
· **14.3 Classe(s) de danger pour le transport** · **ADR, ADN, IMDG, IATA** · **Classe**	néant
· **14.4 Groupe d'emballage** · **ADR, IMDG, IATA**	néant
· **14.5 Dangers pour l'environnement:** · **Marine Pollutant:**	Non
· **14.6 Précautions particulières à prendre par l'utilisateur**	Non applicable.
· **14.7 Transport en vrac conformément à l'annexe II de la convention Marpol 73/78 et au recueil IBC**	Non applicable.
· **"Règlement type" de l'ONU:**	-

SECTION 15: Informations réglementaires

· **15.1 Réglementations/législation particulières à la substance ou au mélange en matière de sécurité, de santé et d'environnement**
Pas d'autres informations importantes disponibles.
· **15.2 Évaluation de la sécurité chimique:** Une évaluation de la sécurité chimique n'a pas été réalisée.

SECTION 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
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Sicherheitsdatenblatt
gemäß 1907/2006/EG, Artikel 31

Druckdatum: 29.05.2015 überarbeitet am: 29.05.2015

ABSCHNITT 1: Bezeichnung des Stoffs bzw. des Gemischs und des Unternehmens

· **1.1 Produktidentifikator**

· **Handelsname:** **Sorensen's Phosphate Buffer 0.2M. pH 7.2**

· **Artikelnummer:** 11600-05, 11600-10, 11600-40

· **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

24h Giftnotruf Munchen: +49 (0)89 19240
Toxikologische Abteilung der II. Medizinischen Klinik
rechts der Isar, Munchen. - www.toxinfo.org

· **Auskunftgebender Bereich:** Product safety department

· **1.4 Notrufnummer:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

ABSCHNITT 2: Mögliche Gefahren

· **2.1 Einstufung des Stoffs oder Gemischs**

· **Einstufung gemäß Verordnung (EG) Nr. 1272/2008**

GHS07

Skin Irrit. 2 H315 Verursacht Hautreizungen.

· **2.2 Kennzeichnungselemente**

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

· **Gefahrenpiktogramme**

GHS07

· **Signalwort** Achtung

· **Gefahrenhinweise**
H315 Verursacht Hautreizungen.

(Fortsetzung auf Seite 2)

Sicherheitsdatenblatt
gemäß 1907/2006/EG, Artikel 31

Druckdatum: 29.05.2015 überarbeitet am: 29.05.2015

Handelsname: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Fortsetzung von Seite 1)

· **Sicherheitshinweise**

P280	Schutzhandschuhe/Schutzkleidung/Augenschutz/Gesichtsschutz tragen.
P321	Besondere Behandlung (siehe auf diesem Kennzeichnungsetikett).
P362	Kontaminierte Kleidung ausziehen und vor erneutem Tragen waschen.
P332+P313	Bei Hautreizung: Ärztlichen Rat einholen/ärztliche Hilfe hinzuziehen.
P403+P233	Behälter dicht verschlossen an einem gut belüfteten Ort aufbewahren.
P501	Entsorgung des Inhalts / des Behälters gemäß den örtlichen / regionalen / nationalen/ internationalen Vorschriften.

· **2.3 Sonstige Gefahren**
· **Ergebnisse der PBT- und vPvB-Beurteilung**
· **PBT:** Nicht anwendbar.
· **vPvB:** Nicht anwendbar.

ABSCHNITT 3: Zusammensetzung/Angaben zu Bestandteilen

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

· **Gefährliche Inhaltsstoffe:** entfällt

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:**
CO_2, Löschpulver oder Wassersprühstrahl. Größeren Brand mit Wassersprühstrahl oder alkoholbeständigem Schaum bekämpfen.
· **5.2 Besondere vom Stoff oder Gemisch ausgehende Gefahren**
Keine weiteren relevanten Informationen verfügbar.
· **5.3 Hinweise für die Brandbekämpfung**
· **Besondere Schutzausrüstung:** 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.

(Fortsetzung auf Seite 3)

Sicherheitsdatenblatt
gemäß 1907/2006/EG, Artikel 31

Druckdatum: 29.05.2015 überarbeitet am: 29.05.2015

Handelsname: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Fortsetzung von Seite 2)

· **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.

· **7.2 Bedingungen zur sicheren Lagerung unter Berücksichtigung von Unverträglichkeiten**
· **Lagerung:**
· **Anforderung an Lagerräume und Behälter:** Keine besonderen Anforderungen.
· **Zusammenlagerungshinweise:** Nicht erforderlich.
· **Weitere Angaben zu den Lagerbedingungen:** Behälter dicht geschlossen halten.
· **Lagerklasse:**
· **Klassifizierung nach Betriebssicherheitsverordnung (BetrSichV):** -
· **7.3 Spezifische Endanwendungen** Keine weiteren relevanten Informationen verfügbar.

ABSCHNITT 8: Begrenzung und Überwachung der Exposition/Persönliche Schutzausrüstungen

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

· **8.1 Zu überwachende Parameter**
· **Bestandteile mit arbeitsplatzbezogenen, zu überwachenden Grenzwerten:**
Das Produkt enthält keine relevanten Mengen von Stoffen mit arbeitsplatzbezogenen, zu überwachenden Grenzwerten.
· **Zusätzliche Hinweise:** Als Grundlage dienten 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 umluftunabhängiges Atemschutzgerät verwenden.
· **Handschutz:**
Das Handschuhmaterial muss undurchlässig und beständig gegen das Produkt / den Stoff / die Zubereitung sein.
Aufgrund fehlender Tests kann keine Empfehlung zum Handschuhmaterial für das Produkt / die Zubereitung / das Chemikaliengemisch abgegeben werden.
Auswahl des Handschuhmaterials unter Beachtung der Durchbruchzeiten, Permeationsraten und der Degradation.
· **Handschuhmaterial**
Die Auswahl eines geeigneten Handschuhs ist nicht nur vom Material, sondern auch von weiteren Qualitätsmerkmalen abhängig und von Hersteller zu Hersteller unterschiedlich. Da das Produkt eine Zubereitung

(Fortsetzung auf Seite 4)

Sicherheitsdatenblatt
gemäß 1907/2006/EG, Artikel 31

Druckdatum: 29.05.2015 überarbeitet am: 29.05.2015

Handelsname: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Fortsetzung von Seite 3)

aus mehreren Stoffen darstellt, ist die Beständigkeit von Handschuhmaterialen nicht vorausberechenbar und muß deshalb vor dem Einsatz überprüft werden.

· **Durchdringungszeit des Handschuhmaterials**
Die genaue Durchbruchzeit ist beim Schutzhandschuhhersteller zu erfahren und einzuhalten.

· **Augenschutz:**

Dichtschließende Schutzbrille

ABSCHNITT 9: Physikalische und chemische Eigenschaften

· **9.1 Angaben zu den grundlegenden physikalischen und chemischen Eigenschaften**	
· **Allgemeine Angaben**	
· **Aussehen:**	
Form:	Flüssig
Farbe:	Farblos
· **Geruch:**	Geruchlos
· **Geruchsschwelle:**	Nicht bestimmt.
· **pH-Wert bei 20 °C:**	7,2
· **Zustandsänderung**	
Schmelzpunkt/Schmelzbereich:	Nicht bestimmt.
Siedepunkt/Siedebereich:	100 °C
· **Flammpunkt:**	Nicht anwendbar.
· **Entzündlichkeit (fest, gasförmig):**	Nicht anwendbar.
· **Zündtemperatur:**	
Zersetzungstemperatur:	Nicht bestimmt.
· **Selbstentzündlichkeit:**	Das Produkt ist nicht selbstentzündlich.
· **Explosionsgefahr:**	Das Produkt ist nicht explosionsgefährlich.
· **Explosionsgrenzen:**	
Untere:	Nicht bestimmt.
Obere:	Nicht bestimmt.
· **Dampfdruck bei 20 °C:**	23 hPa
· **Dichte:**	Nicht bestimmt.
· **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.

