

# Safety Data Sheet

acc. to OSHA HCS

Printing date 03/10/2022

Reviewed on 03/10/2022

## 1 Identification

- **Product identifier**
- **Trade name:** ACETATE BUFFER, 0.2M, pH 3.6
- **Article number:** 11480, 11482
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: info@emsdiasum.com  
www.emsdiasum.com
- **Information department:** Product safety department
- **Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids 3      H226 Flammable liquid and vapor.



GHS06 Skull and crossbones

Acute Toxicity - Oral 1      H300 Fatal if swallowed.  
Acute Toxicity - Dermal 1      H310 Fatal in contact with skin.  
Acute Toxicity - Inhalation 2      H330 Fatal if inhaled.



GHS05 Corrosion

Skin Corrosion 1B      H314 Causes severe skin burns and eye damage.  
Eye Damage 1      H318 Causes serious eye damage.

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



GHS02



GHS05



GHS06

- **Signal word** Danger
- **Hazard-determining components of labeling:**  
SODIUM ACETATE TRIHYDRATE  
Acetic Acid Glacial

(Contd. on page 2)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 03/10/2022

Reviewed on 03/10/2022

**Trade name: ACETATE BUFFER, 0.2M, pH 3.6**

(Contd. of page 1)

- **Hazard statements**

*Flammable liquid and vapor.  
Fatal if swallowed, in contact with skin or if inhaled.  
Causes severe skin burns and eye damage.*

- **Precautionary statements**

*Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
Ground/bond container and receiving equipment.  
Use explosion-proof electrical/ventilating/lighting/equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Do not breathe dusts or mists.  
Do not get in eyes, on skin, or on clothing.  
Wash thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves/protective clothing/eye protection/face protection.  
[In case of inadequate ventilation] wear respiratory protection.  
If swallowed: Immediately call a poison center/doctor.  
If swallowed: Rinse mouth. Do NOT induce vomiting.  
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
Continue rinsing.  
Specific treatment is urgent (see on this label).  
Take off immediately all contaminated clothing and wash it before reuse.  
In case of fire: Use CO2, powder or water spray to extinguish.  
Store in a well-ventilated place. Keep container tightly closed.  
Store in a well-ventilated place. Keep cool.  
Store locked up.  
Dispose of contents/container in accordance with local/regional/national/international regulations.*

- **Classification system:**

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



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



- **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.

(Contd. on page 3)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 03/10/2022

Reviewed on 03/10/2022

**Trade name: ACETATE BUFFER, 0.2M, pH 3.6**

(Contd. of page 2)

**· Dangerous components:**

64-19-7	Acetic Acid Glacial	>25-≤50%
6131-90-4	SODIUM ACETATE TRIHYDRATE	>25-≤50%

## 4 First-aid measures

**· Description of first aid measures**

**· General information:**

Immediately remove any clothing soiled by the product.

Remove breathing apparatus only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

**· After inhalation:**

Supply fresh air or oxygen; call for doctor.

In case of unconsciousness place patient stably in side position for transportation.

**· After skin contact:** Immediately wash with water and soap and rinse thoroughly.

**· After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

**· After swallowing:**

Do not induce vomiting; immediately call for medical help.

Drink copious amounts of water and provide fresh air. Immediately call a doctor.

**· Information for doctor:**

**· Most important symptoms and effects, both acute and delayed** No further relevant information available.

**· Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

## 5 Fire-fighting measures

**· Extinguishing media**

**· Suitable extinguishing agents:**

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

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

**· Advice for firefighters**

**· Protective equipment:** Mouth respiratory protective device.

## 6 Accidental release measures

**· Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

**· Environmental precautions:**

Dilute with plenty of water.

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).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

**· Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

(Contd. on page 4)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 03/10/2022

Reviewed on 03/10/2022

**Trade name: ACETATE BUFFER, 0.2M, pH 3.6**

(Contd. of page 3)

### · Protective Action Criteria for Chemicals

· PAC-1:		
64-19-7	Acetic Acid Glacial	5 ppm
6131-90-4	SODIUM ACETATE TRIHYDRATE	11 mg/m <sup>3</sup>
· PAC-2:		
64-19-7	Acetic Acid Glacial	35 ppm
6131-90-4	SODIUM ACETATE TRIHYDRATE	120 mg/m <sup>3</sup>
· PAC-3:		
64-19-7	Acetic Acid Glacial	250 ppm
6131-90-4	SODIUM ACETATE TRIHYDRATE	690 mg/m <sup>3</sup>

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
 Ensure good ventilation/exhaustion at the workplace.  
 Open and handle receptacle with care.  
 Prevent formation of aerosols.
- **Information about protection against explosions and fires:**  
 Keep ignition sources away - Do not smoke.  
 Protect from heat.  
 Protect against electrostatic charges.  
 Keep respiratory protective device available.
- **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.  
 Protect from heat and direct sunlight.
- **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 following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.  
 At this time, the remaining constituent has no known exposure limits.

64-19-7 Acetic Acid Glacial	
PEL	Long-term value: 25 mg/m <sup>3</sup> , 10 ppm
REL	Short-term value: 37 mg/m <sup>3</sup> , 15 ppm Long-term value: 25 mg/m <sup>3</sup> , 10 ppm
TLV	Short-term value: 15 ppm Long-term value: 10 ppm

- **Additional information:** The lists that were valid during the creation were used as basis.

(Contd. on page 5)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 03/10/2022

Reviewed on 03/10/2022

**Trade name: ACETATE BUFFER, 0.2M, pH 3.6**

(Contd. of page 4)

- **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.

Store protective clothing separately.

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:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

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

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

## 9 Physical and chemical properties

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

- **General Information**

- **Appearance:**

**Form:** Liquid

**Color:** Clear

- **Odor:** Pungent

- **Odor threshold:** Not determined.

- **pH-value at 20 °C (68 °F):** 5.2

- **Change in condition**

**Melting point/Melting range:** Undetermined.

**Boiling point/Boiling range:** 118 °C (244.4 °F)

- **Flash point:** 43 °C (109.4 °F)

(Contd. on page 6)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 03/10/2022

Reviewed on 03/10/2022

Trade name: ACETATE BUFFER, 0.2M, pH 3.6

(Contd. of page 5)

· <b>Flammability (solid, gaseous):</b>	Not flammable.
· <b>Ignition temperature:</b>	426 °C (798.8 °F)
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· <b>Explosion limits:</b>	
Lower:	4 Vol %
Upper:	19 Vol %
· <b>Vapor pressure at 20 °C (68 °F):</b>	11.4 hPa (8.6 mm Hg)
· <b>Density:</b>	Not determined.
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Fully miscible.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
Dynamic:	Not determined.
Kinematic:	Not determined.
· <b>Solvent content:</b>	
Organic solvents:	50.0 %
Water:	8.0 %
· <b>VOC content:</b>	50.00 %
	543.5 g/l / 4.54 lb/gal
· <b>Solids content:</b>	42.0 %
· <b>Other information</b>	No further relevant information available.

## 10 Stability and reactivity

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

(Contd. on page 7)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 03/10/2022

Reviewed on 03/10/2022

Trade name: ACETATE BUFFER, 0.2M, pH 3.6

(Contd. of page 6)

## 11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

### 64-19-7 Acetic Acid Glacial

Oral	LD50	3,310 mg/kg (rat)
Dermal	LD50	1,060 mg/kg (rabbit)

- **Primary irritant effect:**

- **on the skin:** Strong caustic effect on skin and mucous membranes.

- **on the eye:**

- Strong caustic effect.

- Strong irritant with the danger of severe eye injury.

- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

- The product shows the following dangers according to internally approved calculation methods for preparations:

- Corrosive

- Irritant

- Very toxic

- Danger through skin absorption.

- Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

- **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.

- Must not reach bodies of water or drainage ditch undiluted or unneutralized.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

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

US

(Contd. on page 8)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 03/10/2022

Reviewed on 03/10/2022










Trade name: ACETATE BUFFER, 0.2M, pH 3.6

(Contd. of page 7)

## 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.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

## 14 Transport information

- |                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>· <b>UN-Number</b></li> <li>· <b>DOT, ADR, IMDG, IATA</b></li> </ul>                                                 | UN2927                                                                                                                                                                                                                                                                                                                                              |
| <ul style="list-style-type: none"> <li>· <b>UN proper shipping name</b></li> <li>· <b>DOT</b></li> <li>· <b>ADR</b></li> <li>· <b>IMDG, IATA</b></li> </ul> | <p>Toxic liquids, corrosive, organic, n.o.s. (SODIUM ACETATE TRIHYDRATE, Acetic acid, glacial)</p> <p>2927 TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (SODIUM ACETATE TRIHYDRATE, ACETIC ACID, GLACIAL)</p> <p>TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (SODIUM ACETATE TRIHYDRATE, ACETIC ACID, GLACIAL)</p>                                         |
| <ul style="list-style-type: none"> <li>· <b>Transport hazard class(es)</b></li> <li>· <b>DOT</b></li> </ul>                                                 | <div style="display: flex; justify-content: space-around; align-items: center;">    </div> |
| <ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul>                                                                    | <p>6.1 Toxic substances</p> <p>6.1, 8, 3</p>                                                                                                                                                                                                                                                                                                        |
| <ul style="list-style-type: none"> <li>· <b>ADR</b></li> </ul>                                                                                              | <div style="display: flex; justify-content: space-around; align-items: center;">    </div> |
| <ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul>                                                                    | <p>6.1 Toxic substances</p> <p>6.1+8+3</p>                                                                                                                                                                                                                                                                                                          |
| <ul style="list-style-type: none"> <li>· <b>IMDG</b></li> </ul>                                                                                             | <div style="display: flex; justify-content: space-around; align-items: center;">    </div> |
| <ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul>                                                                    | <p>6.1 Toxic substances</p> <p>6.1/8/3</p>                                                                                                                                                                                                                                                                                                          |

(Contd. on page 9)

US



# Safety Data Sheet

acc. to OSHA HCS

Printing date 03/10/2022

Reviewed on 03/10/2022

Trade name: ACETATE BUFFER, 0.2M, pH 3.6

(Contd. of page 8)

· **IATA**

· **Class** 6.1 Toxic substances  
 · **Label** 6.1 (8, 3)

· **Packing group**  
 · **DOT, ADR, IMDG, IATA** I

· **Environmental hazards:** Not applicable.

· **Special precautions for user** Warning: Toxic substances  
 · **Hazard identification number (Kemler code):** 668  
 · **EMS Number:** F-A,S-B  
 · **Segregation groups** Acids  
 · **Stowage Category** B  
 · **Stowage Code** SW2 Clear of living quarters.

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

· **Transport/Additional information:**

· **DOT**  
 · **Quantity limitations** On passenger aircraft/rail: 0.5 L  
 On cargo aircraft only: 2.5 L

· **ADR**  
 · **Excepted quantities (EQ)** Code: E5  
 Maximum net quantity per inner packaging: 1 ml  
 Maximum net quantity per outer packaging: 300 ml

· **IMDG**  
 · **Limited quantities (LQ)** 0  
 · **Excepted quantities (EQ)** Code: E5  
 Maximum net quantity per inner packaging: 1 ml  
 Maximum net quantity per outer packaging: 300 ml

· **UN "Model Regulation":** UN 2927 TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (SODIUM ACETATE TRIHYDRATE, ACETIC ACID, GLACIAL), 6.1 (8+3), I

## 15 Regulatory information

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

· **Sara**

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

None of the ingredients is listed.

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

None of the ingredients is listed.

(Contd. on page 10)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 03/10/2022

Reviewed on 03/10/2022

**Trade name: ACETATE BUFFER, 0.2M, pH 3.6**

(Contd. of page 9)

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

64-19-7	Acetic Acid Glacial	ACTIVE
7732-18-5	Deionized Water, Reagent Grade A.C.S.	ACTIVE

· **Hazardous Air Pollutants**

None of the ingredients is listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value)**

None of the ingredients is listed.

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

None of the ingredients is listed.

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

· **Hazard pictograms**



GHS02    GHS05    GHS06

· **Signal word** *Danger*

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

SODIUM ACETATE TRIHYDRATE

Acetic Acid Glacial

· **Hazard statements**

Flammable liquid and vapor.

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

Causes severe skin burns and eye damage.

· **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Do not breathe dusts or mists.

Do not get in eyes, on skin, or on clothing.

Wash thoroughly after handling.

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

Use only outdoors or in a well-ventilated area.

(Contd. on page 11)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 03/10/2022

Reviewed on 03/10/2022

**Trade name: ACETATE BUFFER, 0.2M, pH 3.6**

(Contd. of page 10)

Wear protective gloves/protective clothing/eye protection/face protection.  
 [In case of inadequate ventilation] wear respiratory protection.  
 If swallowed: Immediately call a poison center/doctor.  
 If swallowed: Rinse mouth. Do NOT induce vomiting.  
 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
 Continue rinsing.  
 Specific treatment is urgent (see on this label).  
 Take off immediately all contaminated clothing and wash it before reuse.  
 In case of fire: Use CO<sub>2</sub>, powder or water spray to extinguish.  
 Store in a well-ventilated place. Keep container tightly closed.  
 Store in a well-ventilated place. Keep cool.  
 Store locked up.  
 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Contact:**

· **Date of preparation / last revision** 03/10/2022 / -

· **Abbreviations and acronyms:**

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

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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**

**Flammable Liquids 3: Flammable liquids – Category 3**

**Acute Toxicity - Oral 1: Acute toxicity – Category 1**

**Acute Toxicity - Inhalation 2: Acute toxicity – Category 2**

**Skin Corrosion 1B: Skin corrosion/irritation – Category 1B**

**Eye Damage 1: Serious eye damage/eye irritation – Category 1**

# Safety Data Sheet

## according to WHS Regulations

Printing date 10.03.2022

Revision: 10.03.2022

### 1 Identification

· **Product identifier**

· **Trade name:** ACETATE BUFFER, 0.2M, pH 3.6

· **Article number:** 11480, 11482

· **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.

· **Application of the substance / the mixture** Laboratory chemicals

· **Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

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

email: [info@emsdiasum.com](mailto:info@emsdiasum.com)

[www.emsdiasum.com](http://www.emsdiasum.com)

ProSciTech Pty Ltd

11 Carlton Street, Kirwan QLD 4817 Australia

Telephone Number: (07) 4773 9444 - 8:30am - 5:00pm, Monday to Friday (excluding Public Holidays)

Emergency Contact: (07) 4773 9444 - 8:30am - 5:00pm, Monday to Friday (excluding Public Holidays)

Website: [ems.proscitech.com](http://ems.proscitech.com)

Emgrid Australia Pty. Ltd.

P.O. Box 118

The Patch VIC 3792

Australia

Tel: 03 9752 1785

Fax: 03 9752 1784

Website: [www.emgrid.com.au](http://www.emgrid.com.au)

· **Further information obtainable from:** Product safety department

· **Emergency telephone number:**

ChemTrec 1-800-424-9300 Contract CCN7661

1-703-527-3887

### 2 Hazard(s) Identification

· **Classification of the substance or mixture**



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS06 skull and crossbones

Acute Tox. 1 H300 Fatal if swallowed.

Acute Tox. 1 H310 Fatal in contact with skin.

Acute Tox. 2 H330 Fatal if inhaled.



GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

(Contd. on page 2)

# Safety Data Sheet

## according to WHS Regulations

Printing date 10.03.2022

Revision: 10.03.2022

**Trade name: ACETATE BUFFER, 0.2M, pH 3.6**

(Contd. of page 1)

Eye Dam. 1 H318 Causes serious eye damage.

· **Label elements**

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

· **Hazard pictograms**



GHS02   GHS05   GHS06

· **Signal word** Danger

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

SODIUM ACETATE TRIHYDRATE

Acetic Acid Glacial

· **Hazard statements**

Flammable liquid and vapour.

Fatal if swallowed.

Fatal in contact with skin.

Fatal if inhaled.

Causes severe skin burns and eye damage.

· **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Do not breathe dusts or mists.

Do not get in eyes, on skin, or on clothing.

Wash thoroughly after handling.

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

Use only outdoors or in a well-ventilated area.

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

Wear respiratory protection.

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

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

Continue rinsing.

Specific treatment is urgent (see on this label).

Take off immediately all contaminated clothing and wash it before reuse.

In case of fire: Use CO<sub>2</sub>, powder or water spray for extinction.

Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

Store locked up.

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

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

AU

(Contd. on page 3)

# Safety Data Sheet

## according to WHS Regulations

Printing date 10.03.2022

Revision: 10.03.2022

Trade name: ACETATE BUFFER, 0.2M, pH 3.6

(Contd. of page 2)

### 3 Composition and Information on Ingredients

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

- **Dangerous components:**

64-19-7	Acetic Acid Glacial	>25-≤50%
6131-90-4	SODIUM ACETATE TRIHYDRATE	>25-≤50%

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

### 4 First Aid Measures

- **Description of first aid measures**
- **General information:**  
Immediately remove any clothing soiled by the product.  
Remove breathing equipment only after contaminated clothing have been completely removed.  
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **After inhalation:**  
Supply fresh air or oxygen; call for doctor.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**  
Do not induce vomiting; call for medical help immediately.  
Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Fire Fighting Measures

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

### 6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**  
Dilute with plenty of water.  
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).  
Use neutralising agent.  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.

(Contd. on page 4)

# Safety Data Sheet

## according to WHS Regulations

Printing date 10.03.2022

Revision: 10.03.2022

**Trade name: ACETATE BUFFER, 0.2M, pH 3.6**

(Contd. of page 3)

- **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.  
Open and handle receptacle with care.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:**  
Keep ignition sources away - Do not smoke.  
Protect from heat.  
Protect against electrostatic charges.  
Keep respiratory protective device available.
- **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.  
Protect from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls and personal protection

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

· **Ingredients with limit values that require monitoring at the workplace:**

**64-19-7 Acetic Acid Glacial**

WES	Short-term value: 37 mg/m <sup>3</sup> , 15 ppm
	Long-term value: 25 mg/m <sup>3</sup> , 10 ppm

- **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.  
Store protective clothing separately.  
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.

(Contd. on page 5)

AU

# Safety Data Sheet

## according to WHS Regulations

Printing date 10.03.2022

Revision: 10.03.2022

Trade name: ACETATE BUFFER, 0.2M, pH 3.6

(Contd. of page 4)

### · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

### · Material of gloves

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

### · Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

### · Eye protection:



Tightly sealed goggles

## 9 Physical and Chemical Properties

### · Information on basic physical and chemical properties

#### · General Information

#### · Appearance:

Form:	Liquid
Colour:	Clear
Odour:	Pungent
Odour threshold:	Not determined.