(Fortsetzung auf Seite 5)

Sicherheitsdatenblatt
gemäß 1907/2006/EG, Artikel 31

Druckdatum: 29.05.2015 überarbeitet am: 29.05.2015

Handelsname: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Fortsetzung von Seite 4)

· **Lösemittelgehalt:**	
Organische Lösemittel:	0,0 %
Wasser:	92,0 %
VOC (EU)	0,00 %
Festkörpergehalt:	4,0 %
· **9.2 Sonstige Angaben**	Keine weiteren relevanten Informationen verfügbar.

ABSCHNITT 10: Stabilität und Reaktivität

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

ABSCHNITT 11: Toxikologische Angaben

· **11.1 Angaben zu toxikologischen Wirkungen**
· **Akute Toxizität:**
· **Primäre Reizwirkung:**
· **an der Haut:** Keine Reizwirkung.
· **am Auge:** Reizwirkung.
· **Sensibilisierung:** Keine sensibilisierende Wirkung bekannt.
· **Zusätzliche toxikologische Hinweise:**
Das Produkt weist aufgrund des Berechnungsverfahrens der Allgemeinen Einstufungsrichtlinie der EG für Zubereitungen in der letztgültigen Fassung folgende Gefahren auf:
Reizend

ABSCHNITT 12: Umweltbezogene Angaben

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

(Fortsetzung auf Seite 6)

Sicherheitsdatenblatt
gemäß 1907/2006/EG, Artikel 31

Druckdatum: 29.05.2015 überarbeitet am: 29.05.2015

Handelsname: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Fortsetzung von Seite 5)

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, ADN, IMDG, IATA**	entfällt
· **14.2 Ordnungsgemäße UN-Versandbezeichnung** · **ADR, ADN, IMDG, IATA**	entfällt
· **14.3 Transportgefahrenklassen** · **ADR, ADN, IMDG, IATA** · **Klasse**	entfällt
· **14.4 Verpackungsgruppe** · **ADR, IMDG, IATA**	entfällt
· **14.5 Umweltgefahren:** · **Marine pollutant:**	Nein
· **14.6 Besondere Vorsichtsmaßnahmen für den Verwender**	Nicht anwendbar.
· **14.7 Massengutbeförderung gemäß Anhang II des MARPOL-Übereinkommens 73/78 und gemäß IBC-Code**	Nicht anwendbar.
· **UN "Model Regulation":**	-

ABSCHNITT 15: Rechtsvorschriften

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

· **Nationale Vorschriften:**
· **Klassifizierung nach Betriebssicherheitsverordnung (BetrSichV):** -

· **Wassergefährdungsklasse:** WGK 1 (Selbsteinstufung): schwach wassergefährdend.
· **15.2 Stoffsicherheitsbeurteilung:** Eine Stoffsicherheitsbeurteilung wurde nicht durchgeführt.

ABSCHNITT 16: Sonstige Angaben

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

· **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

(Fortsetzung auf Seite 7)

Sicherheitsdatenblatt
gemäß 1907/2006/EG, Artikel 31

Druckdatum: 29.05.2015 überarbeitet am: 29.05.2015

Handelsname: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Fortsetzung von Seite 6)

EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

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

Stampato il: 29.05.2015 Revisione: 29.05.2015

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

· **1.1 Identificatore del prodotto**

· **Denominazione commerciale:** **Sorensen's Phosphate Buffer 0.2M. pH 7.2**

· **Articolo numero:** 11600-05, 11600-10, 11600-40
· **1.2 Usi pertinenti identificati della sostanza o miscela e usi sconsigliati** Non sono disponibili altre informazioni.
· **Utilizzazione della Sostanza / del Preparato** Prodotti chimici per laboratorio

· **1.3 Informazioni sul fornitore della scheda di dati di sicurezza**
· **Produttore/fornitore:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com

Societa Italiana Chimici
Via Rio Nell Ellba 140
00138 Rome, Italy
Tel: 39 06 8800211
Fax: 39 30 06 8815313
Web: www.sichim.com

· **Informazioni fornite da:** Product safety department
· **1.4 Numero telefonico di emergenza:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

SEZIONE 2: Identificazione dei pericoli

· **2.1 Classificazione della sostanza o della miscela**
· **Classificazione secondo il regolamento (CE) n. 1272/2008**

GHS07

Skin Irrit. 2 H315 Provoca irritazione cutanea.

· **2.2 Elementi dell'etichetta**
· **Etichettatura secondo il regolamento (CE) n. 1272/2008**
Il prodotto è classificato ed etichettato conformemente al regolamento CLP.
· **Pittogrammi di pericolo**

GHS07

· **Avvertenza** Attenzione
· **Indicazioni di pericolo**
H315 Provoca irritazione cutanea.
· **Consigli di prudenza**
P280 Indossare guanti/indumenti protettivi/Proteggere gli occhi/il viso.
P321 Trattamento specifico (vedere su questa etichetta).
P362 Togliersi di dosso gli indumenti contaminati e lavarli prima di indossarli nuovamente.
P332+P313 In caso di irritazione della pelle: consultare un medico.

(continua a pagina 2)

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

Stampato il: 29.05.2015 Revisione: 29.05.2015

Denominazione commerciale: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Segue da pagina 1)

P403+P233 Tenere il recipiente ben chiuso e in luogo ben ventilato.
P501 Smaltire il prodotto/recipiente in conformità con le disposizioni locali / regionali / nazionali / internazionali.

· **2.3 Altri pericoli**
· **Risultati della valutazione PBT e vPvB**
· **PBT:** Non applicabile.
· **vPvB:** Non applicabile.

SEZIONE 3: Composizione/informazioni sugli ingredienti

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

· **Sostanze pericolose:** non applicabile

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 della eventuale necessità di consultare immediatamente un medico e di trattamenti speciali**
Non sono disponibili altre informazioni.

SEZIONE 5: Misure antincendio

· **5.1 Mezzi di estinzione**
· **Mezzi di estinzione idonei:**
CO_2, polvere o acqua nebulizzata. Estinguere gli incendi di grosse dimensioni con acqua nebulizzata o con schiuma resistente all'alcool.
· **5.2 Pericoli speciali derivanti dalla sostanza o dalla miscela** Non sono disponibili altre informazioni.
· **5.3 Raccomandazioni per gli addetti all'estinzione degli incendi**
· **Mezzi protettivi specifici:** 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.

(continua a pagina 3)

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

Stampato il: 29.05.2015 Revisione: 29.05.2015

Denominazione commerciale: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Segue da pagina 2)

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 l'immagazzinamento 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 specifici** Non sono disponibili altre informazioni.

SEZIONE 8: Controllo dell'esposizione/protezione individuale

· **Ulteriori indicazioni sulla struttura di impianti tecnici:** Nessun dato ulteriore, vedere punto 7.

· **8.1 Parametri di controllo**
· **Componenti i cui valori limite devono essere tenuti sotto controllo negli ambienti di lavoro:**
Il prodotto non contiene quantità rilevanti di sostanze i cui valori limite devono essere tenuti sotto controllo negli ambienti di lavoro.
· **Ulteriori indicazioni:** Le liste valide alla data di compilazione sono state usate come base.

· **8.2 Controlli dell'esposizione**
· **Mezzi protettivi individuali:**
· **Norme generali protettive e di igiene del lavoro:**
Tenere lontano da cibo, bevande e foraggi.
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 bensí anche da altre caratteristiche di qualità variabili da un produttore a un altro. Poiché il prodotto rappresenta una formulazione di più sostanze, la stabilità dei materiali dei guanti non è calcolabile in anticipo e deve essere testata prima dell'impiego
· **Tempo di permeazione del materiale dei guanti**
Richiedere dal fornitore dei guanti il tempo di passaggio preciso il quale deve essere rispettato.

(continua a pagina 4)

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

Stampato il: 29.05.2015 Revisione: 29.05.2015

Denominazione commerciale: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Segue da pagina 3)

· **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:	*Liquido*
Colore:	*Incolore*
· **Odore:**	*Inodore*
· **Soglia olfattiva:**	*Non definito.*
· **valori di pH a 20 °C:**	*7,2*
· **Cambiamento di stato**	
Temperatura di fusione/ambito di fusione:	*Non definito.*
Temperatura di ebollizione/ambito di ebollizione:	*100 °C*
· **Punto di infiammabilità:**	*Non applicabile.*
· **Infiammabilità (solido, gassoso):**	*Non applicabile.*
· **Temperatura di accensione:**	
Temperatura di decomposizione:	*Non definito.*
· **Autoaccensione:**	*Prodotto non autoinfiammabile.*
· **Pericolo di esplosione:**	*Prodotto non esplosivo.*
· **Limiti di infiammabilità:**	
Inferiore:	*Non definito.*
Superiore:	*Non definito.*
· **Tensione di vapore a 20 °C:**	*23 hPa*
· **Densità:**	*Non definito.*
· **Densità relativa**	*Non definito.*
· **Densità del vapore**	*Non definito.*
· **Velocità di evaporazione**	*Non definito.*
· **Solubilità in/Miscibilità con acqua:**	*Poco e/o non miscibile.*
· **Coefficiente di distribuzione (n-Octanol/acqua):**	*Non definito.*
· **Viscosità:**	
Dinamica:	*Non definito.*
Cinematica:	*Non definito.*
· **Tenore del solvente:**	
Solventi organici:	*0,0 %*
Acqua:	*92,0 %*
VOC (CE)	*0,00 %*
Contenuto solido:	*4,0 %*

(continua a pagina 5)

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

Stampato il: 29.05.2015 Revisione: 29.05.2015

Denominazione commerciale: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Segue da pagina 4)

· **9.2 Altre informazioni** *Non sono disponibili altre informazioni.*

SEZIONE 10: Stabilità e reattività

· **10.1 Reattività**
· **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:**
· **Irritabilità primaria:**
· **sulla pelle:** *Non ha effetti irritanti.*
· **sugli occhi:** *Irritante.*
· **Sensibilizzazione:** *Non si conoscono effetti sensibilizzanti.*
· **Ulteriori dati tossicologici:**
Il prodotto, in base al metodo di calcolo della direttiva generale della Comunità sulla classificazione dei preparati nella sua ultima versione valida, presenta i seguenti rischi:
Irritante

SEZIONE 12: Informazioni ecologiche

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

SEZIONE 13: Considerazioni sullo smaltimento

· **13.1 Metodi di trattamento dei rifiuti**
· **Consigli:** *Non smaltire il prodotto insieme ai rifiuti domestici Non immettere nelle fognature.*

(continua a pagina 6)

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

Stampato il: 29.05.2015 Revisione: 29.05.2015

Denominazione commerciale: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Segue da pagina 5)

· **Imballaggi non puliti:**
· **Consigli:** Smaltimento in conformità con le disposizioni amministrative.

SEZIONE 14: Informazioni sul trasporto

· **14.1 Numero ONU** · **ADR, ADN, IMDG, IATA**	non applicabile
· **14.2 Nome di spedizione dell'ONU** · **ADR, ADN, IMDG, IATA**	non applicabile
· **14.3 Classi di pericolo connesso al trasporto** · **ADR, ADN, IMDG, IATA** · **Classe**	non applicabile
· **14.4 Gruppo di imballaggio** · **ADR, IMDG, IATA**	non applicabile
· **14.5 Pericoli per l'ambiente:** · **Marine pollutant:**	No
· **14.6 Precauzioni speciali per gli utilizzatori**	Non applicabile.
· **14.7 Trasporto di rinfuse secondo l'allegato II di MARPOL 73/78 ed il codice IBC**	Non applicabile.
· **UN "Model Regulation":**	-

SEZIONE 15: Informazioni sulla regolamentazione

· **15.1 Norme e legislazione su salute, sicurezza e ambiente specifiche per la sostanza o la miscela**
Non sono disponibili altre informazioni.
· **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
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

안전지침서

제31조의 1907/2006/EC에 따라

기압점: 2015.05.29 개정: 2015.05.29

1 화학제품과 회사에 관한 정보

· **제품 식별자**

· **제품명:** **Sorensen's Phosphate Buffer 0.2M. pH 7.2**

· **상품번호:** 11600-05, 11600-10, 11600-40
· **해당 순물질이나 혼합물의 관련 하위용도 및 사용금지용도** 추가적인 정보가 존재하지 않습니다.
· **제품의 권고 용도와 사용상의 제한:** 실 험 실 화 학품

· **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

· **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 손상/자극성 구분2 H319 눈에 심한 자극을 일으킴

· **라벨표기 요소**
· **GHS 라벨 요소**
본 제품은 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**
(보호장갑·보호의·보안경·안면보호구)를(을) 착용하시오.
취급 후에는 취급 부위를 철저히 씻으시오.
눈에 묻으면 몇 분간 물로 조심해서 씻으시오. 가능하면콘택트렌즈를 제거하시오. 계속 씻으시오.
눈에 자극이 지속되면 의학적인 조치·조언을 구하시오.
용기는 환기가 잘 되는 곳에 단단히 밀폐하여 저장하시오.
현지/지역/국가/국제 규정에 따라서 내용물/용기 노출

(2 쪽에계속)

안전지침서
제31조의 1907/2006/EC에 따라

기압점: 2015.05.29 개정: 2015.05.29

제품명: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(1 쪽부터계속)

· **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: 혼합물**
· **설명:** 무해한 첨 가 물 이 함유된 아래에 열 거 된 물 질 로 만 들 어 진 혼 합 물.

· **위 험 요소:** 누락되다

4 응급조치 요령

· **응급조치요령 내용**
· **흡입했을 때:** 신 선 한 공 기를 쐬고, 통증이 있을 때는 의료진의 도움을 구한다.
· **피부에 접촉했을 때:** 일 반 적 으 로 이 제품은 피 부 에 자 극 적 이 지 않 다.
· **눈에 들어갔을 때:** 흐르는 물에 눈을 몇분동안 씻어내고나서, 증상이 지속될 경우에는 의사와 상담한 다
· **먹었을 때:** 증상이 지 속될 경우에는 의사와 상 담 한 다.
· **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:**
이 산 화 탄 소, 진 화 용 석 회 가 루 또 는 물 방 사를 사용하고, 더 큰 화재는 물 을 분 사 하 거 나 알 코 올 이함 유 된 거 품 으 로 끈 다.
· **본 화학물질이나 혼합물에서 발생하는 특별 유해성** 추가적인 정보가 존재하지 않습니다.
· **소방관에 대한 권고사항**
· **화재 진압 시 착용할 보호구 및 예방조치:** 특 별 한 조 치 가 필요없음.

6 누출 사고 시 대처방법

· **개인적 예방조치, 보호장비 및 응급처치 절차** 필요없음.
· **환경 관련 예방조치:** 하수도망/해수면위의물/지하수로도달하지않게한다.
· **밀폐 및 정화 방법과 소재:**
액 체 가 혼 합 된 물 질 (모 래, 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 대한 정보는 제7 장 을 참고하시오.
개 인 보 호 장 비에 대한 정보는 제8 장 을 참고하시 오.
쓰 레 기 처 리 에 대한 정보는 제13 장 을 참고하시 오.

7 취급 및 저장방법

· **안전 취급을 위한 예방조치**
작업장에서는통풍이잘되고/습기제거가잘되게주의한다.
연무질이형성되는것을피한다.

(3 쪽에계속)

안전지침서
제31조의 1907/2006/EC에 따라

기압점: 2015.05.29 개정: 2015.05.29

제품명: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(2 쪽부터계속)

· **화재 및 폭발 사고 예방대책에 관한 정보:** 특 별 한 조 치 가 필 요없음.

· **혼합위험성 등 안전 저장 조건**
· **보관:**
· **안전한 저장 방법:** 특 별 한 요구사항이 없음.
· **하나의 공동 보관 시설에 대한 보관 관련 정보:** 필 요없음
· **보 관 조 건 에 관 한 추가적인 정보:** 용기를새지않게밀폐한채보관한다.
· **구체적 최종 사용자** 추가적인 정보가 존재하지 않습니다.

8 노출방지 및 개인보호구

· **첨단시설 디자인에 대한 추가정보:** 더 이 상 의 자료는 없음. 항 목 7 을 참고하시 오.