· pH-value at 20 °C: 5.2

#### · Change in condition

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	118 °C

· Flash point: 43 °C

· Flammability (solid, gas): Not applicable.

· Ignition temperature: 426 °C

· Decomposition temperature: Not determined.

· Auto-ignition temperature: Product is not selfigniting.

· Explosive properties: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

#### · Explosion limits:

Lower:	4 Vol %
Upper:	19 Vol %

· Vapour pressure at 20 °C: 11.4 hPa

(Contd. on page 6)



## Safety Data Sheet according to WHS Regulations

Printing date 10.03.2022

Revision: 10.03.2022

Trade name: ACETATE BUFFER, 0.2M, pH 3.6

(Contd. of page 5)

· <b>Density:</b>	Not determined.
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with water:</b>	Fully miscible.
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	50.0 %
<b>Water:</b>	8.0 %
<b>VOC (EC)</b>	50.00 %
<b>Solids content:</b>	42.0 %
· <b>Other information</b>	No further relevant information available.

### 10 Stability and Reactivity

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

### 11 Toxicological Information

- **Information on toxicological effects**
- **Acute toxicity**

· **LD/LC50 values relevant for classification:**

#### 64-19-7 Acetic Acid Glacial

Oral	LD50	3,310 mg/kg (rat)
Dermal	LD50	1,060 mg/kg (rabbit)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Strong caustic effect on skin and mucous membranes.
- **Serious eye damage/irritation**  
Strong caustic effect.  
Strong irritant with the danger of severe eye injury.
- **Respiratory or skin sensitisation** No sensitising effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Corrosive  
Irritant  
Very toxic

(Contd. on page 7)

AU

## Safety Data Sheet according to WHS Regulations

Printing date 10.03.2022

Revision: 10.03.2022

**Trade name: ACETATE BUFFER, 0.2M, pH 3.6**

(Contd. of page 6)

*Danger through skin adsorption.*

*Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.*

### 12 Ecological Information

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

### 13 Disposal considerations

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

### 14 Transport information

- |                                                                                                          |                                                                                                                                       |
|----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>· <b>UN-Number</b></li> <li>· <b>ADG, IMDG, IATA</b></li> </ul>   | <p style="margin-left: 20px;">UN2927</p>                                                                                              |
| <ul style="list-style-type: none"> <li>· <b>UN proper shipping name</b></li> <li>· <b>ADG</b></li> </ul> | <p style="margin-left: 20px;">2927 TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.<br/>(SODIUM ACETATE TRIHYDRATE, ACETIC ACID, GLACIAL)</p> |
| <ul style="list-style-type: none"> <li>· <b>IMDG, IATA</b></li> </ul>                                    | <p style="margin-left: 20px;">TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.<br/>(SODIUM ACETATE TRIHYDRATE, ACETIC ACID, GLACIAL)</p>      |

(Contd. on page 8)

# Safety Data Sheet

according to WHS Regulations

Printing date 10.03.2022

Revision: 10.03.2022

Trade name: ACETATE BUFFER, 0.2M, pH 3.6

(Contd. of page 7)

· **Transport hazard class(es)**· **ADG**· **Class**

6.1 Toxic substances.

· **Label**

6.1+8+3

· **IMDG**· **Class**

6.1 Toxic substances.

· **Label**

6.1/8/3

· **IATA**· **Class**

6.1 Toxic substances.

· **Label**

6.1 (8, 3)

· **Packing group**· **ADG, IMDG, IATA**

I

· **Environmental hazards:**

Not applicable.

· **Special precautions for user**

Warning: Toxic substances.

· **Hazard identification number (Kemler code):**

668

· **EMS Number:**

F-A,S-B

· **Segregation groups**

Acids

· **Stowage Category**

B

· **Stowage Code**

SW2 Clear of living quarters.

· **Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable.

· **Transport/Additional information:**· **ADG**· **Limited quantities (LQ)**

0

· **Excepted quantities (EQ)**

Code: E5

Maximum net quantity per inner packaging: 1 ml

Maximum net quantity per outer packaging: 300 ml

· **Transport category**

1

· **Tunnel restriction code**

C/E

· **IMDG**· **Limited quantities (LQ)**

0

(Contd. on page 9)

# Safety Data Sheet

## according to WHS Regulations

Printing date 10.03.2022

Revision: 10.03.2022

Trade name: ACETATE BUFFER, 0.2M, pH 3.6

(Contd. of page 8)

· <b>Excepted quantities (EQ)</b>	Code: E5 Maximum net quantity per inner packaging: 1 ml Maximum net quantity per outer packaging: 300 ml
· <b>UN "Model Regulation":</b>	UN 2927 TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (SODIUM ACETATE TRIHYDRATE, ACETIC ACID, GLACIAL), 6.1 (8+3), I

### 15 Regulatory information

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

· **Australian Inventory of Industrial Chemicals**

All ingredients are listed.

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

64-19-7	Acetic Acid Glacial	S2, S5, S6
---------	---------------------	------------

· **Australia: Priority Existing Chemicals**

None of the ingredients is listed.

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

· **Hazard pictograms**



GHS02    GHS05    GHS06

· **Signal word** Danger

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

SODIUM ACETATE TRIHYDRATE

Acetic Acid Glacial

· **Hazard statements**

Flammable liquid and vapour.

Fatal if swallowed.

Fatal in contact with skin.

Fatal if inhaled.

Causes severe skin burns and eye damage.

· **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Do not breathe dusts or mists.

Do not get in eyes, on skin, or on clothing.

Wash thoroughly after handling.

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

Use only outdoors or in a well-ventilated area.

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

Wear respiratory protection.

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

(Contd. on page 10)

## Safety Data Sheet according to WHS Regulations

Printing date 10.03.2022

Revision: 10.03.2022

**Trade name: ACETATE BUFFER, 0.2M, pH 3.6**

(Contd. of page 9)

*IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.*

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

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

*Specific treatment is urgent (see on this label).*

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

*In case of fire: Use CO<sub>2</sub>, powder or water spray for extinction.*

*Store in a well-ventilated place. Keep container tightly closed.*

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

*Store locked up.*

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

- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category**  
H1 ACUTE TOXIC  
P5c FLAMMABLE LIQUIDS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 20 t
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

- **Contact:**
- **Abbreviations and acronyms:**  
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
VOC: Volatile Organic Compounds (USA, EU)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Flam. Liq. 3: Flammable liquids – Category 3  
Acute Tox. 1: Acute toxicity – Category 1  
Acute Tox. 2: Acute toxicity – Category 2  
Skin Corr. 1B: Skin corrosion/irritation – Category 1B  
Eye Dam. 1: Serious eye damage/eye irritation – Category 1

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 03/10/2022

Reviewed on 03/10/2022

### 1 Identification

- **Product identifier**
- **Trade name:** ACETATE BUFFER, 0.2M, pH 3.6
- **Article number:** 11480, 11482
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
 Electron Microscopy Sciences  
 1560 Industry Road  
 USA-Hatfield, PA 19440  
 Tel: 215-412-8400 Fax: 215-412-8450  
 email: info@emsdiasum.com  
 www.emsdiasum.com
- **Information department:** Product safety department
- **Emergency telephone number:**  
 ChemTrec 1-800-424-9300 Contract CCN7661  
 1-703-527-3887

### 2 Hazard identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids - Category 3                      H226 Flammable liquid and vapour.



GHS06 Skull and crossbones

Acute Toxicity (Oral) - Category 1                      H300 Fatal if swallowed.  
 Acute Toxicity (Dermal) - Category 1                      H310 Fatal in contact with skin.  
 Acute Toxicity (Inhalation) - Category 2                      H330 Fatal if inhaled.



GHS05 Corrosion

Skin Corrosion - Category 1B                      H314 Causes severe skin burns and eye damage.  
 Serious Eye Damage - Category 1                      H318 Causes serious eye damage.

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



GHS02



GHS05



GHS06

- **Signal word** Danger
- **Hazard-determining components of labeling:**  
 SODIUM ACETATE TRIHYDRATE  
 Acetic Acid Glacial

(Contd. on page 2)

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 03/10/2022

Reviewed on 03/10/2022

**Trade name: ACETATE BUFFER, 0.2M, pH 3.6**

(Contd. of page 1)

**· Hazard statements**

Flammable liquid and vapour.  
 Fatal if swallowed, in contact with skin or if inhaled.  
 Causes severe skin burns and eye damage.

**· Precautionary statements**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 Ground and bond container and receiving equipment.  
 Use explosion-proof [electrical/ventilating/lighting] equipment.  
 Use non-sparking tools.  
 Take actions to prevent static discharges.  
 Do not breathe dust/fume/gas/mist/vapours/spray.  
 Do not get in eyes, on skin, or on clothing.  
 Wash thoroughly after handling.  
 Do not eat, drink or smoke when using this product.  
 Use only outdoors or in a well-ventilated area.  
 Wear protective gloves/protective clothing/eye protection/face protection.  
 [In case of inadequate ventilation] wear respiratory protection.  
 If swallowed: Immediately call a poison center/doctor.  
 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
 IF ON SKIN: Gently wash with plenty of soap and water.  
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
 Continue rinsing.  
 Specific treatment is urgent (see on this label).  
 Wash contaminated clothing before reuse.  
 In case of fire: Use CO<sub>2</sub>, powder or water spray to extinguish.  
 Store in a well-ventilated place. Keep container tightly closed.  
 Store in a well-ventilated place. Keep cool.  
 Store locked up.  
 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

**· HMIS-ratings (scale 0 - 4)**


### 3 Composition/Information on ingredients

**· Chemical characterization: Mixtures**

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

**· Dangerous components:**

64-19-7	Acetic Acid Glacial	30-60% w/w *
6131-90-4	SODIUM ACETATE TRIHYDRATE	30-60% w/w *

(Contd. on page 3)

## Safety Data Sheet according to HPR, Schedule 1

Printing date 03/10/2022

Reviewed on 03/10/2022

**Trade name: ACETATE BUFFER, 0.2M, pH 3.6**

(Contd. of page 2)

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

### 4 First-aid measures

- **Description of first aid measures**
- **General information:**  
Immediately remove any clothing soiled by the product.  
Remove breathing apparatus only after contaminated clothing have been completely removed.  
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **After inhalation:**  
Supply fresh air or oxygen; call for doctor.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**  
Do not induce vomiting; immediately call for medical help.  
Drink copious amounts of water and provide fresh air. Immediately call a doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Fire-fighting measures

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

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**  
Dilute with plenty of water.  
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).  
Use neutralizing agent.  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

CA

(Contd. on page 4)



# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 03/10/2022

Reviewed on 03/10/2022

Trade name: ACETATE BUFFER, 0.2M, pH 3.6

(Contd. of page 3)

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**  
Keep ignition sources away - Do not smoke.  
Protect from heat.  
Protect against electrostatic charges.  
Keep respiratory protective device available.
- **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.  
Protect from heat and direct sunlight.
- **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:**

#### 64-19-7 Acetic Acid Glacial

EL	STEL: 15 ppm TWA: 10 ppm
EV	STEL: 37 mg/m <sup>3</sup> , 15 ppm TWA: 25 mg/m <sup>3</sup> , 10 ppm

- **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.  
Store protective clothing separately.  
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:**



Protective gloves

(Contd. on page 5)

CA

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 03/10/2022

Reviewed on 03/10/2022

**Trade name: ACETATE BUFFER, 0.2M, pH 3.6**

(Contd. of page 4)

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

### 9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

Form: Liquid

Color: Clear

· **Odor:** Pungent

· **Odor threshold:** Not determined.

· **pH-value at 20 °C:** 5.2

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 118 °C

· **Flash point:** 43 °C

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

· **Ignition temperature:** 426 °C

· **Decomposition temperature:** Not determined.

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

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· **Explosion limits:**

Lower: 4 Vol %

Upper: 19 Vol %

· **Vapor pressure at 20 °C:** 11.4 hPa

· **Density:** Not determined.

· **Relative density** Not determined.

· **Vapor density** Not determined.

· **Evaporation rate** Not determined.

(Contd. on page 6)

## Safety Data Sheet according to HPR, Schedule 1

Printing date 03/10/2022

Reviewed on 03/10/2022

Trade name: ACETATE BUFFER, 0.2M, pH 3.6

(Contd. of page 5)

- |                                                   |                                            |
|---------------------------------------------------|--------------------------------------------|
| <b>· Solubility in / Miscibility with Water:</b>  | Fully miscible.                            |
| <b>· Partition coefficient (n-octanol/water):</b> | Not determined.                            |
| <b>· Viscosity:</b>                               |                                            |
| <b>Dynamic:</b>                                   | Not determined.                            |
| <b>Kinematic:</b>                                 | Not determined.                            |
| <b>· Solvent content:</b>                         |                                            |
| <b>Organic solvents:</b>                          | 50.0 %                                     |
| <b>Water:</b>                                     | 8.0 %                                      |
| <b>· Solids content:</b>                          | 42.0 %                                     |
| <b>· Other information</b>                        | No further relevant information available. |

### 10 Stability and reactivity

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

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

#### 64-19-7 Acetic Acid Glacial

Oral	LD50	3,310 mg/kg (rat)
Dermal	LD50	1,060 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** Strong caustic effect on skin and mucous membranes.
- **on the eye:**  
Strong caustic effect.  
Strong irritant with the danger of severe eye injury.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Corrosive  
Irritant  
Very toxic  
Danger through skin absorption.  
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

(Contd. on page 7)

CA

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 03/10/2022

Reviewed on 03/10/2022

Trade name: ACETATE BUFFER, 0.2M, pH 3.6

(Contd. of page 6)

- **Carcinogenic categories**

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

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

### 12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** No further relevant information available.

- **Persistence and degradability** No further relevant information available.

- **Behavior in environmental systems:**

- **Bioaccumulative potential** No further relevant information available.

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

- **Additional ecological information:**

- **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

- **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.

- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

- **UN-Number**

- **DOT/TDG, ADR, IMDG, IATA**

UN2927

- **UN proper shipping name**

- **DOT/TDG**

Toxic liquids, corrosive, organic, n.o.s. (SODIUM ACETATE TRIHYDRATE, Acetic acid, glacial)

- **ADR**

2927 TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (SODIUM ACETATE TRIHYDRATE, ACETIC ACID, GLACIAL)

- **IMDG, IATA**

TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (SODIUM ACETATE TRIHYDRATE, ACETIC ACID, GLACIAL)

(Contd. on page 8)

CA

# Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/10/2022

Reviewed on 03/10/2022

Trade name: ACETATE BUFFER, 0.2M, pH 3.6

(Contd. of page 7)

· **Transport hazard class(es)**· **DOT/TDG (Transport dangerous goods):**

· **Class** 6.1 Toxic substances  
 · **Label** 6.1, 8, 3

· **ADR**

· **Class** 6.1 Toxic substances  
 · **Label** 6.1+8+3

· **IMDG**

· **Class** 6.1 Toxic substances  
 · **Label** 6.1/8/3

· **IATA**

· **Class** 6.1 Toxic substances  
 · **Label** 6.1 (8, 3)

· **Packing group**· **DOT/TDG, ADR, IMDG, IATA** I· **Environmental hazards:** Not applicable.· **Special precautions for user** Warning: Toxic substances· **Hazard identification number (Kemler code):** 668· **EMS Number:** F-A,S-B· **Segregation groups** Acids· **Stowage Category** B· **Stowage Code** SW2 Clear of living quarters.· **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**· **DOT/TDG**· **Quantity limitations**

On passenger aircraft/rail: 0.5 L  
 On cargo aircraft only: 2.5 L

(Contd. on page 9)

# Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/10/2022

Reviewed on 03/10/2022

Trade name: ACETATE BUFFER, 0.2M, pH 3.6

(Contd. of page 8)

· <b>ADR</b> · <b>Excepted quantities (EQ)</b>	Code: E5 Maximum net quantity per inner packaging: 1 ml Maximum net quantity per outer packaging: 300 ml
· <b>IMDG</b> · <b>Limited quantities (LQ)</b> · <b>Excepted quantities (EQ)</b>	0 Code: E5 Maximum net quantity per inner packaging: 1 ml Maximum net quantity per outer packaging: 300 ml
· <b>UN "Model Regulation":</b>	UN 2927 TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (SODIUM ACETATE TRIHYDRATE, ACETIC ACID, GLACIAL), 6.1 (8+3), I

## 15 Regulatory information

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

· **Sara**

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

None of the ingredients is listed.

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

None of the ingredients is listed.

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

64-19-7	Acetic Acid Glacial	ACTIVE
7732-18-5	Deionized Water, Reagent Grade A.C.S.	ACTIVE

· **Canadian substance listings:**

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

64-19-7	Acetic Acid Glacial
7732-18-5	Deionized Water, Reagent Grade A.C.S.

· **Canadian Non-Domestic Substances List (NDSL)**

None of the ingredients is listed.

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

None of the ingredients is listed.

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

64-19-7	Acetic Acid Glacial
---------	---------------------

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

· **Hazard pictograms**



GHS02    GHS05    GHS06

· **Signal word** Danger

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

SODIUM ACETATE TRIHYDRATE

(Contd. on page 10)

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 03/10/2022

Reviewed on 03/10/2022

**Trade name: ACETATE BUFFER, 0.2M, pH 3.6**

(Contd. of page 9)

*Acetic Acid Glacial*

· **Hazard statements**

*Flammable liquid and vapour.*

*Fatal if swallowed, in contact with skin or if inhaled.*

*Causes severe skin burns and eye damage.*

· **Precautionary statements**

*Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.*

*Ground and bond container and receiving equipment.*

*Use explosion-proof [electrical/ventilating/lighting] equipment.*

*Use non-sparking tools.*

*Take actions to prevent static discharges.*

*Do not breathe dust/fume/gas/mist/vapours/spray.*

*Do not get in eyes, on skin, or on clothing.*

*Wash thoroughly after handling.*

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

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

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

*[In case of inadequate ventilation] wear respiratory protection.*

*If swallowed: Immediately call a poison center/doctor.*

*IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.*

*IF ON SKIN: Gently wash with plenty of soap and water.*

*IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].*

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

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

*Continue rinsing.*

*Specific treatment is urgent (see on this label).*

*Wash contaminated clothing before reuse.*

*In case of fire: Use CO<sub>2</sub>, powder or water spray to extinguish.*

*Store in a well-ventilated place. Keep container tightly closed.*

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

*Store locked up.*

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

· **Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

## 16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

· **Contact:**

· **Date of the latest revision of the safety data sheet** 03/10/2022 / -

· **Abbreviations and acronyms:**

*IMDG: International Maritime Code for Dangerous Goods*

*DOT: US Department of Transportation*

*IATA: International Air Transport Association*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*ELINCS: European List of Notified Chemical Substances*

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

*NFPA: National Fire Protection Association (USA)*

*HMIS: Hazardous Materials Identification System (USA)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

*PBT: Persistent, Bioaccumulative and Toxic*

*vPvB: very Persistent and very Bioaccumulative*

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 10.03.2022

Revision: 10.03.2022

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

- **1.1 Product identifier**
- **Trade name:** ACETATE BUFFER, 0.2M, pH 3.6
- **Article number:** 11480, 11482
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://www.emsdiasum.com)
- **Further information obtainable from:** Product safety department
- **1.4 Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## SECTION 2: Hazards identification

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



flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



skull and crossbones

Acute Tox. 2 H300 Fatal if swallowed.