· **통제 변수**
· **화학물질의 노출기준, 생물학적 노출기준 등:**
본 제품에는 작업장에서 감시가 필요한 주요한 가치의 어떤 해당 재료의 양을 함유하고 있지 않다.
· **추 가 정보:** 제 조 할 당시에 유 효 한 목 록을 기초로 사용했다.

· **노출 통제**
· **개인 보호구**
· **일반적보호조치및위생조치:**
식 료 품, 음 료 수와 사 료 로 부 터 멀 리 떨 어 뜨 려 놓 는 다.
더 러 워 지 거 나 음 료 수 가 묻 은 옷 은 즉 시 탈의한다.
휴 식 전 이 나 작업이끝날때마다 손을 씻는다.
눈과의 접 촉 을 피 한 다.
눈 과 피 부와의 접 촉 은 피 한 다.
· **호흡기 보호:**
단 시 간 또 는 경 미 한 오 염 의 경 우에는 호 흡 여과 기 를 사 용 한 다. 심각한 또 는 장 기 간 노 출시에 는 호 흡 보 호 장 비 를 사 용 한 다.
· **손 보호:**
장갑재질은제품 / 원료 / 조제를투과시키지않아야하고, 내구성이있어야한다.
테 스 트 를 하 지 않 았기 때문에 제 품 / 조 제 / 화 학 혼 합 물에 적합한 장갑재질에 대한 추천이 없다.
투과 시 간, 침 투 율 과 저하를 고 려해서 장 갑 재 료를 선택한다.
· **장갑의재료**
적합한장갑의선정은재질차이뿐아니라품질기준의차이도고려하여이루어져야하고제조업종에따라서도다르게선정되어야한다. 제품은다양한재료로부터의조제로이루어지는것이기때문에, 장갑재질의안정성은사전에예측되어질수있는것이아니고, 반드시사용전에 (그안전성이) 체크되어져야한다.
· **장 갑 재 료 의 투과시 간** 정확한관통시간은보호장갑제조자에의하여인지되고, 준수되어야한다.
· **눈 보호:**

꽉조이는보안경

9 물리화학적 특성

· **기본 물리 및 화학적 특성에 대한 정보**
· **일반정보**
· **외형**

물리적 상태:	액체의
색:	색소가없는
· **냄새:**	무취의

(4 쪽에계속)

안전지침서

제31조의 1907/2006/EC에 따라

기압점: 2015.05.29 개정: 2015.05.29

제품명: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(3 쪽부터계속)

· **후각역치**	알맞지않다.
· **pH 의경우 20 °C:**	7.2
· **상태변화**	
녹는점/어는점:	맞지않는
초기 끓는점과 끓는점 범위:	100 °C
· **인화점:**	해당사항 없음.
· **인화성(고체, 기체):**	해당사항 없음.
· **점화온도:**	
분해 온도:	알맞지않다.
· **자기점화:**	이제품은자연발화성이없다.
· **폭발위험:**	이제품은폭발위험성이없다
· **인화 또는 폭발 범위의 상한/하한**	
아래로:	알맞지않다.
위로:	알맞지않다.
· **증기압 의경우 20 °C:**	23 hPa
· **밀도:**	맞지않는다.
· **비중:**	알맞지않다.
· **증기밀도:**	알맞지않다.
· **증발 속도:**	알맞지않다.
· **용해도:**	
물:	각각의경우에따라서는거의혼합할수없는
· **n 옥탄올/물 분배계수:**	알맞지않다.
· **점도:**	
역학성:	알맞지않다.
등점성:	알맞지않다.
· **용매내용물**	
유기용매:	0.0 %
물:	92.0 %
VOC (EU)	0.00 %
고체의 함량:	4.0 %
· **기타 정보**	추가적인 정보가 존재하지 않습니다.

10 안정성 및 반응성

· **반응성**
· **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.

(5 쪽에계속)

안전지침서
제31조의 1907/2006/EC에 따라

기압점: 2015.05.29 개정: 2015.05.29

제품명: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(4 쪽부터계속)

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.
· **추 가 적 인 독성에 관한 정보:**
이제품은유럽공동체의공동분류원칙의합법적인절차에근거하여최근에발효된원고에서아래위험들의사전준비에대하여제시하고있다.
자극적인

12 환경에 미치는 영향

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

13 폐기시 주의사항

· **폐기물 처리 방법**
· **권고:** 생활쓰레기와함께처리되어서는안된다. 하수도망으로유입되서는안된다.

· **비위생적 포장:**
· **권고:** 당국의지침에입각한쓰레기처리.

14 운송에 필요한 정보

· **유엔 번호** · **ADR, ADN, IMDG, IATA**	누락되다
· **UN 적정 선적명** · **ADR, ADN, IMDG, IATA**	누락되다
· **교통 위험 클래스** · **ADR, ADN, IMDG, IATA** · **등급**	누락되다
· **용기등급** · **ADR, IMDG, IATA**	누락되다

(6 쪽에계속)

안전지침서
제31조의 1907/2006/EC에 따라

기압점: 2015.05.29 개정: 2015.05.29

제품명: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(5 쪽부터계속)

· **환경적 유해물질:** · **해양오염물질:**	아니오
· **이용자 특별 예방조치**	해당사항 없음.
· **MARPOL73/78(선박으로부터의 해양오염방지협약) 부속서2 및 IBC Code(국제선적화물코드)에 따른 벌크(bulk) 운송**	해당사항 없음.
· **UN "모범 규제":**	-

15 법적 규제현황

· **해당 순물질 또는 혼합물에 대한 안전, 보건 및 환경 규제/법률**

· **Korean Existing Chemical Inventory**		
7778-77-0	potassium dihydrogenorthophosphate	KE-28622
7558-79-4	disodium hydrogenorthophosphate	KE-12344
7732-18-5	water, distilled, conductivity or of similar purity	KE-35400

· **GHS 라벨 요소**
본 제품은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.
· **위험 도표**

GHS07

· **표지어** 경고
· **위험 문구**
눈에 심한 자극을 일으킴
· **주의 문구**
(보호장갑·보호의·보안경·안면보호구)를(을) 착용하시오.
취급 후에는 취급 부위를 철저히 씻으시오.
눈에 묻으면 몇 분간 물로 조심해서 씻으시오. 가능하면콘택트렌즈를 제거하시오. 계속 씻으시오.
눈에 자극이 지속되면 의학적인 조치·조언을 구하시오.
용기는 환기가 잘 되는 곳에 단단히 밀폐하여 저장하시오.
현지/지역/국가/국제 규정에 따라서 내용물/용기 노출
· **화학물질 안전성 평가:** 화학물질 안전성 평가가 수행되지 않음

16 그 밖의 참고사항

이보고는우리지식에대한오늘날의상태에대하여평가하고있다, 하지만이보고서는생산특성에관한보증은기술하지않았으며계약적인법률관계에기반을두고있지도않다

· **최초 작성일자:** 2015.05.29
· **개정 횟수 및 최종 개정일자:** 1 / 2015.05.29
· **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
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)

(7 쪽에계속)

안전지침서

제31조의 1907/2006/EC에 따라

기압점: 2015.05.29 개정: 2015.05.29

제품명: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(6 쪽부터계속)

VOC: Volatile Organic Compounds (USA, EU)
심한 눈 손상/자극성 구분2: Serious eye damage/eye irritation, Hazard Category 2

Risalah Data Keselamatan Bahan

Menurut 91/155 EC

Tarikh cetak 29.05.2015 Disemak semula pada 29.05.2015

1 Pengenalpastian bahan/sediaan dan syarikat

· **Pengenal pasti produk**

· **Nama dagang:** **Sorensen's Phosphate Buffer 0.2M. pH 7.2**

· **Nombor artikel:** 11600-05, 11600-10, 11600-40
· **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 Komposisi/maklumat ramuan

· **Ciri kimia: Campuran**
· **Keterangan:** Campuran bahan disenaraikan di bawah bersama dengan bahan tambah tidak berbahaya.

· **Komponen berbahaya :** Tidak sah

3 Pengenalpastian bahaya

· **Pengelasan bahan atau campuran**

Eye Irrit. 2 H319 Menyebabkan kerengsaan mata yang serius.

· **Melabelkan unsur**
· **Unsur label GHS** Produk ini dikelaskan dan dilabelkan menurut Sistem Terharmoni Global (GHS).
· **Piktogram hazard**

GHS07

· **Perkataan isyarat** Amaran
· **Pernyataan hazard**
Menyebabkan kerengsaan mata yang serius.
· **Pernyataan langkah perlindungan**
Pakai sarung tangan pelindung/pakaian pelindung/perlindungan mata/perlindungan muka.
JIKA TERKENA MATA: Bilas berhati-hati dengan air selama beberapa minit. Tanggalkan kanta lekap, jika ada dan dapat dilakukan dengan mudah. Teruskan membilas.
Jika kerengsaan mata berterusan: Dapatkan nasihat/rawatan perubatan.
Simpan di tempat yang dialihudarakan dengan baik. Pastikan bekas ditutup dengan ketat.

(Bersambung ke halaman 2)

Risalah Data Keselamatan Bahan

Menurut 91/155 EC

Tarikh cetak 29.05.2015 Disemak semula pada 29.05.2015

Nama dagang: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Sambungan halaman 1)

Lupuskan kandungan/bekas menurut peraturan tempatan/wilayah/kebangsaan/antarabangsa.

4 Langkah pertolongan cemas

· **Jika tersedut:** Berikan udara bersih, hubungi doktor jika terdapat aduan.
· **Jika terkena kulit:** Biasanya produk tidak merengsakan kulit.
· **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.

5 Langkah memadam kebakaran

· **Agen pemadam yang sesuai:**
CO_2, serbuk atau semburan air. Padam kebakaran besar dengan semburan air atau busa rintangan alkohol.
· **Bahaya khusus yang timbul daripada bahan atau campuran** Tiadak maklumat lanjut yang diperoleh.
· **Kelengkapan perlindungan:** Tiada langkah khusus diperlukan.

6 Langkah menangani pelepasan yang tidak disengajakan

· **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

· **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.
· **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/perlindungan diri

· **Maklumat tambahan tentang reka bentuk kemudahan teknikal:** Tiada maklumat lanjut, lihat perkara 7.
· **Ramuan dengan nilai had yang memerlukan pemantauan di tempat kerja:**
Produk tidak mengandungi sebarang kuantiti bahan yang berkaitan dengan nilai kritikal yang perlu dipantau di tempat kerja.
· **Maklumat tambahan:** Senarai yang sah semasa pembuatan digunakan sebagai asas.

(Bersambung ke halaman 3)

Risalah Data Keselamatan Bahan

Menurut 91/155 EC

Tarikh cetak 29.05.2015 Disemak semula pada 29.05.2015

Nama dagang: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Sambungan halaman 2)

· **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 wakta 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 pengeluar dengan pengeluar yang lain. Memandangkan produk merupakan suatu sediaan daripada beberapa bahan, ketahanan bahan sarung tangan tidak boleh dipastikan terlebih dahulu, oleh itu sarung tangan hendaklah diperiksa sebelum digunakan.

· **Jangka masa penyerapan bahan sarung tangan**

Waktu kemunculan yang tepat hendaklah diperoleh pengeluar sarung tangan pelindung dan hendaklah dipatuhi.

· **Perlindungan mata:**

Gogal bertutup rapat

9 Ciri fizik dan kimia

· **Maklumat Am**	
· **Rupa:**	
Bentuk:	Bendalir
Warna:	Tidak berwarna
· **Bau:**	Tidak berbau
· **Had ambang bau:**	Tidak ditentukan.
· **Nilai pH pada 20 °C:**	7,2
· **Perubahan pada keadaan**	
Takat lebur/Julat lebur:	Tidak ditentukan.
Takat didih/Julat didih:	100 °C
· **Takat kilat:**	Tidak berkenaan
· **Kemudahbakaran (pepejal, gas)**	Tidak berkenaan
· **Suhu pencucuhan:**	
Suhu penguraian:	Tidak ditentukan.
· **Pencucuhan sendiri**	Produk tidak tercucuh sendiri
· **Bahaya letupan:**	Produk tidak ada bahaya letupan.

(Bersambung ke halaman 4)

Risalah Data Keselamatan Bahan
Menurut 91/155 EC

Tarikh cetak 29.05.2015 Disemak semula pada 29.05.2015

Nama dagang: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Sambungan halaman 3)

· **Had letupan :**	
Bawah:	Tidak ditentukan.
Atas:	Tidak ditentukan.
· **Tekanan wap pada 20 °C:**	23 hPa
· **Ketumpatan:**	Tidak ditentukan.
· **Ketumpatan relatif**	Tidak ditentukan.
· **Ketumpatan wap**	Tidak ditentukan.
· **Kadar penyejatan**	Tidak ditentukan.
· **Keterlarutan dalam / Keterlarutcampuran dengan**	
Air:	Tidak terlarut campur atau sukar bercampur.
· **Pekali pengasingan (n-oktanol/air)**	Tidak ditentukan.
· **Kelikatan:**	
Dinamik:	Tidak ditentukan.
Kinematik:	Tidak ditentukan.
· **Kandungan pelarut:**	
Pelarut organik:	0,0 %
Air:	92,0 %
Kandungan pepejal:	4,0 %
· **Maklumat lain**	Tiadak maklumat lanjut yang diperoleh.

10 Kestabilan dan kereaktifan

· **Penguraian terma/keadaan yang perlu dielakkan:** Tiada penguraian jika digunakan mengikut spesifikasi.
· **Bahan tidak serasi:** Tiadak maklumat lanjut yang diperoleh.
· **Produk penguraian yang berbahaya:** Tiada produk penguaraian berbahaya yang diketahui.

11 Maklumat toksikologi

· **Ketoksikan akut:**
· **Kesan kerengsaan primer:**
· **pada kulit:** Tiada kesan merengsa.
· **pada mata** Kesan merengsa.
· **Pemekaan:** Tiada kesan pemekaan yang diketahui.
· **Maklumat tambahan toksikologi:**
Produk menunjukkan bahaya berikut mengikut kaedah pengiraan Garis Panduan Pengelasan Am EU bagi Sediaan seperti yang dikeluarkan dalam versi terbaru:
Perengsa

12 Maklumat ekologi

· **Ketoksikan akuatik:** Tiadak maklumat lanjut yang diperoleh.
· **Keterusan dan keterdegradasikan** Tiadak maklumat lanjut yang diperoleh.
· **Potensi bioakumulatif** Tiadak maklumat lanjut yang diperoleh.

(Bersambung ke halaman 5)

Risalah Data Keselamatan Bahan
Menurut 91/155 EC

Tarikh cetak 29.05.2015 Disemak semula pada 29.05.2015

Nama dagang: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Sambungan halaman 4)

· **Maklumat tambahan ekologi:**
· **Nota am:**
Bahaya air kelas 1 (Peraturan Jerman) (Penilaian kendiri): sedikit berbahaya kepada air
Jangan biarkan produk yang tidak dicairkan atau dalam kuantiti yang banyak memasuki air tanah, saluran air atau sistem pembetungan.

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

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

15 Maklumat Pengawalaturan

· **Unsur label GHS** Produk ini dikelaskan dan dilabelkan menurut Sistem Terharmoni Global (GHS).
· **Piktogram hazard**

GHS07

· **Perkataan isyarat** Amaran
· **Pernyataan hazard**
Menyebabkan kerengsaan mata yang serius.

(Bersambung ke halaman 6)

Risalah Data Keselamatan Bahan

Menurut 91/155 EC

Tarikh cetak 29.05.2015 Disemak semula pada 29.05.2015

Nama dagang: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Sambungan halaman 5)

· **Pernyataan langkah perlindungan**

Pakai sarung tangan pelindung/pakaian pelindung/perlindungan mata/perlindungan muka.
JIKA TERKENA MATA: Bilas berhati-hati dengan air selama beberapa minit. Tanggalkan kanta lekap, jika ada dan dapat dilakukan dengan mudah. Teruskan membilas.
Jika kerengsaan mata berterusan: Dapatkan nasihat/rawatan perubatan.
Simpan di tempat yang dialihudarakan dengan baik. Pastikan bekas ditutup dengan ketat.
Lupuskan kandungan/bekas menurut peraturan tempatan/wilayah/kebangsaan/antarabangsa.