Acute Tox. 1 H310 Fatal in contact with skin.

Acute Tox. 2 H330 Fatal if inhaled.



corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

- **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**



GHS02



GHS05



GHS06

(Contd. on page 2)



# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 10.03.2022

Revision: 10.03.2022

Trade name: ACETATE BUFFER, 0.2M, pH 3.6

(Contd. of page 1)

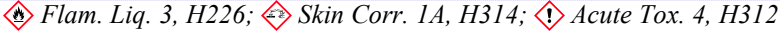
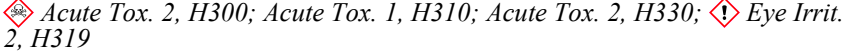
· **Signal word** *Danger*· **Hazard-determining components of labelling:**

SODIUM ACETATE TRIHYDRATE

*Acetic Acid Glacial*· **Hazard statements**H226 *Flammable liquid and vapour.*H300+H310+H330 *Fatal if swallowed, in contact with skin or if inhaled.*H314 *Causes severe skin burns and eye damage.*· **Precautionary statements**P301+P310 *IF SWALLOWED: Immediately call a POISON CENTER/ doctor.*P303+P361+P353 *IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].*P305+P351+P338 *IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*P320 *Specific treatment is urgent (see on this label).*P361+P364 *Take off immediately all contaminated clothing and wash it before reuse.*P405 *Store locked up.*P501 *Dispose of contents/container in accordance with local/regional/national/international regulations.*· **2.3 Other hazards**· **Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.

## SECTION 3: Composition/information on ingredients

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

CAS: 64-19-7	<i>Acetic Acid Glacial</i>	>25-≤50%
EINECS: 200-580-7		
CAS: 6131-90-4	<i>SODIUM ACETATE TRIHYDRATE</i>	>25-≤50%
		

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

## SECTION 4: First aid measures

· **4.1 Description of first aid measures**· **General information:***Immediately remove any clothing soiled by the product.**Remove breathing equipment only after contaminated clothing have been completely removed.**In case of irregular breathing or respiratory arrest provide artificial respiration.*· **After inhalation:***Supply fresh air or oxygen; call for doctor.**In case of unconsciousness place patient stably in side position for transportation.*· **After skin contact:** *Immediately wash with water and soap and rinse thoroughly.*· **After eye contact:** *Rinse opened eye for several minutes under running water. Then consult a doctor.*· **After swallowing:***Do not induce vomiting; call for medical help immediately.**Drink plenty of water and provide fresh air. Call for a doctor immediately.*

(Contd. on page 3)

# Safety data sheet

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

Printing date 10.03.2022

Revision: 10.03.2022

**Trade name: ACETATE BUFFER, 0.2M, pH 3.6**

(Contd. of page 2)

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

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**  
Dilute with plenty of water.  
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).  
Use neutralising agent.  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:**  
Keep ignition sources away - Do not smoke.  
Protect from heat.  
Protect against electrostatic charges.  
Keep respiratory protective device available.
- **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.  
Protect from heat and direct sunlight.
- **7.3 Specific end use(s)** No further relevant information available.

GB

(Contd. on page 4)

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 10.03.2022

Revision: 10.03.2022

Trade name: ACETATE BUFFER, 0.2M, pH 3.6

(Contd. of page 3)

## SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Additional information about design of technical facilities:** No further data; see item 7.

- **Ingredients with limit values that require monitoring at the workplace:**

### 64-19-7 Acetic Acid Glacial

WEL	Short-term value: 50 mg/m <sup>3</sup> , 20 ppm Long-term value: 25 mg/m <sup>3</sup> , 10 ppm
-----	---------------------------------------------------------------------------------------------------

- **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.  
Store protective clothing separately.  
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:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**



Tightly sealed goggles

## SECTION 9: Physical and chemical properties

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

- **General Information**

- **Appearance:**

**Form:** Liquid

(Contd. on page 5)

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

Printing date 10.03.2022

Revision: 10.03.2022

Trade name: ACETATE BUFFER, 0.2M, pH 3.6

(Contd. of page 4)

· <b>Colour:</b>	Clear
· <b>Odour:</b>	Pungent
· <b>Odour threshold:</b>	Not determined.
· <b>pH-value at 20 °C:</b>	5.2
· <b>Change in condition</b>	
<b>Melting point/freezing point:</b>	Undetermined.
<b>Initial boiling point and boiling range:</b>	118 °C
· <b>Flash point:</b>	43 °C
· <b>Flammability (solid, gas):</b>	Not applicable.
· <b>Ignition temperature:</b>	426 °C
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto-ignition temperature:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· <b>Explosion limits:</b>	
<b>Lower:</b>	4 Vol %
<b>Upper:</b>	19 Vol %
· <b>Vapour pressure at 20 °C:</b>	11.4 hPa
· <b>Density:</b>	Not determined.
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with water:</b>	Fully miscible.
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	50.0 %
<b>Water:</b>	8.0 %
<b>VOC (EC)</b>	50.00 %
<b>Solids content:</b>	42.0 %
· <b>9.2 Other information</b>	No further relevant information available.

### SECTION 10: Stability and reactivity

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

(Contd. on page 6)

GB

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 10.03.2022

Revision: 10.03.2022

Trade name: ACETATE BUFFER, 0.2M, pH 3.6

(Contd. of page 5)

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

## SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**· **Acute toxicity**

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

· **LD/LC50 values relevant for classification:****64-19-7 Acetic Acid Glacial**

Oral	LD50	3,310 mg/kg (rat)
Dermal	LD50	1,060 mg/kg (rabbit)

· **Primary irritant effect:**· **Skin corrosion/irritation**

Causes severe skin burns and eye damage.

· **Serious eye damage/irritation**

Causes serious eye damage.

· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.· **Additional toxicological information:**· **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.· **Carcinogenicity** Based on available data, the classification criteria are not met.· **Reproductive toxicity** Based on available data, the classification criteria are not met.· **STOT-single exposure** Based on available data, the classification criteria are not met.· **STOT-repeated exposure** Based on available data, the classification criteria are not met.· **Aspiration hazard** Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

· **12.1 Toxicity**· **Aquatic toxicity:** No further relevant information available.· **12.2 Persistence and degradability** No further relevant information available.· **12.3 Bioaccumulative potential** No further relevant information available.· **12.4 Mobility in soil** No further relevant information available.· **Additional ecological information:**· **General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

· **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.

(Contd. on page 7)

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

Printing date 10.03.2022

Revision: 10.03.2022

Trade name: ACETATE BUFFER, 0.2M, pH 3.6

(Contd. of page 6)

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### SECTION 14: Transport information

· **14.1 UN-Number**

· **ADR, IMDG, IATA** UN2927

· **14.2 UN proper shipping name**

· **ADR** 2927 TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (SODIUM ACETATE TRIHYDRATE, ACETIC ACID, GLACIAL)

· **IMDG, IATA** TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (SODIUM ACETATE TRIHYDRATE, ACETIC ACID, GLACIAL)

· **14.3 Transport hazard class(es)**

· **ADR**



· **Class** 6.1 Toxic substances.  
· **Label** 6.1+8+3

· **IMDG**



· **Class** 6.1 Toxic substances.  
· **Label** 6.1/8/3

· **IATA**



· **Class** 6.1 Toxic substances.  
· **Label** 6.1 (8, 3)

· **14.4 Packing group**

· **ADR, IMDG, IATA** I

· **14.5 Environmental hazards:** Not applicable.

· **14.6 Special precautions for user**

· **Hazard identification number (Kemler code):** 668  
· **EMS Number:** F-A,S-B  
· **Segregation groups** Acids  
· **Stowage Category** B  
· **Stowage Code** SW2 Clear of living quarters.

(Contd. on page 8)

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

Printing date 10.03.2022

Revision: 10.03.2022

Trade name: ACETATE BUFFER, 0.2M, pH 3.6

(Contd. of page 7)

· <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>ADR</b>	
· <b>Limited quantities (LQ)</b>	0
· <b>Excepted quantities (EQ)</b>	Code: E5 Maximum net quantity per inner packaging: 1 ml Maximum net quantity per outer packaging: 300 ml
· <b>Transport category</b>	1
· <b>Tunnel restriction code</b>	C/E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	0
· <b>Excepted quantities (EQ)</b>	Code: E5 Maximum net quantity per inner packaging: 1 ml Maximum net quantity per outer packaging: 300 ml
· <b>UN "Model Regulation":</b>	UN 2927 TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (SODIUM ACETATE TRIHYDRATE, ACETIC ACID, GLACIAL), 6.1 (8+3), I

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category**  
H1 ACUTE TOXIC  
P5c FLAMMABLE LIQUIDS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 20 t
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

- **Relevant phrases**  
H226 Flammable liquid and vapour.  
H300 Fatal if swallowed.  
H310 Fatal in contact with skin.  
H312 Harmful in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H319 Causes serious eye irritation.  
H330 Fatal if inhaled.
- **Abbreviations and acronyms:**  
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances

(Contd. on page 9)

GB

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

Printing date 10.03.2022

Revision: 10.03.2022

**Trade name: ACETATE BUFFER, 0.2M, pH 3.6**

(Contd. of page 8)

*ELINCS: European List of Notified Chemical Substances*  
*CAS: Chemical Abstracts Service (division of the American Chemical Society)*  
*VOC: Volatile Organic Compounds (USA, EU)*  
*LC50: Lethal concentration, 50 percent*  
*LD50: Lethal dose, 50 percent*  
*PBT: Persistent, Bioaccumulative and Toxic*  
*vPvB: very Persistent and very Bioaccumulative*  
*Flam. Liq. 3: Flammable liquids – Category 3*  
*Acute Tox. 2: Acute toxicity – Category 2*  
*Acute Tox. 1: Acute toxicity – Category 1*  
*Acute Tox. 4: Acute toxicity – Category 4*  
*Skin Corr. 1A: Skin corrosion/irritation – Category 1A*  
*Skin Corr. 1B: Skin corrosion/irritation – Category 1B*  
*Eye Dam. 1: Serious eye damage/eye irritation – Category 1*  
*Eye Irrit. 2: Serious eye damage/eye irritation – Category 2*

GB



# Veiligheidsinformatieblad volgens 1907/2006/EG, Artikel 31

datum van de druk: 10.03.2022

Herziening van: 10.03.2022

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

### · 1.1 Productidentificatie

· Handelsnaam: ACETATE BUFFER, 0.2M, pH 3.6

· Artikelnummer: 11480, 11482

· UFI: ARY0-COV5-P00R-N87G

### · 1.2 Relevant geïdentificeerd gebruik van de stof of het mengsel en ontraden gebruik

Geen verdere relevante informatie verkrijgbaar.

· Toepassing van de stof / van de bereiding *Laboratoriumchemicaliën*

### · 1.3 Details betreffende de verstrekker van het veiligheidsinformatieblad

#### · Fabrikant/leverancier:

*Electron Microscopy Sciences*

*1560 Industry Road*

*USA-Hatfield, PA 19440*

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

*email: info@emsdiasum.com*

*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



GHS02 vlam

*Flam. Liq. 3 H226 Ontvlambare vloeistof en damp.*



GHS06 doodshoofd met gekruiste beenderen

*Acute Tox. 2 H300 Dodelijk bij inslikken.*

*Acute Tox. 1 H310 Dodelijk bij contact met de huid.*

*Acute Tox. 2 H330 Dodelijk bij inademing.*



GHS05 corrosie

*Skin Corr. 1B H314 Veroorzaakt ernstige brandwonden en oogletsel.*

*Eye Dam. 1 H318 Veroorzaakt ernstig oogletsel.*

(Vervolg op blz. 2)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 10.03.2022

Herziening van: 10.03.2022

**Handelsnaam: ACETATE BUFFER, 0.2M, pH 3.6**

(Vervolg van blz. 1)

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



GHS02 GHS05 GHS06

- **Signaalwoord** Gevaar
- **Gevaaraanduidende componenten voor de etikettering:**  
SODIUM ACETATE TRIHYDRATE  
azijnzuur
- **Gevenaanduidingen**  
H226 Ontvlambare vloeistof en damp.  
H300+H310+H330 Dodelijk bij inslikken, bij contact met de huid en bij inademing.  
H314 Veroorzaakt ernstige brandwonden en oogletsel.
- **Veiligheidsaanbevelingen**  
P301+P310 NA INSLIKKEN: onmiddellijk een ANTIGIFCENTRUM/arts raadplegen.  
P303+P361+P353 BIJ CONTACT MET DE HUID (of het haar): verontreinigde kleding onmiddellijk uittrekken.  
Huid met water afspoelen [of afdouchen].  
P305+P351+P338 BIJ CONTACT MET DE OGEN: voorzichtig afspoelen met water gedurende een aantal minuten; contactlenzen verwijderen, indien mogelijk; blijven spoelen.  
P320 Specifieke behandeling dringend vereist (zie op dit etiket).  
P361+P364 Verontreinigde kleding onmiddellijk uittrekken en wassen alvorens deze opnieuw te gebruiken.  
P405 Achter slot 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:**

CAS: 64-19-7	azijnzuur	>25-≤50%
EINECS: 200-580-7	Flam. Liq. 3, H226;  Skin Corr. 1A, H314;  Acute Tox. 4, H312	
CAS: 6131-90-4	SODIUM ACETATE TRIHYDRATE	>25-≤50%
	Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 2, H330;  Eye Irrit. 2, H319	

- **Aanvullende gegevens:**  
De woordelijke inhoud van de opgegeven aanwijzingen inzake de mogelijke gevaren is te vinden in hoofdstuk 16.

(Vervolg op blz. 3)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 10.03.2022

Herziening van: 10.03.2022

Handelsnaam: ACETATE BUFFER, 0.2M, pH 3.6

(Vervolg van blz. 2)

### RUBRIEK 4: Eerstehulpmaatregelen

- **4.1 Beschrijving van de eerstehulpmaatregelen**
- **Algemene informatie:**
  - Verontreinigde kleding onmiddellijk uittrekken.
  - Ademhalingsstoestel pas afnemen nadat de verontreinigde kleding verwijderd is.
  - Bij onregelmatige ademhaling of ademstilstand kunstmatige ademhaling toepassen.
- **Na het inademen:**
  - Verse lucht of zuurstof toedienen; deskundige medische hulp inroepen.
  - Bij bewusteloosheid ligging en vervoer in stabiele zijligging.
- **Na huidcontact:** Onmiddellijk met water en zeep afwassen en goed naspoelen.
- **Na oogcontact:** Ogen met open ooglid een aantal minuten onder stromend water afspoelen en dokter raadplegen.
- **Na inslikken:**
  - Geen braken teweegbrengen en onmiddellijk medische hulp raadplegen.
  - Drink zeer veel water en voer verse lucht aan. Onmiddellijk een dokter waarschuwen.
- **4.2 Belangrijkste acute en uitgestelde symptomen en effecten** Geen verdere relevante informatie verkrijgbaar.
- **4.3 Vermelding van de vereiste onmiddellijke medische verzorging en speciale behandeling**
  - Geen verdere relevante informatie verkrijgbaar.

### RUBRIEK 5: Brandbestrijdingsmaatregelen

- **5.1 Blusmiddelen**
- **Geschikte blusmiddelen:**
  - CO<sub>2</sub>, bluspoeder of waterstraal. Grotere brand met waterstraal bestrijden of met schuim, dat tegen alcohol bestand is.
- **5.2 Speciale gevaren die door de stof of het mengsel worden veroorzaakt**
  - Geen verdere relevante informatie verkrijgbaar.
- **5.3 Advies voor brandweerlieden**
- **Speciale beschermende kleding:** Ademhalingsstoestel aantrekken.

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

- **6.1 Persoonlijke voorzorgsmaatregelen, beschermingsmiddelen en noodprocedures**
  - Beschermende kleding aantrekken. Niet beschermde personen op afstand houden.
- **6.2 Milieuvoorzorgsmaatregelen:**
  - Met veel water verdunnen.
  - 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.
  - Neutralisatiemiddel gebruiken.
  - Besmet materiaal zoals afval volgens punt 13 verwijderen.
  - Voor voldoende ventilatie zorgen.
- **6.4 Verwijzing naar andere rubrieken**
  - Informatie inzake veilig gebruik - zie hoofdstuk 7.
  - Informatie inzake persoonlijke beschermingsuitrusting - zie hoofdstuk 8.
  - Informatie inzake berging - zie hoofdstuk 13.

### RUBRIEK 7: Hantering en opslag

- **7.1 Voorzorgsmaatregelen voor het veilig hanteren van de stof of het mengsel**
  - Voor goede ventilatie/afzuiging op de werkplaatsen zorgen.

(Vervolg op blz. 4)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 10.03.2022

Herziening van: 10.03.2022

**Handelsnaam: ACETATE BUFFER, 0.2M, pH 3.6**

(Vervolg van blz. 3)

Tanks voorzichtig openen en behandelen.

Aërosolvorming vermijden.

· **Informatie m.b.t. brand- en ontploffingsgevaar:**

Onststekingsbronnen op afstand houden - niet roken.

Beschermen tegen hitte.

Maatregelen treffen tegen ontlading van statische elektriciteit.

Ademhalingstoestellen gereedhouden.

· **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.

Tegen hitte en directe zonnestralen beschermen.

· **7.3 Specifiek eindgebruik** Geen verdere relevante informatie verkrijgbaar.