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
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Ficha de datos de seguridad
según 1907/2006/CE, Artículo 31

fecha de impresión 29.05.2015 Revisión: 29.05.2015

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

· **1.1 Identificador del producto**

· **Nombre comercial:** **Sorensen's Phosphate Buffer 0.2M. pH 7.2**

· **Número del artículo:** 11600-05, 11600-10, 11600-40
· **1.2 Usos pertinentes identificados de la sustancia o de la mezcla y usos desaconsejados**
No existen más datos relevantes disponibles.
· **Utilización del producto / de la elaboración** Sustancias químicas de laboratorio

· **1.3 Datos del proveedor de la ficha de datos de seguridad**
· **Fabricante/distribuidor:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com

Aname
C/ Perez Galdos no. 2
28693 Quijorna
Madrid, Spain
Tel: +34.91.816.89.50
Fax: +34.91.816.85.94
email: ventas@aname.es

· **Área de información:** Product safety department
· **1.4 Teléfono de emergencia:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

SECCIÓN 2: Identificación de los peligros

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

GHS07

Skin Irrit. 2 H315 Provoca irritación cutánea.

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

GHS07

· **Palabra de advertencia** Atención
· **Indicaciónes de peligro**
H315 Provoca irritación cutánea.
· **Consejos de prudencia**
P280 Llevar guantes/prendas/gafas/máscara de protección.
P321 Se necesita un tratamiento específico (ver en esta etiqueta).
P362 Quitarse las prendas contaminadas y lavarlas antes de volver a usarlas.

(se continua en página 2)

Ficha de datos de seguridad
según 1907/2006/CE, Artículo 31

fecha de impresión 29.05.2015 Revisión: 29.05.2015

Nombre comercial: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(se continua en página 1)

P332+P313 En caso de irritación cutánea: Consultar a un médico.
P403+P233 Almacenar en un lugar bien ventilado. Mantener el recipiente cerrado herméticamente.
P501 Eliminar el contenido o el recipiente conforme a la reglamentación local/regional/nacional/internacional.

· **2.3 Otros peligros**
· **Resultados de la valoración PBT y mPmB**
· **PBT:** No aplicable.
· **mPmB:** No aplicable.

SECCIÓN 3: Composición/información sobre los componentes

· **3.2 Caracterización química: Mezclas**
· **Descripción:** Mezcla formada por las substancias especificadas a continuación con adiciones no peligrosas.

· **Componentes peligrosos:** suprimido

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:**
CO_2, polvo extintor o chorro de agua rociada. Combatir incendios mayores con chorro de agua rociada o espuma resistente al alcohol.
· **5.2 Peligros específicos derivados de la sustancia o la mezcla** No existen más datos relevantes disponibles.
· **5.3 Recomendaciones para el personal de lucha contra incendios**
· **Equipo especial de protección:** 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.

(se continua en página 3)

Ficha de datos de seguridad
según 1907/2006/CE, Artículo 31

fecha de impresión 29.05.2015 Revisión: 29.05.2015

Nombre comercial: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(se continua en página 2)

Para mayor información sobre cómo desechar el producto, ver capítulo 13.

SECCIÓN 7: Manipulación y almacenamiento

· **7.1 Precauciones para una manipulación segura**
Asegurar suficiente ventilación /aspiración en el puesto de trabajo.
Evitar la formación de aerosoles.
· **Prevención de incendios y explosiones:** *No se requieren medidas especiales.*

· **7.2 Condiciones de almacenamiento seguro, incluidas posibles incompatibilidades**
· **Almacenamiento:**
· **Exigencias con respecto al almacén y los recipientes:** *No se requieren medidas especiales.*
· **Normas en caso de un almacenamiento conjunto:** *No es necesario.*
· **Indicaciones adicionales sobre las condiciones de almacenamiento:**
Mantener el recipiente cerrado herméticamente.
· **7.3 Usos específicos finales** *No existen más datos relevantes disponibles.*

SECCIÓN 8: Controles de exposición/protección individual

· **Instrucciones adicionales para el acondicionamiento de instalaciones técnicas:**
Sin datos adicionales, ver punto 7.

· **8.1 Parámetros de control**
· **Componentes con valores límite admisibles que deben controlarse en el puesto de trabajo:**
El producto no contiene cantidades relevantes de substancias con valores límite que exijan un control en el puesto de trabajo.
· **Indicaciones adicionales:** *Como base se han utilizado las listas vigentes en el momento de la elaboración.*

· **8.2 Controles de la exposición**
· **Equipo de protección individual:**
· **Medidas generales de protección e higiene:**
Mantener alejado de alimentos, bebidas y alimentos para animales.
Quitarse de inmediato la ropa ensuciada o impregnada.
Lavarse las manos antes de las pausas y al final del trabajo.
Evitar el contacto con 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 / substancia / preparado.
Ante la ausencia de tests específicos, no se puede recomendar ningún material específico para guantes de protección contra el producto / preparado / mezcla de substancias químicas.
Selección del material de los guantes en función de los tiempos de rotura, grado de permeabilidad y degradación.
· **Material de los guantes**
La elección del guante adecuado no depende únicamente del material, sino también de otras características de calidad, que pueden variar de un fabricante a otro. Teniendo en cuenta que el producto está fabricado a partir de diferentes materiales, su calidad no puede ser avaluada de antemano, de modo que los guantes deberán ser controlados antes de su utilización.
· **Tiempo de penetración del material de los guantes**
El tiempo de resistencia a la penetración exacto deberá ser pedido al fabricante de los guantes. Este tiempo debe ser respetado.

(se continua en página 4)

Ficha de datos de seguridad
según 1907/2006/CE, Artículo 31

fecha de impresión 29.05.2015 Revisión: 29.05.2015

Nombre comercial: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(se continua en página 3)

· **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:	*Líquido*
Color:	*Incoloro*
· **Olor:**	*Inodoro*
· **Umbral olfativo:**	*No determinado.*
· **valor pH a 20 °C:**	*7,2*
· **Cambio de estado**	
Punto de fusión /campo de fusión:	*Indeterminado.*
Punto de ebullición /campo de ebullición:	*100 °C*
· **Punto de inflamación:**	*No aplicable.*
· **Inflamabilidad (sólido, gaseiforme):**	*No aplicable.*
· **Temperatura de ignición:**	
Temperatura de descomposición:	*No determinado.*
· **Autoinflamabilidad:**	*El producto no es autoinflamable.*
· **Peligro de explosión:**	*El producto no es explosivo.*
· **Límites de explosión:**	
Inferior:	*No determinado.*
Superior:	*No determinado.*
· **Presión de vapor a 20 °C:**	*23 hPa*
· **Densidad:**	*Indeterminado.*
· **Densidad relativa**	*No determinado.*
· **Densidad de vapor**	*No determinado.*
· **Velocidad de evaporación**	*No determinado.*
· **Solubilidad en / miscibilidad con agua:**	*Poco o no mezclable.*
· **Coeficiente de reparto (n-octanol/agua):**	*No determinado.*
· **Viscosidad:**	
Dinámica:	*No determinado.*
Cinemática:	*No determinado.*
· **Concentración del disolvente:**	
Disolventes orgánicos:	*0,0 %*
Agua:	*92,0 %*
VOC (CE)	*0,00 %*
Contenido de cuerpos sólidos:	*4,0 %*

(se continua en página 5)

Ficha de datos de seguridad
según 1907/2006/CE, Artículo 31

fecha de impresión 29.05.2015 Revisión: 29.05.2015

Nombre comercial: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(se continua en página 4)