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

· **8.1 Controleparameters**

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

· **Bestanddelen met grenswaarden die m.b.t. de werkruimte in acht genomen moeten worden:**

**64-19-7 azijnzuur**

WGW Korte termijn waarde: 50 mg/m<sup>3</sup>, 20 ppm

Lange termijn waarde: 25 mg/m<sup>3</sup>, 10 ppm

· **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.

Beschermende kleding afzonderlijk bewaren.

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:**



Veiligheidshandschoenen

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

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

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

· **Handschoenmateriaal**

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

(Vervolg op blz. 5)

# Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 10.03.2022

Herziening van: 10.03.2022

Handelsnaam: ACETATE BUFFER, 0.2M, pH 3.6

(Vervolg van blz. 4)

- **Doordringingstijd van het handschoenmateriaal**  
De precieze penetratietijd kunt u te weten komen bij de handschoenfabrikant; houd er rekening mee.
- **Oogbescherming:**



Nauw aansluitende veiligheidsbril

## RUBRIEK 9: Fysische en chemische eigenschappen

### · 9.1 Informatie over fysische en chemische basiseigenschappen

#### · Algemene gegevens

#### · Voorkomen:

Vorm:	Vloeistof
Kleur:	Helder
Geur:	Stekend
Geurdrempelwaarde:	Niet bepaald.

· pH-waarde bij 20 °C: 5,2

#### · Toestandsverandering

Smelt-/vriespunt:	Niet bepaald.
Beginkookpunt en kooktraject:	118 °C

· Vlampunt: 43 °C

· Ontvlambaarheid (vast, gas): Niet bruikbaar.

· Ontstekingstemperatuur: 426 °C

· Ontledingstemperatuur: Niet bepaald.

· Zelfontbrandingstemperatuur: Het produkt ontbrandt niet uit zichzelf.

· **Ontploffingseigenschappen:** Het produkt is niet ontploffingsgevaarlijk, maar de vorming van ontploffingsgevaarlijke damp-/luchtmengsels is mogelijk.

#### · Ontploffingsgrenzen:

Onderste:	4 Vol %
Bovenste:	19 Vol %

· Dampspanning bij 20 °C: 11,4 hPa

· Dichtheid: Niet bepaald.

· Relatieve dichtheid: Niet bepaald.

· Dampdichtheid: Niet bepaald.

· Verdampingssnelheid: Niet bepaald.

#### · Oplosbaarheid in/mengbaarheid met

Water: Volledig mengbaar.

· **Verdelingscoëfficiënt: n-octanol/water:** Niet bepaald.

#### · Viscositeit

Dynamisch:	Niet bepaald.
Kinematisch:	Niet bepaald.

#### · Oplosmiddelgehalte:

Organisch oplosmiddel: 50,0 %

(Vervolg op blz. 6)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 10.03.2022

Herziening van: 10.03.2022

Handelsnaam: ACETATE BUFFER, 0.2M, pH 3.6

(Vervolg van blz. 5)

<b>Water:</b>	8,0 %
<b>VOC (EG)</b>	50,00 %
<b>Gehalte aan vaste bestanddelen:</b>	42,0 %
<b>· 9.2 Overige informatie</b>	Geen verdere relevante informatie verkrijgbaar.

### RUBRIEK 10: Stabiliteit en reactiviteit

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

### RUBRIEK 11: Toxicologische informatie

- **11.1 Informatie over toxicologische effecten**
- **Acute toxiciteit**  
Dodelijk bij inslikken, bij contact met de huid en bij inademing.

#### · Indelingsrelevantie LD/LC50-waarden:

##### 64-19-7 azijnzuur

Oraal	LD50	3.310 mg/kg (rat)
Dermaal	LD50	1.060 mg/kg (rabbit)

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

### RUBRIEK 12: Ecologische informatie

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

(Vervolg op blz. 7)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 10.03.2022

Herziening van: 10.03.2022

**Handelsnaam: ACETATE BUFFER, 0.2M, pH 3.6**



(Vervolg van blz. 6)

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

### RUBRIEK 13: Instructies voor verwijdering

- **13.1 Afvalverwerkingsmethoden**
- **Aanbeveling:** Mag niet tesamen met huisvuil gestort worden of in de riolering terechtkomen.
- **Niet gereinigde verpakkingen:**
- **Aanbeveling:** Afvalverwijdering volgens overheidsbepalingen.
- **Aanbevolen reinigingsmiddel:** Water, eventueel met toevoeging van reinigingsmiddelen.

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

- |                                                                              |                                                                                            |
|------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| · <b>14.1 VN-nummer</b>                                                      | UN2927                                                                                     |
| · <b>ADR, IMDG, IATA</b>                                                     |                                                                                            |
| · <b>14.2 Juiste ladingnaam overeenkomstig de modelreglementen van de VN</b> | 2927 GIFTIGE ORGANISCHE VLOEISTOF, BIJTEND, N.E.G. (SODIUM ACETATE TRIHYDRATE, IJSAZIJN)   |
| · <b>ADR</b>                                                                 | TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (SODIUM ACETATE TRIHYDRATE, ACETIC ACID, GLACIAL) |
| · <b>IMDG, IATA</b>                                                          |                                                                                            |
| · <b>14.3 Transportgevarenklasse(n)</b>                                      |                                                                                            |
| · <b>ADR</b>                                                                 |                                                                                            |
|                                                                              |         |
| · <b>klasse</b>                                                              | 6.1 Giftige stoffen                                                                        |
| · <b>Etiket</b>                                                              | 6.1+8+3                                                                                    |
| · <b>IMDG</b>                                                                |                                                                                            |
|                                                                              |         |
| · <b>Class</b>                                                               | 6.1 Giftige stoffen                                                                        |

(Vervolg op blz. 8)

# Veiligheidsinformatieblad


volgens 1907/2006/EG, Artikel 31

datum van de druk: 10.03.2022

Herziening van: 10.03.2022

Handelsnaam: ACETATE BUFFER, 0.2M, pH 3.6

(Vervolg van blz. 7)

· <b>Label</b>	6.1/8/3
· <b>IATA</b>	
	
· <b>Class</b>	6.1 Giftige stoffen
· <b>Label</b>	6.1 (8, 3)
· <b>14.4 Verpakkingsgroep:</b>	
· <b>ADR, IMDG, IATA</b>	I
· <b>14.5 Milieugevaren:</b>	Niet bruikbaar.
· <b>14.6 Bijzondere voorzorgen voor de gebruiker</b>	Waarschuwing: Giftige stoffen
· <b>Gevaarsidentificatienummer (Kemler-getal):</b>	668
· <b>EMS-nummer:</b>	F-A,S-B
· <b>Segregation groups</b>	Acids
· <b>Stowage Category</b>	B
· <b>Stowage Code</b>	SW2 Clear of living quarters.
· <b>14.7 Vervoer in bulk overeenkomstig bijlage II bij Marpol en de IBC-code</b>	Niet bruikbaar.
· <b>Transport/verdere gegevens:</b>	
· <b>ADR</b>	
· <b>Beperkte hoeveelheden (LQ)</b>	0
· <b>Uitgezonderde hoeveelheden (EQ)</b>	Code: E5 Grootste netto hoeveelheid per binnenverpakking: 1 ml Grootste netto hoeveelheid per buitenverpakking: 300 ml
· <b>Vervoerscategorie</b>	1
· <b>Tunnelbeperkingscode</b>	C/E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	0
· <b>Excepted quantities (EQ)</b>	Code: E5 Maximum net quantity per inner packaging: 1 ml Maximum net quantity per outer packaging: 300 ml
· <b>VN "Model Regulation":</b>	UN 2927 GIFTIGE ORGANISCHE VLOEISTOF, BIJTEND, N.E.G. (SODIUM ACETATE TRIHYDRATE, IJSAZIJN), 6.1 (8+3), I

## RUBRIEK 15: Regelgeving

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

#### · SZW-lijst van kankerverwekkende stoffen

geen der bestanddelen staat op de lijst.

#### · SZW-lijst van mutagene stoffen

geen der bestanddelen staat op de lijst.

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

geen der bestanddelen staat op de lijst.

(Vervolg op blz. 9)



# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 10.03.2022

Herziening van: 10.03.2022

**Handelsnaam: ACETATE BUFFER, 0.2M, pH 3.6**

(Vervolg van blz. 8)

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

geen der bestanddelen staat op de lijst.

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

geen der bestanddelen staat op de lijst.

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

geen der bestanddelen staat op de lijst.

· **Lijst van Potentieel Zeer Zorgwekkende Stoffen**

geen der bestanddelen staat op de lijst.

· **Richtlijn 2012/18/EU**

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

· **Seveso-categorie**

H1 ACUUT TOXISCH

P5c ONTVLAMBARE VLOEISTOFFEN

· **Drempelwaarde (ton) voor toepassing van voorschriften voor lagedrempelinrichtingen** 5 t

· **Drempelwaarde (ton) voor toepassing van voorschriften voor hogedrempelinrichtingen** 20 t

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

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

geen der bestanddelen staat op de lijst.

· **VERORDENING (EU) 2019/1148**

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

geen der bestanddelen staat op de lijst.

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

geen der bestanddelen staat op de lijst.

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

geen der bestanddelen staat op de lijst.

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

geen der bestanddelen staat op de lijst.

· **Nationale voorschriften:**

· **Gevaarklasse v. water:**

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

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

### RUBRIEK 16: Overige informatie

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

· **Relevante zinnen**

H226 Ontvlambare vloeistof en damp.

H300 Dodelijk bij inslikken.

H310 Dodelijk bij contact met de huid.

H312 Schadelijk bij contact met de huid.

H314 Veroorzaakt ernstige brandwonden en oogletsel.

H319 Veroorzaakt ernstige oogirritatie.

(Vervolg op blz. 10)

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

datum van de druk: 10.03.2022

Herziening van: 10.03.2022

**Handelsnaam: ACETATE BUFFER, 0.2M, pH 3.6**

(Vervolg van blz. 9)

*H330 Dodelijk bij inademing.***Afkortingen en acroniemen:***ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)**IMDG: International Maritime Code for Dangerous Goods**IATA: International Air Transport Association**GHS: Globally Harmonised System of Classification and Labelling of Chemicals**EINECS: European Inventory of Existing Commercial Chemical Substances**ELINCS: European List of Notified Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**VOC: Volatile Organic Compounds (USA, EU)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Flam. Liq. 3: Ontvlambare vloeistoffen – Categorie 3**Acute Tox. 2: Acute toxiciteit – Categorie 2**Acute Tox. 1: Acute toxiciteit – Categorie 1**Acute Tox. 4: Acute toxiciteit – Categorie 4**Skin Corr. 1A: Huidcorrosie/-irritatie – Categorie 1A**Skin Corr. 1B: Huidcorrosie/-irritatie – Categorie 1B**Eye Dam. 1: Ernstig oogletsel/oogirritatie – Categorie 1**Eye Irrit. 2: Ernstig oogletsel/oogirritatie – Categorie 2*

NL

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 10.03.2022

Révision: 10.03.2022

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

- **1.1 Identificateur de produit**
- **Nom du produit:** ACETATE BUFFER, 0.2M, pH 3.6
- **Code du produit:** 11480, 11482
- **UFI:** ARY0-COV5-P00R-N87G
- **1.2 Utilisations identifiées pertinentes de la substance ou du mélange et utilisations déconseillées**  
Pas d'autres informations importantes disponibles.
- **Emploi de la substance / de la préparation** Produits chimiques pour laboratoires
- **1.3 Renseignements concernant le fournisseur de la fiche de données de sécurité**
- **Producteur/fournisseur:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://www.emsdiasum.com)
- **Service chargé des renseignements:** Product safety department
- **1.4 Numéro d'appel d'urgence:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### RUBRIQUE 2: Identification des dangers

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



GHS02 flamme

Flam. Liq. 3 H226 Liquide et vapeurs inflammables.



GHS06 tête de mort sur deux tibias

Acute Tox. 2 H300 Mortel en cas d'ingestion.

Acute Tox. 1 H310 Mortel par contact cutané.

Acute Tox. 2 H330 Mortel par inhalation.



GHS05 corrosion

Skin Corr. 1B H314 Provoque de graves brûlures de la peau et de graves lésions des yeux.

Eye Dam. 1 H318 Provoque de graves lésions des yeux.

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



GHS02



GHS05



GHS06

(suite page 2)

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 10.03.2022

Révision: 10.03.2022

**Nom du produit: ACETATE BUFFER, 0.2M, pH 3.6**

(suite de la page 1)

- **Mention d'avertissement** *Danger*
- **Composants dangereux déterminants pour l'étiquetage:**  
SODIUM ACETATE TRIHYDRATE  
*acide acétique*
- **Mentions de danger**  
H226 *Liquide et vapeurs inflammables.*  
H300+H310+H330 *Mortel par ingestion, par contact cutané ou par inhalation.*  
H314 *Provoque de graves brûlures de la peau et de graves lésions des yeux.*
- **Conseils de prudence**  
P301+P310 *EN CAS D'INGESTION: Appeler immédiatement un CENTRE ANTIPOISON/un médecin.*  
P303+P361+P353 *EN CAS DE CONTACT AVEC LA PEAU (ou les cheveux): Enlever immédiatement tous les vêtements contaminés. Rincer la peau à l'eau [ou se doucher].*  
P305+P351+P338 *EN CAS DE CONTACT AVEC LES YEUX: Rincer avec précaution à l'eau pendant plusieurs minutes. Enlever les lentilles de contact si la victime en porte et si elles peuvent être facilement enlevées. Continuer à rincer.*  
P320 *Un traitement spécifique est urgent (voir sur cette étiquette).*  
P361+P364 *Enlever immédiatement tous les vêtements contaminés et les laver avant réutilisation.*  
P405 *Garder sous clef.*  
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.*
- **vPvB:** *Non applicable.*

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

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

- **Composants dangereux:**

CAS: 64-19-7	acide acétique	>25-≤50%
EINECS: 200-580-7	Flam. Liq. 3, H226;  Skin Corr. 1A, H314;  Acute Tox. 4, H312	
CAS: 6131-90-4	SODIUM ACETATE TRIHYDRATE	>25-≤50%
	Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 2, H330;  Eye Irrit. 2, H319	

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

### RUBRIQUE 4: Premiers secours

- **4.1 Description des premiers secours**
- **Remarques générales:**  
*Enlever immédiatement les vêtements contaminés par le produit.*  
*Ne retirer la protection respiratoire qu'après avoir retiré les vêtements contaminés.*  
*Respiration artificielle dans le cas d'une respiration irrégulière ou d'un arrêt respiratoire.*
- **Après inhalation:**  
*Donner de l'air frais ou de l'oxygène; demander d'urgence une assistance médicale.*  
*En cas d'inconscience, coucher et transporter la personne en position latérale stable.*
- **Après contact avec la peau:** *Laver immédiatement à l'eau et au savon et bien rincer.*
- **Après contact avec les yeux:**  
*Rincer les yeux, pendant plusieurs minutes, sous l'eau courante en écartant bien les paupières et consulter un médecin.*

(suite page 3)

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 10.03.2022

Révision: 10.03.2022

**Nom du produit:** ACETATE BUFFER, 0.2M, pH 3.6

(suite de la page 2)

- **Après ingestion:**  
Ne pas faire vomir, demander d'urgence une assistance médicale.  
Boire de l'eau en abondance et donner de l'air frais. Consulter immédiatement un médecin.
- **4.2 Principaux symptômes et effets, aigus et différés** Pas d'autres informations importantes disponibles.
- **4.3 Indication des éventuels soins médicaux immédiats et traitements particuliers nécessaires**  
Pas d'autres informations importantes disponibles.

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

- **5.1 Moyens d'extinction**
- **Moyens d'extinction:**  
CO<sub>2</sub>, poudre d'extinction ou eau pulvérisée. Combattre les foyers importants avec de l'eau pulvérisée ou de la mousse résistant à l'alcool.
- **5.2 Dangers particuliers résultant de la substance ou du mélange**  
Pas d'autres informations importantes disponibles.
- **5.3 Conseils aux pompiers**
- **Équipement spécial de sécurité:** Porter un appareil de protection respiratoire.

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

- **6.1 Précautions individuelles, équipement de protection et procédures d'urgence**  
Porter un équipement de sécurité. Eloigner les personnes non protégées.
- **6.2 Précautions pour la protection de l'environnement:**  
Diluer avec beaucoup d'eau.  
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).  
Utiliser un neutralisant.  
Évacuer les matériaux contaminés en tant que déchets conformément au point 13.  
Assurer une aération suffisante.
- **6.4 Référence à d'autres rubriques**  
Afin d'obtenir des informations pour une manipulation sûre, consulter le chapitre 7.  
Afin d'obtenir des informations sur les équipements de protection personnels, consulter le chapitre 8.  
Afin d'obtenir des informations sur l'élimination, consulter le chapitre 13.

### RUBRIQUE 7: Manipulation et stockage

- **7.1 Précautions à prendre pour une manipulation sans danger**  
Veiller à une bonne ventilation/aspiration du poste de travail.  
Ouvrir et manipuler les récipients avec précaution.  
Éviter la formation d'aérosols.
- **Préventions des incendies et des explosions:**  
Tenir à l'abri des sources d'inflammation - ne pas fumer.  
Tenir à l'abri de la chaleur.  
Prendre des mesures contre les charges électrostatiques.  
Tenir des appareils de protection respiratoire prêts.
- **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.

(suite page 4)

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 10.03.2022

Révision: 10.03.2022

**Nom du produit: ACETATE BUFFER, 0.2M, pH 3.6**

(suite de la page 3)

- **Autres indications sur les conditions de stockage:**  
Tenir les emballages hermétiquement fermés.  
Protéger de la forte chaleur et du rayonnement direct du soleil.
- **7.3 Utilisation(s) finale(s) particulière(s)** Pas d'autres informations importantes disponibles.

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

- **8.1 Paramètres de contrôle**
- **Indications complémentaires pour l'agencement des installations techniques:**  
Sans autre indication, voir point 7.

- **Composants présentant des valeurs-seuil à surveiller par poste de travail:**

#### 64-19-7 acide acétique

VLEP	Valeur momentanée: 50 mg/m <sup>3</sup> , 20 ppm
	Valeur à long terme: 25 mg/m <sup>3</sup> , 10 ppm

- **Remarques supplémentaires:**  
Le présent document s'appuie sur les listes en vigueur au moment de son élaboration.
- **8.2 Contrôles de l'exposition**
- **Équipement de protection individuel:**
- **Mesures générales de protection et d'hygiène:**  
Tenir à l'écart des produits alimentaires, des boissons et de la nourriture pour animaux.  
Retirer immédiatement les vêtements souillés ou humectés.  
Se laver les mains avant les pauses et en fin de travail.  
Conserver à part les vêtements de protection.  
Éviter tout contact avec les yeux.  
Éviter tout contact avec les yeux et avec la peau.
- **Protection respiratoire:**  
En cas d'exposition faible ou de courte durée, utiliser un filtre respiratoire; en cas d'exposition intense ou durable, utiliser un appareil de respiration indépendant de l'air ambiant.
- **Protection des mains:**



Gants de protection

- Le matériau des gants doit être imperméable et résistant au produit / à la substance / à la préparation.  
À cause du manque de tests, aucune recommandation pour un matériau de gants pour le produit / la préparation / le mélange de produits chimiques ne peut être donnée.  
Choix du matériau des gants en fonction des temps de pénétration, du taux de perméabilité et de la dégradation.
- **Matériau des gants**  
Le choix de gants appropriés dépend non seulement du matériau, mais aussi d'autres critères de qualité qui peuvent varier d'un fabricant à l'autre. Puisque le produit représente une préparation composée de plusieurs substances, la résistance des matériaux des gants ne peut pas être calculée à l'avance et doit, alors, être contrôlée avant l'utilisation.

- **Temps de pénétration du matériau des gants**  
Le temps de pénétration exact est à déterminer par le fabricant des gants de protection et à respecter.

(suite page 5)

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 10.03.2022

Révision: 10.03.2022

Nom du produit: ACETATE BUFFER, 0.2M, pH 3.6

(suite de la page 4)

## · Protection des yeux:



Lunettes de protection hermétiques

### RUBRIQUE 9: Propriétés physiques et chimiques

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

## · Indications générales

## · Aspect:

Forme:	Liquide
Couleur:	Transparent
Odeur:	Piquante
Seuil olfactif:	Non déterminé.

· valeur du pH à 20 °C: 5,2

## · Changement d'état

Point de fusion/point de congélation:	Non déterminé.
Point initial d'ébullition et intervalle d'ébullition:	118 °C

· Point d'éclair 43 °C

· Inflammabilité (solide, gaz): Non applicable.

· Température d'inflammation: 426 °C

· Température de décomposition: Non déterminé.

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

· Propriétés explosives: Le produit n'est pas explosif; toutefois, des mélanges explosifs vapeur-air peuvent se former.

## · Limites d'explosion:

Inférieure:	4 Vol %
Supérieure:	19 Vol %

· Pression de vapeur à 20 °C: 11,4 hPa

· Densité: Non déterminée.

· Densité relative: Non déterminé.

· Densité de vapeur: Non déterminé.

· Taux d'évaporation: Non déterminé.

· Solubilité dans/miscibilité avec l'eau:

Entièrement miscible

· Coefficient de partage: n-octanol/eau: Non déterminé.

## · Viscosité:

Dynamique:	Non déterminé.
Cinématique:	Non déterminé.

## · Teneur en solvants:

Solvants organiques:	50,0 %
Eau:	8,0 %
VOC (CE)	50,00 %

(suite page 6)

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 10.03.2022

Révision: 10.03.2022

**Nom du produit:** ACETATE BUFFER, 0.2M, pH 3.6

(suite de la page 5)

**Teneur en substances solides:** 42,0 %

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

### RUBRIQUE 10: Stabilité et réactivité

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

### RUBRIQUE 11: Informations toxicologiques

- **11.1 Informations sur les effets toxicologiques**
- **Toxicité aiguë**  
Mortel par ingestion, par contact cutané ou par inhalation.

- **Valeurs LD/LC50 déterminantes pour la classification:**

#### 64-19-7 acide acétique

Oral	LD50	3.310 mg/kg (rat)
Dermique	LD50	1.060 mg/kg (lapin)

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

### RUBRIQUE 12: Informations écologiques

- **12.1 Toxicité**
- **Toxicité aquatique:** Pas d'autres informations importantes disponibles.
- **12.2 Persistance et dégradabilité** Pas d'autres informations importantes disponibles.
- **12.3 Potentiel de bioaccumulation** Pas d'autres informations importantes disponibles.

(suite page 7)



# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 10.03.2022

Révision: 10.03.2022

**Nom du produit: ACETATE BUFFER, 0.2M, pH 3.6**







(suite de la page 6)

- **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.*  
*Ne doit pas pénétrer à l'état non dilué ou non neutralisé dans les eaux usées ou le collecteur.*
- **12.5 Résultats des évaluations PBT et VPVB**
- **PBT:** Non applicable.
- **vPvB:** Non applicable.
- **12.6 Autres effets néfastes** Pas d'autres informations importantes disponibles.

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

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

### RUBRIQUE 14: Informations relatives au transport

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>· <b>14.1 Numéro ONU</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | UN2927                                                                                                                                                                                             |
| <ul style="list-style-type: none"> <li>· <b>14.2 Désignation officielle de transport de l'ONU</b></li> <li>· <b>ADR</b></li> <li>· <b>IMDG, IATA</b></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                               | 2927 LIQUIDE ORGANIQUE TOXIQUE, CORROSIF, N.S.A. (SODIUM ACETATE TRIHYDRATE, ACIDE ACÉTIQUE GLACIAL)<br>TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (SODIUM ACETATE TRIHYDRATE, ACETIC ACID, GLACIAL) |
| <ul style="list-style-type: none"> <li>· <b>14.3 Classe(s) de danger pour le transport</b></li> <li>· <b>ADR</b></li> </ul> <div style="display: flex; justify-content: space-around; align-items: center;">    </div> <ul style="list-style-type: none"> <li>· <b>Classe</b></li> <li>· <b>Étiquette</b></li> </ul> | 6.1 Matières toxiques.<br>6.1+8+3                                                                                                                                                                  |
| <ul style="list-style-type: none"> <li>· <b>IMDG</b></li> <li>· <b>Class</b></li> </ul> <div style="display: flex; justify-content: space-around; align-items: center;">    </div>                                                                                                                                   | 6.1 Matières toxiques.                                                                                                                                                                             |

(suite page 8)

# Fiche de données de sécurité


## selon 1907/2006/CE, Article 31

Date d'impression : 10.03.2022

Révision: 10.03.2022

**Nom du produit: ACETATE BUFFER, 0.2M, pH 3.6**

(suite de la page 7)

· <b>Label</b>	6.1/8/3
· <b>IATA</b>	
	
· <b>Class</b>	6.1 Matières toxiques.
· <b>Label</b>	6.1 (8, 3)
· <b>14.4 Groupe d'emballage</b>	
· <b>ADR, IMDG, IATA</b>	I
· <b>14.5 Dangers pour l'environnement:</b>	Non applicable.
· <b>14.6 Précautions particulières à prendre par l'utilisateur</b>	Attention: Matières toxiques.
· <b>Numéro d'identification du danger (Indice Kemler):</b>	668
· <b>No EMS:</b>	F-A,S-B
· <b>Segregation groups</b>	Acids
· <b>Stowage Category</b>	B
· <b>Stowage Code</b>	SW2 Clear of living quarters.
· <b>14.7 Transport en vrac conformément à l'annexe II de la convention Marpol et au recueil IBC</b>	Non applicable.
· <b>Indications complémentaires de transport:</b>	
· <b>ADR</b>	
· <b>Quantités limitées (LQ)</b>	0
· <b>Quantités exceptées (EQ)</b>	Code: E5 Quantité maximale nette par emballage intérieur: 1 ml Quantité maximale nette par emballage extérieur: 300 ml
· <b>Catégorie de transport</b>	I
· <b>Code de restriction en tunnels</b>	C/E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	0
· <b>Excepted quantities (EQ)</b>	Code: E5 Maximum net quantity per inner packaging: 1 ml Maximum net quantity per outer packaging: 300 ml
· <b>"Règlement type" de l'ONU:</b>	UN 2927 LIQUIDE ORGANIQUE TOXIQUE, CORROSIF, N.S.A. (SODIUM ACETATE TRIHYDRATE, ACIDE ACÉTIQUE GLACIAL), 6.1 (8+3), I

### RUBRIQUE 15: Informations relatives à la réglementation

- **15.1 Réglementations/législation particulières à la substance ou au mélange en matière de sécurité, de santé et d'environnement**
- **Directive 2012/18/UE**
- **Substances dangereuses désignées - ANNEXE I** Aucun des composants n'est compris.

(suite page 9)

FR

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 10.03.2022

Révision: 10.03.2022

**Nom du produit: ACETATE BUFFER, 0.2M, pH 3.6**

(suite de la page 8)

- **Catégorie SEVESO**  
H1 TOXICITÉ AIGUË  
P5c LIQUIDES INFLAMMABLES
- **Quantité seuil (tonnes) pour l'application des exigences relatives au seuil bas 5 t**
- **Quantité seuil (tonnes) pour l'application des exigences relatives au seuil haut 20 t**
- **RÈGLEMENT (CE) N° 1907/2006 ANNEXE XVII Conditions de limitation: 3**

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

Aucun des composants n'est compris.

· **RÈGLEMENT (UE) 2019/1148**

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

Aucun des composants n'est compris.

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

Aucun des composants n'est compris.

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

Aucun des composants n'est compris.

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

Aucun des composants n'est compris.

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

### RUBRIQUE 16: Autres informations

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

· **Phrases importantes**

H226 Liquide et vapeurs inflammables.

H300 Mortel en cas d'ingestion.

H310 Mortel par contact cutané.

H312 Nocif par contact cutané.

H314 Provoque de graves brûlures de la peau et de graves lésions des yeux.

H319 Provoque une sévère irritation des yeux.

H330 Mortel par inhalation.

· **Acronymes et abréviations:**

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

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Liquides inflammables – Catégorie 3

Acute Tox. 2: Toxicité aiguë – Catégorie 2

Acute Tox. 1: Toxicité aiguë – Catégorie 1

Acute Tox. 4: Toxicité aiguë – Catégorie 4

Skin Corr. 1A: Corrosion cutanée/irritation cutanée – Catégorie 1A

Skin Corr. 1B: Corrosion cutanée/irritation cutanée – Catégorie 1B

Eye Dam. 1: Lésions oculaires graves/irritation oculaire – Catégorie 1

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

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 10.03.2022

überarbeitet am: 10.03.2022

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

- **1.1 Produktidentifikator**
- **Handelsname:** ACETATE BUFFER, 0.2M, pH 3.6
- **Artikelnummer:** 11480, 11482
- **UFI:** ARY0-COV5-P00R-N87G
- **1.2 Relevante identifizierte Verwendungen des Stoffs oder Gemischs und Verwendungen, von denen abgeraten wird**  
Keine weiteren relevanten Informationen verfügbar.
- **Verwendung des Stoffes / des Gemisches** Laborchemikalien
- **1.3 Einzelheiten zum Lieferanten, der das Sicherheitsdatenblatt bereitstellt**
- **Hersteller/Lieferant:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://www.emsdiasum.com)  
  
Science Services GmbH  
Unterhachinger Str. 75  
81737 München Germany  
  
Tel: +49(0)89 18 93 668-0  
[safety@scienceservices.de](mailto:safety@scienceservices.de)  
  
Deutschland: +49 (0)89 19240, 24h Giftnotruf Munchen, [www.toxinfo.org](http://www.toxinfo.org)  
Osterreich: +43 1406 43 43, Gesundheit Osterreich GmbH, 24 h
- **Auskunftgebender Bereich:** Product safety department
- **1.4 Notrufnummer:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### ABSCHNITT 2: Mögliche Gefahren

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



GHS02 Flamme

Flam. Liq. 3 H226 Flüssigkeit und Dampf entzündbar.



GHS06 Totenkopf mit gekreuzten Knochen

Acute Tox. 2 H300 Lebensgefahr bei Verschlucken.

Acute Tox. 1 H310 Lebensgefahr bei Hautkontakt.

Acute Tox. 2 H330 Lebensgefahr bei Einatmen.



GHS05 Ätzwirkung

(Fortsetzung auf Seite 2)

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 10.03.2022

überarbeitet am: 10.03.2022

**Handelsname: ACETATE BUFFER, 0.2M, pH 3.6**

(Fortsetzung von Seite 1)

*Skin Corr. 1B H314 Verursacht schwere Verätzungen der Haut und schwere Augenschäden.*

*Eye Dam. 1 H318 Verursacht schwere Augenschäden.*

### · 2.2 Kennzeichnungselemente

#### · Kennzeichnung gemäß Verordnung (EG) Nr. 1272/2008

Das Produkt ist gemäß CLP-Verordnung eingestuft und gekennzeichnet.

#### · Gefahrenpiktogramme



GHS02    GHS05    GHS06

#### · Signalwort Gefahr

#### · Gefahrbestimmende Komponenten zur Etikettierung:

SODIUM ACETATE TRIHYDRATE

Essigsäure

#### · Gefahrenhinweise

H226 Flüssigkeit und Dampf entzündbar.

H300+H310+H330 Lebensgefahr bei Verschlucken, Hautkontakt oder Einatmen.

H314 Verursacht schwere Verätzungen der Haut und schwere Augenschäden.

#### · Sicherheitshinweise

P301+P310 BEI VERSCHLUCKEN: Sofort GIFTINFORMATIONSZENTRUM/Arzt anrufen.

P303+P361+P353 BEI BERÜHRUNG MIT DER HAUT (oder dem Haar): Alle kontaminierten Kleidungsstücke sofort ausziehen. Haut mit Wasser abwaschen [oder duschen].

P305+P351+P338 BEI KONTAKT MIT DEN AUGEN: Einige Minuten lang behutsam mit Wasser spülen. Eventuell vorhandene Kontaktlinsen nach Möglichkeit entfernen. Weiter spülen.

P320 Besondere Behandlung dringend erforderlich (siehe auf diesem Kennzeichnungsetikett).

P361+P364 Alle kontaminierten Kleidungsstücke sofort ausziehen und vor erneutem Tragen waschen.

P405 Unter Verschluss 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:

CAS: 64-19-7	Essigsäure	>25-≤50%
EINECS: 200-580-7	Flam. Liq. 3, H226; Skin Corr. 1A, H314; Acute Tox. 4, H312	
CAS: 6131-90-4	SODIUM ACETATE TRIHYDRATE	>25-≤50%
	Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 2, H330; Eye Irrit. 2, H319	

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

DE

(Fortsetzung auf Seite 3)

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 10.03.2022

überarbeitet am: 10.03.2022

**Handelsname: ACETATE BUFFER, 0.2M, pH 3.6**

(Fortsetzung von Seite 2)

### ABSCHNITT 4: Erste-Hilfe-Maßnahmen

- **4.1 Beschreibung der Erste-Hilfe-Maßnahmen**
- **Allgemeine Hinweise:**  
 Mit Produkt verunreinigte Kleidungsstücke unverzüglich entfernen.  
 Atemschutz erst nach Entfernen verunreinigter Kleidungsstücke abnehmen.  
 Bei unregelmäßiger Atmung oder Atemstillstand künstliche Beatmung.
- **Nach Einatmen:**  
 Frischluft- oder Sauerstoffzufuhr; ärztliche Hilfe in Anspruch nehmen.  
 Bei Bewusstlosigkeit Lagerung und Transport in stabiler Seitenlage.
- **Nach Hautkontakt:** Sofort mit Wasser und Seife abwaschen und gut nachspülen.
- **Nach Augenkontakt:**  
 Augen bei geöffnetem Lidspalt mehrere Minuten unter fließendem Wasser abspülen und Arzt konsultieren.
- **Nach Verschlucken:**  
 Kein Erbrechen herbeiführen, sofort Arzthilfe zuziehen.  
 Reichlich Wasser nachtrinken und Frischluftzufuhr. Unverzüglich Arzt hinzuziehen.
- **4.2 Wichtigste akute und verzögert auftretende Symptome und Wirkungen**  
 Keine weiteren relevanten Informationen verfügbar.
- **4.3 Hinweise auf ärztliche Soforthilfe oder Spezialbehandlung**  
 Keine weiteren relevanten Informationen verfügbar.

### ABSCHNITT 5: Maßnahmen zur Brandbekämpfung

- **5.1 Löschmittel**
- **Geeignete Löschmittel:**  
 CO<sub>2</sub>, Löschpulver oder Wassersprühstrahl. Größeren Brand mit Wassersprühstrahl oder alkoholbeständigem Schaum bekämpfen.
- **5.2 Besondere vom Stoff oder Gemisch ausgehende Gefahren**  
 Keine weiteren relevanten Informationen verfügbar.
- **5.3 Hinweise für die Brandbekämpfung**
- **Besondere Schutzausrüstung:** Atemschutzgerät anlegen.

### ABSCHNITT 6: Maßnahmen bei unbeabsichtigter Freisetzung

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

DE

(Fortsetzung auf Seite 4)

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 10.03.2022

überarbeitet am: 10.03.2022

**Handelsname: ACETATE BUFFER, 0.2M, pH 3.6**

(Fortsetzung von Seite 3)

### ABSCHNITT 7: Handhabung und Lagerung

- **7.1 Schutzmaßnahmen zur sicheren Handhabung**  
Für gute Belüftung/Absaugung am Arbeitsplatz sorgen.  
Behälter mit Vorsicht öffnen und handhaben.  
Aerosolbildung vermeiden.
- **Hinweise zum Brand- und Explosionsschutz:**  
Zündquellen fernhalten - nicht rauchen.  
Vor Hitze schützen.  
Maßnahmen gegen elektrostatische Aufladung treffen.  
Atemschutzgeräte bereithalten.
- **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.  
Vor Hitze und direkter Sonnenbestrahlung schützen.
- **Lagerklasse:**
- **Klassifizierung nach Betriebssicherheitsverordnung (BetrSichV):** Entzündbare Flüssigkeiten
- **7.3 Spezifische Endanwendungen** Keine weiteren relevanten Informationen verfügbar.

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

- **8.1 Zu überwachende Parameter**
- **Zusätzliche Hinweise zur Gestaltung technischer Anlagen:** Keine weiteren Angaben, siehe Abschnitt 7.