· **9.2 Información adicional** *No existen más datos relevantes disponibles.*

SECCIÓN 10: Estabilidad y reactividad

· **10.1 Reactividad**
· **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:**
· **Efecto estimulante primario:**
· **en la piel:** *No produce irritaciones.*
· **en el ojo:** *Produce irritaciones.*
· **Sensibilización:** *No se conoce ningún efecto sensibilizante.*
· **Indicaciones toxicológicas adicionales:**
En conformidad con el procedimiento de cálculo contenido en la última versión de la Normativa General de Clasificación de la CE para Preparados, el producto tiene los siguientes riesgos:
Irritante

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 (autoclasificación): 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.*

(se continua en página 6)

Ficha de datos de seguridad
según 1907/2006/CE, Artículo 31

fecha de impresión 29.05.2015 Revisión: 29.05.2015

Nombre comercial: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(se continua en página 5)

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

SECCIÓN 14: Información relativa al transporte

· **14.1 Número UN** · **ADR, ADN, IMDG, IATA**	suprimido
· **14.2 Designación oficial de transporte de las Naciones Unidas** · **ADR, ADN, IMDG, IATA**	suprimido
· **14.3 Clase(s) de peligro para el transporte** · **ADR, ADN, IMDG, IATA** · **Clase**	suprimido
· **14.4 Grupo de embalaje** · **ADR, IMDG, IATA**	suprimido
· **14.5 Peligros para el medio ambiente:** · **Contaminante marino:**	No
· **14.6 Precauciones particulares para los usuarios**	No aplicable.
· **14.7 Transporte a granel con arreglo al anexo II del Convenio Marpol 73/78 y del Código IBC**	No aplicable.
· **"Reglamentación Modelo" de la UNECE:**	-

SECCIÓN 15: Información reglamentaria

· **15.1 Reglamentación y legislación en materia de seguridad, salud y medio ambiente específicas para la sustancia o la mezcla**
No existen más datos relevantes disponibles.
· **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 contratual.

· **Abreviaturas y acrónimos:**
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Säkerhetsdatablad
Enligt 1907/2006/EG, Artikel 31

Datum för utskrift: 29.05.2015 Omarbetad: 29.05.2015

AVSNITT 1: Namnet på ämnet/blandningen och bolaget/företaget

· **1.1 Produktbeteckning**

· **Handelsnamn:** **Sorensen's Phosphate Buffer 0.2M. pH 7.2**

· **Artikelnummer:** 11600-05, 11600-10, 11600-40
· **1.2 Relevanta identifierade användningar av ämnet eller blandningen och användningar som det avråds från**
Ingen ytterligare relevant information finns till förfogande.
· **Ämnets användning / tillredningen** Laboratoriekemikalier

· **1.3 Närmare upplysningar om den som tillhandahåller säkerhetsdatablad**
· **Tillverkare/leverantör:**
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

· **Område där upplysningar kan inhämtas:** Product safety department
· **1.4 Telefonnummer för nödsituationer:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

AVSNITT 2: Farliga egenskaper

· **2.1 Klassificering av ämnet eller blandningen**
· **Klassificering enligt förordning (EG) nr 1272/2008**

GHS07

Skin Irrit. 2 H315 Irriterar huden.

· **2.2 Märkningsuppgifter**
· **Märkning enligt förordning (EG) nr 1272/2008** Produkten är klassificerad och märkt enligt CLP-förordningen.
· **Farosymboler**

GHS07

· **Signalord** Varning
· **Faroangivelser**
H315 Irriterar huden.
· **Skyddsangivelser**
P280 Använd skyddshandskar/skyddskläder/ögonskydd/ansiktsskydd.
P321 Särskild behandling (se på etiketten).
P362 Nedstänkta kläder tas av och tvättas innan de används igen.
P332+P313 Vid hudirritation: Sök läkarhjälp.
P403+P233 Förvaras på väl ventilerad plats. Förpackningen ska förvaras väl tillsluten.
P501 Innehållet / behållaren avfallshanteras enligt lokala / regionala / nationella / internationella föreskrifter.
· **2.3 Andra faror**
· **Resultat av PBT- och vPvB-bedömningen**
· **PBT:** Ej användbar.

(Fortsättning på sida 2)

Säkerhetsdatablad
Enligt 1907/2006/EG, Artikel 31

Datum för utskrift: 29.05.2015 Omarbetad: 29.05.2015

Handelsnamn: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Fortsättning från sida 1)

· **vPvB:** Ej användbar.

AVSNITT 3: Sammansättning/information om beståndsdelar

· **3.2 Kemisk karakterisering: Blandningar**
· **Beskrivning:** Blandning bestående av nedan upplistade ämnen med ofarliga tillsatser.

· **Farliga ingredienser:** Utgår

AVSNITT 4: Åtgärder vid första hjälpen

· **4.1 Beskrivning av åtgärder vid första hjälpen**
· **Vid inandning:** Tillförsel av friskluft, vid besvär kontakta läkare.
· **Vid kontakt med huden:** I allmänhet kan produkten ej irritera huden.
· **Vid kontakt med ögonen:**
Spola ögonen öppna i flera minuter under rinnande vatten. Om besvär kvarstår, kontakta läkare.
· **Vid förtäring:** Om besvär kvarstår, kontakta läkare.
· **4.2 De viktigaste symptomen och effekterna, både akuta och fördröjda**
Ingen ytterligare relevant information finns till förfogande.
· **4.3 Angivande av omedelbar medicinsk behandling och särskild behandling som eventuellt krävs**
Ingen ytterligare relevant information finns till förfogande.

AVSNITT 5: Brandbekämpningsåtgärder

· **5.1 Släckmedel**
· **Lämpliga släckningsmedel:**
CO_2, släckningspulver eller spridd vattenstråle. Större bränder skall bekämpas med spridd vattenstråle eller alkoholbeständigt skum.
· **5.2 Särskilda faror som ämnet eller blandningen kan medföra**
Ingen ytterligare relevant information finns till förfogande.
· **5.3 Råd till brandbekämpningspersonal**
· **Speciell skyddsutrustning:** Inga speciella åtgärder krävs.

AVSNITT 6: Åtgärder vid oavsiktliga utsläpp

· **6.1 Personliga skyddsåtgärder, skyddsutrustning och åtgärder vid nödsituationer** Erfordras ej.
· **6.2 Miljöskyddsåtgärder:** Förhindra produkten att tränga ner i avloppsnät/ytvatten/grundvatten.
· **6.3 Metoder och material för inneslutning och sanering:**
Sug upp med vätskebindande material (sand, kiselgur, syrabindemedel, universalbindemedel, sågspån).
Se till att ventilationen är tillräcklig.
· **6.4 Hänvisning till andra avsnitt**
Information beträffande säker hantering se kapitel 7.
Information beträffande personlig skyddsutrustning se kapitel 8.
Information beträffande avfallshantering se kapitel 13.

AVSNITT 7: Hantering och lagring

· **7.1 Försiktighetsmått för säker hantering**
Sörj för god ventilation/utsug på arbetsplatsen.
Undvik bildning av aerosol.

(Fortsättning på sida 3)

Säkerhetsdatablad
Enligt 1907/2006/EG, Artikel 31

Datum för utskrift: 29.05.2015 Omarbetad: 29.05.2015

Handelsnamn: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Fortsättning från sida 2)

· **Hänvisningar beträffande brand- och explosionsskydd:** Inga speciella åtgärder krävs.

· **7.2 Förhållanden för säker lagring, inklusive eventuell oförenlighet**
· **Lagring:**
· **Krav på lagerutrymmen och behållare:** Inga speciella krav.
· **Hänvisningar beträffande sammanlagring:** Erfordras ej.
· **Ytterligare uppgifter till lagringsvillkoren:** Förvara behållaren tätt tillsluten.
· **7.3 Specifik slutanvändning** Ingen ytterligare relevant information finns till förfogande.

AVSNITT 8: Begränsning av exponeringen/personligt skydd

· **Ytterligare hänvisningar beträffande utformning av tekniska anläggningar:** Inga övriga uppgifter, se punkt 7.

· **8.1 Kontrollparametrar**
· **Ämnen med yrkeshygieniska gränsvärden som bör övervakas:**
Produkten innehåller inga relevanta mängder av ämnen med arbetsplatsrelaterade gränsvärden som skall övervakas.
· **Ytterligare hänvisningar:** De vid framställningen gällande listorna har använts som utgångspunkt.