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

**64-19-7 Essigsäure**

AGW	Langzeitwert: 25 mg/m <sup>3</sup> , 10 ml/m <sup>3</sup> 2(I);DFG, EU, Y
-----	------------------------------------------------------------------------------

- **Zusätzliche Hinweise:** Als Grundlage dienen die bei der Erstellung gültigen Listen.
- **8.2 Begrenzung und Überwachung der Exposition**
- **Persönliche Schutzausrüstung:**
- **Allgemeine Schutz- und Hygienemaßnahmen:**  
Von Nahrungsmitteln, Getränken und Futtermitteln fernhalten.  
Beschmutzte, getränkte Kleidung sofort ausziehen.  
Vor den Pausen und bei Arbeitsende Hände waschen.  
Getrennte Aufbewahrung der Schutzkleidung.  
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:**



Schutzhandschuhe

(Fortsetzung auf Seite 5)

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 10.03.2022

überarbeitet am: 10.03.2022

**Handelsname: ACETATE BUFFER, 0.2M, pH 3.6**

(Fortsetzung von Seite 4)

Das Handschuhmaterial muss undurchlässig und beständig gegen das Produkt / den Stoff / die Zubereitung sein. Aufgrund fehlender Tests kann keine Empfehlung zum Handschuhmaterial für das Produkt / die Zubereitung / das Chemikaliengemisch abgegeben werden.

Auswahl des Handschuhmaterials unter Beachtung der Durchbruchzeiten, Permeationsraten und der Degradation.

- **Handschuhmaterial**

Die Auswahl eines geeigneten Handschuhs ist nicht nur vom Material, sondern auch von weiteren Qualitätsmerkmalen abhängig und von Hersteller zu Hersteller unterschiedlich. Da das Produkt eine Zubereitung aus mehreren Stoffen darstellt, ist die Beständigkeit von Handschuhmaterialien nicht vorausberechenbar und muß deshalb vor dem Einsatz überprüft werden.

- **Durchdringungszeit des Handschuhmaterials**

Die genaue Durchbruchzeit ist beim Schutzhandschuhhersteller zu erfahren und einzuhalten.

- **Augenschutz:**



Dichtschließende Schutzbrille

### ABSCHNITT 9: Physikalische und chemische Eigenschaften

- **9.1 Angaben zu den grundlegenden physikalischen und chemischen Eigenschaften**

- **Allgemeine Angaben**

- **Aussehen:**

**Form:** Flüssigkeit

**Farbe:** Klar

- **Geruch:** Stechend

- **Geruchsschwelle:** Nicht bestimmt.

- **pH-Wert bei 20 °C:** 5,2

- **Zustandsänderung**

**Schmelzpunkt/Gefrierpunkt:** Nicht bestimmt.

**Siedebeginn und Siedebereich:** 118 °C

- **Flammpunkt:** 43 °C

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

- **Zündtemperatur:** 426 °C

- **Zersetzungstemperatur:** Nicht bestimmt.

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

- **Explosive Eigenschaften:** Das Produkt ist nicht explosionsgefährlich, jedoch ist die Bildung explosionsgefährlicher Dampf-/Luftgemische möglich.

- **Explosionsgrenzen:**

**Untere:** 4 Vol %

**Obere:** 19 Vol %

- **Dampfdruck bei 20 °C:** 11,4 hPa

- **Dichte:** Nicht bestimmt.

- **Relative Dichte** Nicht bestimmt.

- **Dampfdichte** Nicht bestimmt.

- **Verdampfungsgeschwindigkeit** Nicht bestimmt.

(Fortsetzung auf Seite 6)



# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 10.03.2022

überarbeitet am: 10.03.2022

**Handelsname: ACETATE BUFFER, 0.2M, pH 3.6**

(Fortsetzung von Seite 5)

· <b>Löslichkeit in / Mischbarkeit mit Wasser:</b>	Vollständig mischbar.
· <b>Verteilungskoeffizient: n-Octanol/Wasser:</b>	Nicht bestimmt.
· <b>Viskosität:</b>	
<b>Dynamisch:</b>	Nicht bestimmt.
<b>Kinematisch:</b>	Nicht bestimmt.
· <b>Lösemittelgehalt:</b>	
<b>Organische Lösemittel:</b>	50,0 %
<b>Wasser:</b>	8,0 %
<b>VOC (EU)</b>	50,00 %
<b>Festkörpergehalt:</b>	42,0 %
· <b>9.2 Sonstige Angaben</b>	Keine weiteren relevanten Informationen verfügbar.

### ABSCHNITT 10: Stabilität und Reaktivität

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

### ABSCHNITT 11: Toxikologische Angaben

- **11.1 Angaben zu toxikologischen Wirkungen**
- **Akute Toxizität**  
Lebensgefahr bei Verschlucken, Hautkontakt oder Einatmen.

· <b>Einstufungsrelevante LD/LC50-Werte:</b>		
<b>64-19-7 Essigsäure</b>		
Oral	LD50	3.310 mg/kg (rat)
Dermal	LD50	1.060 mg/kg (rabbit)

· <b>Einstufungsrelevante LD/LC50-Werte:</b>		
<b>64-19-7 Essigsäure</b>		
Oral	LD50	3.310 mg/kg (rat)
Dermal	LD50	1.060 mg/kg (rabbit)

- **Primäre Reizwirkung:**
- **Ätz-/Reizwirkung auf die Haut**  
Verursacht schwere Verätzungen der Haut und schwere Augenschäden.
- **Schwere Augenschädigung/-reizung**  
Verursacht schwere Augenschäden.
- **Sensibilisierung der Atemwege/Haut** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Zusätzliche toxikologische Hinweise:**
- **CMR-Wirkungen (krebserzeugende, erbgutverändernde und fortpflanzungsgefährdende Wirkung)**
- **Keimzell-Mutagenität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Karzinogenität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Reproduktionstoxizität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Spezifische Zielorgan-Toxizität bei einmaliger Exposition**  
Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

(Fortsetzung auf Seite 7)

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 10.03.2022

überarbeitet am: 10.03.2022

**Handelsname: ACETATE BUFFER, 0.2M, pH 3.6**

(Fortsetzung von Seite 6)

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


### ABSCHNITT 12: Umweltbezogene Angaben

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

### ABSCHNITT 13: Hinweise zur Entsorgung

- **13.1 Verfahren der Abfallbehandlung**
- **Empfehlung:** Darf nicht zusammen mit Hausmüll entsorgt werden. Nicht in die Kanalisation gelangen lassen.
- **Ungereinigte Verpackungen:**
- **Empfehlung:** Entsorgung gemäß den behördlichen Vorschriften.
- **Empfohlenes Reinigungsmittel:** Wasser, gegebenenfalls mit Zusatz von Reinigungsmitteln.

### ABSCHNITT 14: Angaben zum Transport

- |                                                                                     |                                                                                                 |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| <b>14.1 UN-Nummer</b>                                                               | UN2927                                                                                          |
| <b>ADR, IMDG, IATA</b>                                                              |                                                                                                 |
| <b>14.2 Ordnungsgemäße UN-Versandbezeichnung</b>                                    | 2927 GIFTIGER ORGANISCHER FLÜSSIGER STOFF, ÄTZEND, N.A.G. (SODIUM ACETATE TRIHYDRATE, EISESSIG) |
| <b>ADR</b>                                                                          |                                                                                                 |
| <b>IMDG, IATA</b>                                                                   | TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (SODIUM ACETATE TRIHYDRATE, ACETIC ACID, GLACIAL)      |
| <b>14.3 Transportgefahrenklassen</b>                                                |                                                                                                 |
| <b>ADR</b>                                                                          |                                                                                                 |
|  |                                                                                                 |
| <b>Klasse</b>                                                                       | 6.1 Giftige Stoffe                                                                              |

(Fortsetzung auf Seite 8)

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 10.03.2022

überarbeitet am: 10.03.2022

**Handelsname: ACETATE BUFFER, 0.2M, pH 3.6**

(Fortsetzung von Seite 7)

· **Gefahrzettel** 6.1+8+3

· **IMDG**



· **Class** 6.1 Giftige Stoffe  
 · **Label** 6.1/8/3

· **IATA**



· **Class** 6.1 Giftige Stoffe  
 · **Label** 6.1 (8, 3)

· **14.4 Verpackungsgruppe**

· **ADR, IMDG, IATA** I

· **14.5 Umweltgefahren:** Nicht anwendbar.

· **14.6 Besondere Vorsichtsmaßnahmen für den Verwender** Achtung: Giftige Stoffe

· **Nummer zur Kennzeichnung der Gefahr (Kemler-Zahl):** 668

· **EMS-Nummer:** F-A,S-B

· **Segregation groups** Acids

· **Stowage Category** B

· **Stowage Code** SW2 Clear of living quarters.

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

· **Transport/weitere Angaben:**

· **ADR**

· **Begrenzte Menge (LQ)** 0

· **Freigestellte Mengen (EQ)** Code: E5

Höchste Nettomenge je Innenverpackung: 1 ml

Höchste Nettomenge je Außenverpackung: 300 ml

· **Beförderungskategorie** 1

· **Tunnelbeschränkungscode** C/E

· **IMDG**

· **Limited quantities (LQ)** 0

· **Excepted quantities (EQ)** Code: E5

Maximum net quantity per inner packaging: 1 ml

Maximum net quantity per outer packaging: 300 ml

· **UN "Model Regulation":**

UN 2927 GIFTIGER ORGANISCHER FLÜSSIGER STOFF, ÄTZEND, N.A.G. (SODIUM ACETATE TRIHYDRATE, EISESSIG), 6.1 (8+3), I

DE

(Fortsetzung auf Seite 9)

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 10.03.2022

überarbeitet am: 10.03.2022

**Handelsname: ACETATE BUFFER, 0.2M, pH 3.6**

(Fortsetzung von Seite 8)

### ABSCHNITT 15: Rechtsvorschriften

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

· Richtlinie 2012/18/EU

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

· Seveso-Kategorie

H1 AKUT TOXISCH

P5c ENTZÜNDBARE FLÜSSIGKEITEN

· Mengenschwelle (in Tonnen) für die Anwendung in Betrieben der unteren Klasse 5 t

· Mengenschwelle (in Tonnen) für die Anwendung in Betrieben der oberen Klasse 20 t

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

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

Keiner der Inhaltsstoffe ist enthalten.

· VERORDNUNG (EU) 2019/1148

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

Keiner der Inhaltsstoffe ist enthalten.

· Anhang II - MELDEPFLICHTIGE AUSGANGSSTOFFE FÜR EXPLOSIVSTOFFE

Keiner der Inhaltsstoffe ist enthalten.

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

Keiner der Inhaltsstoffe ist enthalten.

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

Keiner der Inhaltsstoffe ist enthalten.

· Nationale Vorschriften:

· Technische Anleitung Luft:

Klasse	Anteil in %
Wasser	8,0
II	50,0

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

· Sonstige Vorschriften, Beschränkungen und Verbotsverordnungen

Das Produkt unterliegt der Anlage 2 der Chemikalienverbotsverordnung (ChemVerbotsV) - Anforderungen in Bezug auf die Abgabe

· 15.2 Stoffsicherheitsbeurteilung: Eine Stoffsicherheitsbeurteilung wurde nicht durchgeführt.

### ABSCHNITT 16: Sonstige Angaben

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

· Relevante Sätze

H226 Flüssigkeit und Dampf entzündbar.

H300 Lebensgefahr bei Verschlucken.

H310 Lebensgefahr bei Hautkontakt.

H312 Gesundheitsschädlich bei Hautkontakt.

H314 Verursacht schwere Verätzungen der Haut und schwere Augenschäden.

(Fortsetzung auf Seite 10)

# Sicherheitsdatenblatt

gemäß 1907/2006/EG, Artikel 31

Druckdatum: 10.03.2022

überarbeitet am: 10.03.2022

**Handelsname: ACETATE BUFFER, 0.2M, pH 3.6**

(Fortsetzung von Seite 9)

*H319 Verursacht schwere Augenreizung.**H330 Lebensgefahr bei Einatmen.***· Abkürzungen und Akronyme:***ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)**IMDG: International Maritime Code for Dangerous Goods**IATA: International Air Transport Association**GHS: Globally Harmonised System of Classification and Labelling of Chemicals**EINECS: European Inventory of Existing Commercial Chemical Substances**ELINCS: European List of Notified Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**VOC: Volatile Organic Compounds (USA, EU)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Flam. Liq. 3: Entzündbare Flüssigkeiten – Kategorie 3**Acute Tox. 2: Akute Toxizität – Kategorie 2**Acute Tox. 1: Akute Toxizität – Kategorie 1**Acute Tox. 4: Akute Toxizität – Kategorie 4**Skin Corr. 1A: Hautreizende/-ätzende Wirkung – Kategorie 1A**Skin Corr. 1B: Hautreizende/-ätzende Wirkung – Kategorie 1B**Eye Dam. 1: Schwere Augenschädigung/Augenreizung – Kategorie 1**Eye Irrit. 2: Schwere Augenschädigung/Augenreizung – Kategorie 2*

DE

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

Stampato il: 10.03.2022

Revisione: 10.03.2022

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

· **1.1 Identificatore del prodotto**

· **Denominazione commerciale:** ACETATE BUFFER, 0.2M, pH 3.6

· **Articolo numero:** 11480, 11482

· **UFI:** ARY0-COV5-P00R-N87G

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

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

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

· **Produttore/fornitore:**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

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

email: [info@emsdiasum.com](mailto:info@emsdiasum.com)

[www.emsdiasum.com](http://www.emsdiasum.com)

Societa Italiana Chimici

Via Rio Nell Ellba 140

00138 Rome, Italy

Tel: 39 06 8800211

Fax: 39 30 06 8815313

Web: [www.sichim.com](http://www.sichim.com)

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

· **1.4 Numero telefonico di emergenza:**

ChemTrec 1-800-424-9300 Contract CCN7661

1-703-527-3887

### SEZIONE 2: Identificazione dei pericoli

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

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



GHS02 fiamma

Flam. Liq. 3 H226 Liquido e vapori infiammabili.



GHS06 teschio e tibie incrociate

Acute Tox. 2 H300 Letale se ingerito.

Acute Tox. 1 H310 Letale per contatto con la pelle.

Acute Tox. 2 H330 Letale se inalato.



GHS05 corrosione

Skin Corr. 1B H314 Provoca gravi ustioni cutanee e gravi lesioni oculari.

Eye Dam. 1 H318 Provoca gravi lesioni oculari.

· **2.2 Elementi dell'etichetta**

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

Il prodotto è classificato ed etichettato conformemente al regolamento CLP.

(continua a pagina 2)

# Scheda di dati di sicurezza

## ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 10.03.2022

Revisione: 10.03.2022

**Denominazione commerciale: ACETATE BUFFER, 0,2M, pH 3.6**

(Segue da pagina 1)

**Pittogrammi di pericolo**


GHS02 GHS05 GHS06

**Avvertenza Pericolo**
**Componenti pericolosi che ne determinano l'etichettatura:**

SODIUM ACETATE TRIHYDRATE

acido acetico

**Indicazioni di pericolo**

H226 Liquido e vapori infiammabili.

H300+H310+H330 Mortale se ingerito, a contatto con la pelle o se inalato.

H314 Provoca gravi ustioni cutanee e gravi lesioni oculari.

**Consigli di prudenza**
P301+P310 **IN CASO DI INGESTIONE:** contattare immediatamente un CENTRO ANTIVELENI/un medico.P303+P361+P353 **IN CASO DI CONTATTO CON LA PELLE (o con i capelli):** togliersi di dosso immediatamente tutti gli indumenti contaminati. Sciacquare la pelle [o fare una doccia].P305+P351+P338 **IN CASO DI CONTATTO CON GLI OCCHI:** sciacquare accuratamente per parecchi minuti. Togliere le eventuali lenti a contatto se è agevole farlo. Continuare a sciacquare.

P320 Trattamento specifico urgente (vedere su questa etichetta).

P361+P364 Togliere immediatamente tutti gli indumenti contaminati e lavarli prima di indossarli nuovamente.

P405 Conservare sotto chiave.

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

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

**vPvB:** Non applicabile.

### SEZIONE 3: Composizione/informazioni sugli ingredienti

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

**Sostanze pericolose:**

CAS: 64-19-7	acido acetico	>25-≤50%
EINECS: 200-580-7	Flam. Liq. 3, H226; Skin Corr. 1A, H314; Acute Tox. 4, H312	
CAS: 6131-90-4	SODIUM ACETATE TRIHYDRATE	>25-≤50%
	Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 2, H330; Eye Irrit. 2, H319	

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

### SEZIONE 4: Misure di primo soccorso

**4.1 Descrizione delle misure di primo soccorso**
**Indicazioni generali:**

Allontanare immediatamente gli abiti contaminati dal prodotto.

Levarsi la maschera protettiva solamente dopo aver tolto gli abiti contaminati.

(continua a pagina 3)

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

Stampato il: 10.03.2022

Revisione: 10.03.2022

**Denominazione commerciale: ACETATE BUFFER, 0.2M, pH 3.6**

(Segue da pagina 2)

*In caso di respirazione irregolare o di blocco respiratorio praticare la respirazione artificiale.*

· **Inalazione:**

*Portare il soggetto in zona ben areata o somministrare ossigeno; chiedere l'intervento di un medico.*

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

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

· **Contatto con gli occhi:**

*Lavare con acqua corrente per diversi minuti tenendo le palpebre ben aperte e consultare il medico.*

· **Ingestione:**

*Non provocare il vomito, chiamare subito il medico.*

*Bere abbondante acqua e sostare in zona ben areata. Richiedere immediatamente l'intervento del medico.*

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

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

*Non sono disponibili altre informazioni.*

### **SEZIONE 5: Misure antincendio**

· **5.1 Mezzi di estinzione**

· **Mezzi di estinzione idonei:**

*CO<sub>2</sub>, polvere o acqua nebulizzata. Estinguere gli incendi di grosse dimensioni con acqua nebulizzata o con schiuma resistente all'alcool.*

· **5.2 Pericoli speciali derivanti dalla sostanza o dalla miscela** *Non sono disponibili altre informazioni.*

· **5.3 Raccomandazioni per gli addetti all'estinzione degli incendi**

· **Mezzi protettivi specifici:** *Indossare il respiratore.*

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

· **6.1 Precauzioni personali, dispositivi di protezione e procedure in caso di emergenza**

*Indossare equipaggiamento protettivo. Allontanare le persone non equipaggiate.*

· **6.2 Precauzioni ambientali:**

*Diluire abbondantemente con acqua.*

*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).*

*Utilizzare mezzi di neutralizzazione.*

*Smaltimento del materiale contaminato conformemente al punto 13.*

*Provvedere ad una sufficiente areazione.*

· **6.4 Riferimento ad altre sezioni**

*Per informazioni relative ad un manipolazione sicura, vedere capitolo 7.*

*Per informazioni relative all'equipaggiamento protettivo ad uso personale vedere Capitolo 8.*

*Per informazioni relative allo smaltimento vedere Capitolo 13.*

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

· **7.1 Precauzioni per la manipolazione sicura**

*Accurata ventilazione/aspirazione nei luoghi di lavoro.*

*Aprire e manipolare i recipienti con cautela.*

*Evitare la formazione di aerosol.*

· **Indicazioni in caso di incendio ed esplosione:**

*Tenere lontano da fonti di calore, non fumare.*

*Proteggere dal calore.*

*Adottare provvedimenti contro cariche elettrostatiche.*

(continua a pagina 4)



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

Stampato il: 10.03.2022

Revisione: 10.03.2022

**Denominazione commerciale: ACETATE BUFFER, 0,2M, pH 3.6**

(Segue da pagina 3)

Tener pronto il respiratore.