· **8.2 Begränsning av exponeringen**
· **Personlig skyddsutrustning:**
· **Allmänna skydds- och hygienåtgärder:**
Undvik kontakt med livsmedel, drycker och fodermedel.
Nedsmutsade, indränkta klädesplagg skall omedelbart tas av.
Tvätta händerna före raster och efter arbetet.
Undvik kontakt med ögonen.
Undvik kontakt med ögonen och huden.
· **Andningsskydd:**
Vid kortvarig eller ringa belastning - använd andningsfilterutrustning; vid intensiv resp. längre exponering - använd andningsskyddsutrustning som är oberoende av omgivningsluften.
· **Handskydd:**
Handskmaterialet måste vara tätt och beständigt mot produkt/ämne/tillredning.
Handskmaterialrekommendationer kan inte ges för produkt/tillredning/kemikalielösning, då inga tester genomförts.
Val av handskmaterial beaktande penetrationstider, permeationskvoter och degradation.
· **Handskmaterial**
Val av lämplig handske är inte enbart beroende av material utan även av andra kvalitetskriterier och varierar från en tillverkare till nästa. Då produkten bereds av flera material, kan handskmaterialets beständighet inte förutses och måste därför kontrolleras före användningen.
· **Handskmaterialets penetreringstid**
Exakt penetrationstid fastställs av skyddshandskarnas tillverkare och skall beaktas.
· **Ögonskydd:**

Tättslutande skyddsglasögon

(Fortsättning på sida 4)

Säkerhetsdatablad
Enligt 1907/2006/EG, Artikel 31

Datum för utskrift: 29.05.2015 Omarbetad: 29.05.2015

Handelsnamn: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Fortsättning från sida 3)

AVSNITT 9: Fysikaliska och kemiska egenskaper

· **9.1 Information om grundläggande fysikaliska och kemiska egenskaper**	
· **Allmänna uppgifter**	
· **Utseende:**	
Form:	Flytande
Färg:	Färglös
· **Lukt:**	Luktfri
· **Lukttröskel:**	Ej bestämd.
· **pH-värde vid 20 °C:**	7,2
· **Tillståndsändring**	
Smältpunkt/smältområde:	Ej bestämd.
Kokpunkt / kokområde:	100 °C
· **Flampunkt:**	Ej användbar.
· **Lättantändlighet (fast, gasformig):**	Ej användbar.
· **Tändtemperatur:**	
Sönderdelningstemperatur:	Ej bestämd.
· **Självantändbarhet:**	Produkten är ej självantändande.
· **Explosionsfara:**	Produkten är ej explosiv.
· **Explosionsgränser:**	
Nedre:	Ej bestämd.
Övre:	Ej bestämd.
· **Ångtryck vid 20 °C:**	23 hPa
· **Densitet:**	Ej bestämd.
· **Relativ densitet**	Ej bestämd.
· **Ångdensitet**	Ej bestämd.
· **Förångningshastighet**	Ej bestämd.
· **Löslighet i / blandbarhet med**	
Vatten:	Ej resp. föga blandbar.
· **Fördelningskoefficient (n-octanol/vatten):**	Ej bestämd.
· **Viskositet:**	
Dynamisk:	Ej bestämd.
Kinematisk:	Ej bestämd.
· **Lösningsmedelhalt:**	
Organiska lösningsmedel:	0,0 %
Vatten:	92,0 %
VOC (EG)	0,00 %
Andel av fasta partiklar:	4,0 %
· **9.2 Annan information**	Ingen ytterligare relevant information finns till förfogande.

AVSNITT 10: Stabilitet och reaktivitet

· **10.1 Reaktivitet**
· **10.2 Kemisk stabilitet**
· **Termisk sönderdelning / förhållanden som bör undvikas:** Inget sönderfall vid ändamålsenlig användning.

(Fortsättning på sida 5)

Säkerhetsdatablad
Enligt 1907/2006/EG, Artikel 31

Datum för utskrift: 29.05.2015 Omarbetad: 29.05.2015

Handelsnamn: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Fortsättning från sida 4)

· **10.3 Risken för farliga reaktioner** Inga farliga reaktioner kända.
· **10.4 Förhållanden som ska undvikas** Ingen ytterligare relevant information finns till förfogande.
· **10.5 Oförenliga material:** Ingen ytterligare relevant information finns till förfogande.
· **10.6 Farliga sönderdelningsprodukter:** Inga farliga sönderfallsprodukter kända.

AVSNITT 11: Toxikologisk information

· **11.1 Information om de toxikologiska effekterna**
· **Akut toxicitet:**
· **Primär retningseffekt:**
· **på huden:** Ingen irritationsrisk.
· **på ögat:** Irriterande.
· **Sensibilisering:** Ingen sensibiliserande effekt känd.
· **Ytterligare toxikologiska hänvisningar:**
Enligt beräkningsmetoden i EG's Allmänna klassificeringsriktlinjer för tillredningar i den senast giltiga versionen kan produkten medföra följande risker:
Irriterande

AVSNITT 12: Ekologisk information

· **12.1 Toxicitet**
· **Akvatisk toxicitet:** Ingen ytterligare relevant information finns till förfogande.
· **12.2 Persistens och nedbrytbarhet** Ingen ytterligare relevant information finns till förfogande.
· **12.3 Bioackumuleringsförmåga** Ingen ytterligare relevant information finns till förfogande.
· **12.4 Rörligheten i jord** Ingen ytterligare relevant information finns till förfogande.
· **Ytterligare ekologiska hänvisningar:**
· **Allmänna hänvisningar:**
Vattenföroreningsklass 1 (Självutvärdering): liten risk för vattenförorening.
Låt ej tränga ner i grundvatten, vattendrag eller i avloppsnätet i outspätt tillstånd resp. i större mängder.
· **12.5 Resultat av PBT- och vPvB-bedömningen**
· **PBT:** Ej användbar.
· **vPvB:** Ej användbar.
· **12.6 Andra skadliga effekter** Ingen ytterligare relevant information finns till förfogande.

AVSNITT 13: Avfallshantering

· **13.1 Avfallsbehandlingsmetoder**
· **Rekommendation:** Får inte deponeras ihop med hushållsavfall. Får inte tömmas i avloppsnätet.

· **Ej rengjorda förpackningar:**
· **Rekommendation:** Avfallshanteras enligt myndigheters föreskrifter.

AVSNITT 14: Transport information

· **14.1 UN-nummer**	
· **ADR, ADN, IMDG, IATA**	Utgår
· **14.2 Officiell transportbenämning**	
· **ADR, ADN, IMDG, IATA**	Utgår

(Fortsättning på sida 6)

Säkerhetsdatablad
Enligt 1907/2006/EG, Artikel 31

Datum för utskrift: 29.05.2015 Omarbetad: 29.05.2015

Handelsnamn: Sorensen's Phosphate Buffer 0.2M. pH 7.2

(Fortsättning från sida 5)

· **14.3 Faroklass för transport**	
· **ADR, ADN, IMDG, IATA**	
· **Klass**	Utgår
· **14.4 Förpackningsgrupp**	
· **ADR, IMDG, IATA**	Utgår
· **14.5 Miljöfaror:**	
· **Marine pollutant:**	Nej
· **14.6 Särskilda försiktighetsåtgärder**	Ej användbar.
· **14.7 Bulktransport enligt bilaga II till MARPOL 73/78 och IBC-koden**	Ej användbar.
· **UN "Model Regulation":**	-

AVSNITT 15: Gällande föreskrifter

· **15.1 Föreskrifter/lagstiftning om ämnet eller blandningen när det gäller säkerhet, hälsa och miljö**
Ingen ytterligare relevant information finns till förfogande.
· **15.2 Kemikaliesäkerhetsbedömning:** En kemikaliesäkerhetsbedömning har ej gjorts.

AVSNITT 16: Annan information

Uppgifterna är baserade på våra aktuella kunskaper. De representerar emellertid ingen som helst garanti beträffande produktegenskaper och utgör ingen grund för ett avtalat rättsförhållande.

· **Förkortningar och 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
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2