- **7.2 Condizioni per lo stoccaggio sicuro, comprese eventuali incompatibilità**
- **Stoccaggio:**
- **Requisiti dei magazzini e dei recipienti:** Non sono richiesti requisiti particolari.
- **Indicazioni sullo stoccaggio misto:** Non necessario.
- **Ulteriori indicazioni relative alle condizioni di immagazzinamento:**  
Mantenere i recipienti ermeticamente chiusi.  
Proteggere dal calore e dai raggi diretti del sole.
- **7.3 Usi finali particolari** Non sono disponibili altre informazioni.

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

- **8.1 Parametri di controllo**
- **Ulteriori indicazioni sulla struttura di impianti tecnici:** Nessun dato ulteriore, vedere punto 7.

· **Componenti i cui valori limite devono essere tenuti sotto controllo negli ambienti di lavoro:**

#### 64-19-7 acido acetico

TWA	Valore a breve termine: 37 mg/m <sup>3</sup> , 15 ppm Valore a lungo termine: 25 mg/m <sup>3</sup> , 10 ppm
VL	Valore a breve termine: 50 mg/m <sup>3</sup> , 20 ppm Valore a lungo termine: 25 mg/m <sup>3</sup> , 10 ppm

- **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.  
Custodire separatamente l'equipaggiamento protettivo.  
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:**



Guanti protettivi

Il materiale dei guanti deve essere impermeabile e stabile contro il prodotto/ la sostanza/ la formulazione.  
A causa della mancanza di tests non può essere consigliato alcun tipo di materiale per i guanti con cui manipolare il prodotto / la formulazione / la miscela di sostanze chimiche.  
Scelta del materiale dei guanti in considerazione dei tempi di passaggio, dei tassi di permeazione e della degradazione.

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

(continua a pagina 5)

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

Stampato il: 10.03.2022

Revisione: 10.03.2022

Denominazione commerciale: ACETATE BUFFER, 0.2M, pH 3.6

(Segue da pagina 4)

· 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: Chiaro

· Odore: Pungente

· Soglia olfattiva: Non definito.

· valori di pH a 20 °C: 5,2

· Cambiamento di stato

Punto di fusione/punto di congelamento: Non definito.

Punto di ebollizione iniziale e intervallo di ebollizione: 118 °C

· Punto di infiammabilità: 43 °C

· Infiammabilità (solidi, gas): Non applicabile.

· Temperatura di accensione: 426 °C

· Temperatura di decomposizione: Non definito.

· Temperatura di autoaccensione: Prodotto non autoinfiammabile.

· Proprietà esplosive: Prodotto non è esplosivo, è tuttavia possibile la formazione di miscele di vapori/aria esplosive.

· Limiti di infiammabilità:

Inferiore: 4 Vol %

Superiore: 19 Vol %

· Tensione di vapore a 20 °C: 11,4 hPa

· Densità: Non definito.

· Densità relativa: Non definito.

· Densità di vapore: Non definito.

· Velocità di evaporazione: Non definito.

· Solubilità in/Miscibilità con acqua:

Completamente miscibile.

· Coefficiente di ripartizione: n-ottanolo/acqua: Non definito.

· Viscosità:

Dinamica: Non definito.

Cinematica: Non definito.

· Tenore del solvente:

Solventi organici: 50,0 %

Acqua: 8,0 %

(continua a pagina 6)

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

Stampato il: 10.03.2022

Revisione: 10.03.2022

**Denominazione commerciale:** ACETATE BUFFER, 0.2M, pH 3.6

(Segue da pagina 5)

<b>VOC (CE)</b>	50,00 %
<b>Contenuto solido:</b>	42,0 %
<b>· 9.2 Altre informazioni</b>	Non sono disponibili altre informazioni.

### SEZIONE 10: Stabilità e reattività

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

### SEZIONE 11: Informazioni tossicologiche

- **11.1 Informazioni sugli effetti tossicologici**
- **Tossicità acuta**  
Mortale se ingerito, a contatto con la pelle o se inalato.

- **Valori LD/LC50 rilevanti per la classificazione:**

**64-19-7 acido acetico**

Orale	LD50	3.310 mg/kg (rat)
Cutaneo	LD50	1.060 mg/kg (rabbit)

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

### 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.

(continua a pagina 7)

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

Stampato il: 10.03.2022

Revisione: 10.03.2022

**Denominazione commerciale: ACETATE BUFFER, 0.2M, pH 3.6**



(Segue da pagina 6)

- **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.  
Non immettere il prodotto non diluito o non neutralizzato nelle acque di scarico e nei canali di raccolta.
- **12.5 Risultati della valutazione PBT e vPvB**
- **PBT:** Non applicabile.
- **vPvB:** Non applicabile.
- **12.6 Altri effetti avversi** Non sono disponibili altre informazioni.

### SEZIONE 13: Considerazioni sullo smaltimento

- **13.1 Metodi di trattamento dei rifiuti**
- **Consigli:** Non smaltire il prodotto insieme ai rifiuti domestici Non immettere nelle fognature.
- **Imballaggi non puliti:**
- **Consigli:** Smaltimento in conformità con le disposizioni amministrative.
- **Detergente consigliato:** Acqua eventualmente con l'aggiunta di detersivi.

### SEZIONE 14: Informazioni sul trasporto

- |                                                                                                                                                                       |                                                                                                                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| · <b>14.1 Numero ONU</b><br>· <b>ADR, IMDG, IATA</b>                                                                                                                  | UN2927                                                                                                                                                                                                 |
| · <b>14.2 Nome di spedizione dell'ONU</b><br>· <b>ADR</b><br><br>· <b>IMDG, IATA</b>                                                                                  | 2927 LIQUIDO ORGANICO TOSSICO, CORROSIVO, N.A.S. (SODIUM ACETATE TRIHYDRATE, ACIDO ACETICO GLACIALE)<br><br>TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (SODIUM ACETATE TRIHYDRATE, ACETIC ACID, GLACIAL) |
| · <b>14.3 Classi di pericolo connesso al trasporto</b><br><br>· <b>ADR</b><br><br> |                                                                                                                                                                                                        |
| · <b>Classe</b><br>· <b>Etichetta</b>                                                                                                                                 | 6.1 Materie tossiche<br>6.1+8+3                                                                                                                                                                        |
| · <b>IMDG</b><br><br>                                                              |                                                                                                                                                                                                        |
| · <b>Class</b>                                                                                                                                                        | 6.1 Materie tossiche                                                                                                                                                                                   |

(continua a pagina 8)


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

Stampato il: 10.03.2022

Revisione: 10.03.2022

Denominazione commerciale: ACETATE BUFFER, 0.2M, pH 3.6

(Segue da pagina 7)

· <b>Label</b>	6.1/8/3
· <b>IATA</b>	
	
· <b>Class</b>	6.1 Materie tossiche
· <b>Label</b>	6.1 (8, 3)
· <b>14.4 Gruppo di imballaggio</b>	
· <b>ADR, IMDG, IATA</b>	I
· <b>14.5 Pericoli per l'ambiente:</b>	Non applicabile.
· <b>14.6 Precauzioni speciali per gli utilizzatori</b>	Attenzione: Materie tossiche
· <b>N° identificazione pericolo (Numero Kemler):</b>	668
· <b>Numero EMS:</b>	F-A,S-B
· <b>Segregation groups</b>	Acids
· <b>Stowage Category</b>	B
· <b>Stowage Code</b>	SW2 Clear of living quarters.
· <b>14.7 Trasporto di rinfuse secondo l'allegato II di MARPOL ed il codice IBC</b>	Non applicabile.
· <b>Trasporto/ulteriori indicazioni:</b>	
· <b>ADR</b>	
· <b>Quantità limitate (LQ)</b>	0
· <b>Quantità esenti (EQ)</b>	Codice: E5 Quantità massima netta per imballaggio interno: 1 ml Quantità massima netta per imballaggio esterno: 300 ml
· <b>Categoria di trasporto</b>	I
· <b>Codice di restrizione in galleria</b>	C/E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	0
· <b>Excepted quantities (EQ)</b>	Code: E5 Maximum net quantity per inner packaging: 1 ml Maximum net quantity per outer packaging: 300 ml
· <b>UN "Model Regulation":</b>	UN 2927 LIQUIDO ORGANICO TOSSICO, CORROSIVO, N.A.S. (SODIUM ACETATE TRIHYDRATE, ACIDO ACETICO GLACIALE), 6.1 (8+3), I

### SEZIONE 15: Informazioni sulla regolamentazione

- **15.1 Disposizioni legislative e regolamentari su salute, sicurezza e ambiente specifiche per la sostanza o la miscela**
- **Direttiva 2012/18/UE**
- **Sostanze pericolose specificate - ALLEGATO I** Nessuno dei componenti è contenuto.
- **Categoria Seveso**  
H1 TOSSICITÀ ACUTA  
P5c LIQUIDI INFIAMMABILI
- **Quantità limite (tonnellate) ai fini dell'applicazione dei requisiti di soglia inferiore 5 t**
- **Quantità limite (tonnellate) ai fini dell'applicazione dei requisiti di soglia superiore 20 t**

(continua a pagina 9)

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

Stampato il: 10.03.2022

Revisione: 10.03.2022

**Denominazione commerciale: ACETATE BUFFER, 0.2M, pH 3.6**

(Segue da pagina 8)

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

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

Nessuno dei componenti è contenuto.

· **REGOLAMENTO (UE) 2019/1148**

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

Nessuno dei componenti è contenuto.

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

Nessuno dei componenti è contenuto.

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

Nessuno dei componenti è contenuto.

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

Nessuno dei componenti è contenuto.

· **Disposizioni nazionali:**

· **Istruzione tecnica aria:**

Classe	quota in %
NC	50,0

· **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.

· **Frasi rilevanti**

H226 Liquido e vapori infiammabili.

H300 Letale se ingerito.

H310 Letale per contatto con la pelle.

H312 Nocivo per contatto con la pelle.

H314 Provoca gravi ustioni cutanee e gravi lesioni oculari.

H319 Provoca grave irritazione oculare.

H330 Letale se inalato.

· **Abbreviazioni e acronimi:**

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

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Liquidi infiammabili – Categoria 3

Acute Tox. 2: Tossicità acuta – Categoria 2

Acute Tox. 1: Tossicità acuta – Categoria 1

Acute Tox. 4: Tossicità acuta – Categoria 4

Skin Corr. 1A: Corrosione/irritazione della pelle – Categoria 1A

(continua a pagina 10)

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

Stampato il: 10.03.2022

Revisione: 10.03.2022

**Denominazione commerciale: ACETATE BUFFER, 0.2M, pH 3.6**

*Skin Corr. 1B: Corrosione/irritazione della pelle – Categoria 1B*  
*Eye Dam. 1: Gravi lesioni oculari/irritazione oculare – Categoria 1*  
*Eye Irrit. 2: Gravi lesioni oculari/irritazione oculare – Categoria 2*

(Segue da pagina 9)

IT

# 물질안전보건자료 GHS에 따라

인쇄일자: 2022.03.10

개정: 2022.03.10

## 1 화학제품과 회사에 관한 정보

- 제품 식별자
  - 제품명: **ACETATE BUFFER, 0.2M, pH 3.6**
  - 상품번호: 11480, 11482
  - 해당 순물질이나 혼합물의 관련 하위용도 및 사용금지용도
  - 제품의 권고 용도와 사용상의 제한: ACETATE BUFFER, 0.2M, pH 3.6
  - 제품의 권고 용도와 사용상의 제한: 실험실 화학품
  - 안전데이터표(Safety Data Sheet)내 공급업체 관련 상세 정보
  - 제조자/수입자/유통업자 정보:
    - Electron Microscopy Sciences
    - 1560 Industry Road
    - USA-Hatfield, PA 19440
    - Tel: 215-412-8400 Fax: 215-412-8450
    - email: info@emsdiasum.com
    - www.emsdiasum.com
  - Samchang Commercial Co., Ltd.
    - Yeo Eui Do
    - PO Box 1110
    - Seoul, Korea
    - Tel: 82 2 703 3040
    - Fax: 82 2 717 3298
- 
- Daedok Science, Co. Ltd.
    - 34141 E10 Korea Advanced Institute of Science
    - Guseong-Dong, Yuseong-gu, Daejeon,
    - Korea
    - Phone: 82 42 710 2091
    - Fax: 82 42 367 0005
    - Website: www.labsmro.com
  - 추가적인 정보 획득 가능: Product safety department
  - 비상연락 전화번호:
    - ChemTrec 1-800-424-9300 Contract CCN7661
    - 1-703-527-3887

## 2 유해성·위험성

- 순물질 또는 혼합물의 분류



화염

인화성 액체 – 구분3

H226 인화성 액체 및 증기



두개골과 대퇴골

급성 독성 - 경구 – 구분1

H300 삼키면 치명적임

급성 독성 - 경피 – 구분1

H310 피부와 접촉하면 치명적임

급성 독성 - 흡입 – 구분2

H330 흡입하면 치명적임

(2 쪽에 계속)



# 물질안전보건자료 GHS에 따라

인쇄일자: 2022.03.10

개정: 2022.03.10

**제품명: ACETATE BUFFER, 0.2M, pH 3.6**

(1 쪽부터계속)



피부 부식성/피부 자극성 – 구분 1 H314 피부에 심한 화상과 눈에 손상을 일으킴  
심한 눈 손상성/눈 자극성 – 구분1 H318 눈에 심한 손상을 일으킴

- 라벨표기 요소
- GHS 라벨 요소 본 제품은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.
- GHS 그림문자



- 신호어 위험
- 상표상에명확히위험성이표시된성분:  
SODIUM ACETATE TRIHYDRATE  
Acetic Acid Glacial
- 유해·위험문구  
인화성 액체 및 증기  
삼키거나, 피부에 접촉하거나 흡입하면 치명적임  
피부에 심한 화상과 눈에 손상을 일으킴

- 예방조치문구  
삼켰을 시: 즉시 독성물질센터/병원 연락 필요.  
피부(또는 머리카락)에 묻으면 오염된 모든 의복은 벗거나 제거하십시오. 피부를 물로 씻으시오/샤워하십시오 .  
눈에 묻으면 몇 분간 물로 조심해서 씻으시오. 가능하면 콘택트렌즈를 제거하십시오. 계속 씻으시오.  
긴급히(라벨 참조) 처치를 하시오.  
오염된 모든 의복은 즉시 벗고 다시 사용 전 세척하십시오.  
밀봉하여 저장하십시오.  
(지방/지역/국가/국제 규정에 따라) 에 내용물/용기를 폐기하십시오.

- 기타 유해성
- PBT(잔류성, 생물농축성, 독성 물질) 및 vPvB(고 잔류성, 고 생물농축성 물질) 평가 결과
- PBT(잔류성, 생물농축성, 독성 물질): 해당사항 없음.
- vPvB(고 잔류성, 고 생물농축성 물질): 해당사항 없음.

### 3 구성성분의 명칭 및 함유량

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

· 위험 요소:

64-19-7	Acetic Acid Glacial ⚠ 인화성 액체 – 구분3, H226; ⚠ 피부 부식성/피부 자극성 – 구분 1, H314; ⚠ 급성 독성 - 경피 – 구분4, H312	>25-≤50%
6131-90-4	SODIUM ACETATE TRIHYDRATE ⚠ 급성 독성 - 경구 – 구분1, H300; ⚠ 급성 독성 - 경피 – 구분1, H310; ⚠ 급성 독성 - 흡입 – 구분2, H330; ⚠ 심한 눈 손상성/눈 자극성 – 구분 2, H319	>25-≤50%

KR

(3 쪽에계속)

# 물질안전보건자료

## GHS에 따라

인쇄일자: 2022.03.10

개정: 2022.03.10

**제품명: ACETATE BUFFER, 0.2M, pH 3.6**

(2 쪽부터 계속)

### 4 응급조치 요령

- 응급조치요령 내용
- 일반적 정보:
  - 이 제품에 의해 오염된 의상은 즉시 제거한다.
  - 반드시 오염된 의상을 완전히 제거한 후에 호흡보호기를 떼어낸다.
  - 불규칙적인 호흡이나 호흡정지상태에서는 인공호흡을 실시한다.
- 흡입했을 때:
  - 신선한 공기나 산소를 공급받고, 의료진의 도움을 구한다.
  - 환자가 의식을 잃었을 경우에는 안전한 자세에서 환자를 운반한다.
- 피부에 접촉했을 때: 즉시 물과 비누로 씻고 잘 헹군다.
- 눈에 들어갔을 때: 흐르는 물에 눈을 몇 분 동안 씻어내고 나서, 의사와 상담한다.
- 먹었을 때:
  - 구토를 유발시키지 않는다. 즉시 의료진의 도움을 구한다.
  - 물을 충분히 마시고 신선한 공기를 쐬다. 즉시 의사의 도움을 구한다.
- 기타 의사의 주의사항:
  - 가장 중요한 급·만성 증상 및 영향 추가적인 정보가 존재하지 않습니다.
  - 즉각적인 의료처치 및 특별치료가 필요함을 시사하는 징후 추가적인 정보가 존재하지 않습니다.

### 5 폭발·화재시 대처방법

- 소화제
- 적절한 소화제:
  - 이산화탄소, 진화용 석회가루 또는 물방사를 사용하고, 더 큰 화재는 물을 분사하거나 알코올이 함유된 제품으로 끈다.
- 본 화학물질이나 혼합물에서 발생하는 특별 유해성 추가적인 정보가 존재하지 않습니다.
- 소방관에 대한 권고사항
- 화재 진압 시 착용할 보호구 및 예방조치: 호흡보호장비 설치.

### 6 누출 사고 시 대처방법

- 개인적 예방조치, 보호장비 및 응급처치 절차 안전장비 착용하고, 무방비의 사람은 격리시킨다.
- 환경 관련 예방조치:
  - 많은 물로 희석시킨다.
  - 하수도망/해수면위의물/지하수로도달하지않게한다.
- 밀폐 및 정화 방법과 소재:
  - 액체가 혼합된 물질(모래, 규조토, 산성 결합물, 일반 결합물, 톱밥)에 흡입되도록 한다.
  - 중성제를 사용한다.
  - 항목 13에 따라 오염된 물질을 쓰레기로 처분한다.
  - 충분한 환기가 되도록 한다.
- 타 섹션 참조
  - 안전관리에 대한 정보는 제7장을 참고하십시오.
  - 개인보호장비에 대한 정보는 제8장을 참고하십시오.
  - 쓰레기처리에 대한 정보는 제13장을 참고하십시오.

### 7 취급 및 저장방법

- 취급:
  - 안전 취급을 위한 예방조치
    - 작업장에서는 통풍이 잘 되고/습기 제거가 잘 되게 주의한다.
    - 조심스럽게 용기를 개봉하거나 취급한다.

(4 쪽에 계속)

# 물질안전보건자료 GHS에 따라

인쇄일자: 2022.03.10

개정: 2022.03.10

**제품명: ACETATE BUFFER, 0.2M, pH 3.6**

(3 쪽부터계속)

- 연무질이형성되는것을피한다.
- **화재 및 폭발 사고 예방대책에 관한 정보:**  
 발 화 요소는 멀 리 둔 다-금 연.  
 열로부터보호한다.  
 정 전 기 의 충 전 으로부터 보호한다.  
 호흡보호장비를항상비치한다.
- **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.  
 열이나직사광선으로부터보호한다.
- **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:**

### 64-19-7 Acetic Acid Glacial

OELV (KR)	단기간의값: 15 ppm 장기간의값: 10 ppm
IOELV (EU)	단기간의값: 50 mg/m <sup>3</sup> , 20 ppm 장기간의값: 25 mg/m <sup>3</sup> , 10 ppm
PEL (US)	장기간의값: 25 mg/m <sup>3</sup> , 10 ppm
REL (US)	단기간의값: 37 mg/m <sup>3</sup> , 15 ppm 장기간의값: 25 mg/m <sup>3</sup> , 10 ppm
TLV (US)	단기간의값: 15 ppm 장기간의값: 10 ppm

- **추 가 정보:** 제 조 할 당시에 유 효 한 목 록 을 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 탈 의 한다.  
 휴 식 전 이 나 작 업 이 끝 날 때 마 다 손 을 씻 는 다.  
 방 호 복 은 따 로 보 관 한다.  
 눈 과 의 접 촉 을 피 한 다.  
 눈 과 피 부 와 의 접 촉 은 피 한 다.
- **호흡기 보호:**  
 단 시 간 또 는 경 미 한 오 염 의 경 우 에 는 호 흡 여 과 기 를 사 용 한 다. 심 각 한 또 는 장 기 간 노 출 시 에 는 호 흡 보 호 장 비 를 사 용 한 다.
- **손 보호:**



보호용 장갑

장갑재질은제품 / 원료 / 조제를투과시키지않아야하고, 내구성이있어야한다.

(5 쪽에계속)

# 물질안전보건자료 GHS에 따라

인쇄일자: 2022.03.10

개정: 2022.03.10

**제품명: ACETATE BUFFER, 0.2M, pH 3.6**

(4 쪽부터계속)

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

투과 시간, 침투율과 저하를 고려해서 장갑 재료를 선택한다.

**· 장갑의 재료**

적합한 장갑의 선정은 재질 차이뿐 아니라 품질 기준의 차이도 고려하여 이루어져야 하고 제조업종에 따라서도 다르게 선정되어야 한다. 제품은 다양한 재료로부터의 조제로 이루어지는 것이기 때문에, 장갑재질의 안정성은 사전에 예측되어질 수 있는 것이 아니고, 반드시 사용전에 (그 안전성이) 체크되어야 한다.

· 장갑 재료의 투과 시간 정확한 관통 시간은 보호 장갑 제조자에 의하여 인지되고, 준수되어야 한다.

**· 눈 보호:**



꼭 조이는 보안경

## 9 물리화학적 특성

**· 기본 물리 및 화학적 특성에 대한 정보**

**· 일반정보**

**· 외형**

물리적 상태:	액체
색:	밝은
냄새:	찌르는 듯한
후각역치	알맞지 않다.

· pH 의 경우 20 °C: 5.2

**· 상태변화**

녹는점/어는점:	맞지 않는다
초기 끓는점과 끓는점 범위:	118 °C

· 인화점: 43 °C

· 인화성(고체, 기체): 해당 사항 없음.

· 점화 온도: 426 °C

· 분해 온도: 알맞지 않다.

· 자기점화: 이 제품은 자연발화성이 없다.

· 폭발위험: 이 제품은 폭발위험성이 없지만, 폭발 가능성이 있는 증기화합물/공기화합물의 형성 가능성이 있다.

**· 인화 또는 폭발 범위의 상한/하한**

아래로:	4 Vol %
위로:	19 Vol %

· 증기압 의 경우 20 °C: 11.4 hPa

· 밀도: 맞지 않는다.

· 비중: 알맞지 않다.

· 증기밀도: 알맞지 않다.

· 증발 속도: 알맞지 않다.

**· 용해도:**

물: 완전히 혼합할 수 있는

· n 옥탄올/물 분배계수: 알맞지 않다.

(6 쪽에계속)

# 물질안전보건자료 GHS에 따라

인쇄일자: 2022.03.10

개정: 2022.03.10

**제품명: ACETATE BUFFER, 0.2M, pH 3.6**

(5 쪽부터계속)

· 점도:	
· 역학성:	알맞지않다.
· 동점성:	알맞지않다.
· 용매내용물	
· 유기용매:	50.0 %
· 물:	8.0 %
· VOC (EU)	50.00 %
· 고체의 함량:	42.0 %
· 기타 정보	추가적인 정보가 존재하지 않습니다.

## 10 안정성 및 반응성

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

## 11 독성에 관한 정보

- 독성학적 영향에 대한 정보
- 급성 독성:

· LD/LC50-수치에 따른 분류:

**64-19-7 Acetic Acid Glacial**

구강의	LD50	3,310 mg/kg (rat)
피부의	LD50	1,060 mg/kg (rabbit)

- 일차적 자극 효과:
- 피부 부식성 또는 자극성: 피부와점막에강한부식작용.
- 심한 눈 손상 또는 자극성:
  - 강한부식작용
  - 심각한안구상처의위험이있는강한자극
- 감각화: 민감한영향이없는것으로알려져있다.
- 추 가 적 인 독성 에 관 한 정 보:
  - 이제품은유럽공동체의공동분류원칙의합법적인절차에근거하여최근에발효된원고에서아래위험들의사전준비에대하여제시하고있다.
  - 부식작용의
  - 자극적인
  - 맹독성의
  - 피부유입시위험
  - 삼킬경우식도나위등의내장기관벽에상처를주는위험과마찬가지로입주변이나구강에강한부식작용을한다

## 12 환경에 미치는 영향

- 독성
- 수생독성: 추가적인 정보가 존재하지 않습니다.

(7 쪽에계속)

# 물질안전보건자료 GHS에 따라

인쇄일자: 2022.03.10

개정: 2022.03.10

**제품명: ACETATE BUFFER, 0.2M, pH 3.6**







(6 쪽부터계속)

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

## 13 폐기시 주의사항

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

## 14 운송에 필요한 정보

<ul style="list-style-type: none"> <li>· 유엔 번호</li> <li>· ADR, IMDG, IATA</li> </ul>	UN2927
<ul style="list-style-type: none"> <li>· UN 적정 선적명</li> <li>· ADR</li> <li>· IMDG, IATA</li> </ul>	2927 TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (SODIUM ACETATE TRIHYDRATE, ACETIC ACID, GLACIAL)  TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (SODIUM ACETATE TRIHYDRATE, ACETIC ACID, GLACIAL)
<ul style="list-style-type: none"> <li>· 교통 위험 클래스</li> <li>· ADR</li> </ul>	<div style="display: flex; justify-content: space-around; align-items: center;">    </div>
<ul style="list-style-type: none"> <li>· 등급</li> <li>· 위험물 라벨</li> </ul>	6.1 독성물질 6.1+8+3
<ul style="list-style-type: none"> <li>· IMDG</li> </ul>	<div style="display: flex; justify-content: space-around; align-items: center;">    </div>
<ul style="list-style-type: none"> <li>· Class</li> </ul>	6.1 독성물질

(8 쪽에계속)


물질안전보건자료  
GHS에 따라

인쇄일자: 2022.03.10

개정: 2022.03.10

제품명: ACETATE BUFFER, 0.2M, pH 3.6

(7 쪽부터계속)

· Label	6.1/8/3
· IATA	
	
· Class	6.1 독성물질
· Label	6.1 (8, 3)
· 용기등급	
· ADR, IMDG, IATA	I
· 환경적 유해물질:	해당사항 없음.
· 이용자 특별 예방조치	경고: 독성물질
· 위험 코드:	668
· EMS-번호:	F-A,S-B
· Segregation groups	Acids
· Stowage Category	B
· Stowage Code	SW2 Clear of living quarters.
· MARPOL73/78(선박으로부터의 해양오염방지협약) 부속서2 및 IBC Code(국제선적화물코드)에 따른 벌크(bulk) 운송	해당사항 없음.
· 운 송/추가 정보:	
· ADR	
· 한정 수량 (LQ)	0
· Excepted quantities (EQ)	Code: E5 Maximum net quantity per inner packaging: 1 ml Maximum net quantity per outer packaging: 300 ml
· 운송 구분	1
· 터널 제한 코드	C/E
· IMDG	
· Limited quantities (LQ)	0
· Excepted quantities (EQ)	Code: E5 Maximum net quantity per inner packaging: 1 ml Maximum net quantity per outer packaging: 300 ml
· UN "모범 규제":	UN 2927 TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (SODIUM ACETATE TRIHYDRATE, ACETIC ACID, GLACIAL), 6.1 (8+3), I

15 법적 규제현황

· 산업안전보건법에 의한 규제:

· 제조 등 금지물질:

어떠한내용물도목록화되어있지않다

· 허가대상물질:

어떠한내용물도목록화되어있지않다

(9 쪽에계속)

## 물질안전보건자료 GHS에 따라

인쇄일자: 2022.03.10

개정: 2022.03.10

**제품명: ACETATE BUFFER, 0.2M, pH 3.6**

(8 쪽부터계속)

**· 관리대상유해물질:**

64-19-7 Acetic Acid Glacial

**· 작업환경측정 대상 유해인자**

64-19-7 Acetic Acid Glacial

1C15

**· 특수건강진단 대상 유해인자**

어떠한내용물도목록화되어있지않다

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

**· Korean Existing Chemical Inventory**

64-19-7 Acetic Acid Glacial

KE-00013

7732-18-5 물

KE-35400

**· 화학물질관리법**

**· 사고대비물질**

어떠한내용물도목록화되어있지않다

**· 금지물질**

어떠한내용물도목록화되어있지않다

**· 제한물질**

어떠한내용물도목록화되어있지않다

**· 유독물질**

어떠한내용물도목록화되어있지않다

**· 허가물질**

어떠한내용물도목록화되어있지않다

· 위험물안전관리법 (위험물 및 지정수량) 제 4: 2,000 리터

**· 등록 또는 신고 면제대상 화학물질**

7732-18-5 물

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

어떠한내용물도목록화되어있지않다

**· 중점관리물질의 지정**

**· 표1 중점관리물질(제2조 관련)**

어떠한내용물도목록화되어있지않다

**· 표2 중점관리물질(제2조 관련)**

어떠한내용물도목록화되어있지않다

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

**· GHS 그림문자**



GHS02    GHS05    GHS06

**· 신호어 위험**

**· 상표상에 명확히 위험성이 표시된 성분:**

SODIUM ACETATE TRIHYDRATE

Acetic Acid Glacial

**· 유해·위험문구**

인화성 액체 및 증기

삼키거나, 피부에 접촉하거나 흡입하면 치명적임

(10 쪽에계속)



# 물질안전보건자료 GHS에 따라

인쇄일자: 2022.03.10

개정: 2022.03.10

**제품명: ACETATE BUFFER, 0.2M, pH 3.6**

(9 쪽부터계속)

피부에 심한 화상과 눈에 손상을 일으킴

**· 예방조치문구**

· 삼켰을 시: 즉시 독성물질센터/병원 연락 필요.

· 피부(또는 머리카락)에 묻으면 오염된 모든 의복은 벗거나 제거하십시오. 피부를 물로 씻으시오/샤워하십시오 .

· 눈에 묻으면 몇 분간 물로 조심해서 씻으시오. 가능하면 콘택트렌즈를 제거하십시오. 계속 씻으시오.

· 긴급히(라벨 참조) 처치를 하시오.

· 오염된 모든 의복은 즉시 벗고 다시 사용 전 세척하십시오.

· 밀봉하여 저장하십시오.

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

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

## 16 그 밖의 참고사항

이 보고는 우리 지식에 대한 오늘날의 상태에 대하여 평가하고 있다

하지만 이 보고서는 생산 특성에 관한 보충은 기술하지 않았으며 계약적인 법률 관계에 기반을 두고 있지 않다

**· 담당자:**

· **최초 작성일자:** 2022.03.10

· **개정 횟수 및 최종 개정일자:** 1 / 2022.03.10

**· 약어와 두문자어:**

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

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

# Sikkerhetsdatablad

iflg. forordning (EF) nr. 1907/2006, Artikkel 31

Trykkdato: 10.03.2022

revidert den: 10.03.2022

## Avsnitt 1: Identifikasjon av stoffet/stoffblandingen og av selskapet/foretaket

- **1.1 Produktidentifikator**
- **Handelsnavn:** ACETATE BUFFER, 0.2M, pH 3.6
- **Artikkelnummer:** 11480, 11482
- **UFI:** ARY0-C0V5-P00R-N87G
- **1.2 Relevante identifiserte bruksområder for stoffet eller stoffblandingen og bruk som frarådes**  
Ikke noe mer relevant informasjon tilgjengelig.
- **Bruk av stoffet/ tilberedning** laboratoriekjemikalier
- **1.3 Opplysninger om leverandøren av sikkerhetsdatabladet**
- **Produsent/leverandør:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://www.emsdiasum.com)
- **Avdeling for nærmere informasjon:** Product safety department
- **1.4 Nødtelefonnummer**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## Avsnitt 2: Fareidentifikasjon

- **2.1 Klassifisering av stoffet eller stoffblandingen**
- **Klassifisering i henhold til EC-forskrift nr.1272/2008**



GHS02 Flamme

Flam. Liq. 3 H226 Brannfarlig væske og damp.



GHS06 Dødningehode med korslagte knokler

Acute Tox. 2 H300 Dødelig ved svelging.

Acute Tox. 1 H310 Dødelig ved hudkontakt.

Acute Tox. 2 H330 Dødelig ved innånding.



GHS05 Etsende virkning

Skin Corr. 1B H314 Gir alvorlige etseskader på hud og øyne.

Eye Dam. 1 H318 Gir alvorlig øyeskade.

- **2.2 Merkingselementer**
- **Merking iht. bestemmelse (EC) Nr. 1272/2008**  
Produktet er klassifisert og merket i henhold til CLP-forordningen.

(fortsatt på side 2)

# Sikkerhetsdatablad

iflg. forordning (EF) nr. 1907/2006, Artikkel 31

Trykkdato: 10.03.2022

revidert den: 10.03.2022

**Handelsnavn: ACETATE BUFFER, 0.2M, pH 3.6**

(fortsatt fra side 1)

## · Farepiktogrammer



GHS02 GHS05 GHS06

## · Varselord Fare

## · Farebestemmende komponenter ved etikettering:

SODIUM ACETATE TRIHYDRATE

eddiksyre

## · Faresetninger

H226

Brannfarlig væske og damp.

H300+H310+H330 Dødelig ved svelging, hudkontakt eller innånding.

H314

Gir alvorlige etseskader på hud og øyne.

## · Sikkerhetssetninger

P301+P310

VED SVELGING: Kontakt umiddelbart et GIFTINFORMASJONSSENTER/en lege.

P303+P361+P353 VED HUDKONTAKT (eller håret): Tilsølte klær må fjernes straks. Skyll [eller dusj] huden med vann.

P305+P351+P338 VED KONTAKT MED ØYNENE: Skyll forsiktig med vann i flere minutter. Fjern eventuelle kontaktlinser dersom dette enkelt lar seg gjøre. Fortsett skyllingen.

P320

Særlig behandling kreves umiddelbart (se på etiketten).

P361+P364

Tilsølte klær må fjernes straks og vaskes før bruk.

P405

Oppbevares innelåst.

P501

Innholdet / emballasjen skal avhendes i henhold til de lokale / regionale / nasjonale / internasjonale forskrifter.

## · 2.3 Andre farer

## · Resultater av PBT- og vPvB-vurdering

· PBT: Ikke brukbar.

· vPvB: Ikke brukbar.

## Avsnitt 3: Sammensetning/opplysninger om bestanddeler

## · 3.2 Kjemisk karakterisering: Stoffblandinger

· Beskrivelse: Blanding av nedenstående oppførte stoffer med ufarlige tilsetninger.

## · Farlige innholdsstoffer:

CAS: 64-19-7	eddiksyre	>25-≤50%
EINECS: 200-580-7	Flam. Liq. 3, H226; Skin Corr. 1A, H314; Acute Tox. 4, H312	
CAS: 6131-90-4	SODIUM ACETATE TRIHYDRATE	>25-≤50%
	Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 2, H330; Eye Irrit. 2, H319	

· Ytterligere informasjon: Teksten til de fareangivelsene som er inkludert her, kan konsulteres i kapittel 16.

## Avsnitt 4: Førstehjelpstiltak

## · 4.1 Beskrivelse av førstehjelpstiltak

## · Generelle informasjon:

Klær som er tilsølt med produktet må fjernes omgående.

Åndedrettsbeskyttelse må først fjernes etter at tilsølte klær er fjernet.

Kunstig åndedrett ved uregelmessig åndedrett eller åndedrettsstillstand.

(fortsatt på side 3)

# Sikkerhetsdatablad

## iflg. forordning (EF) nr. 1907/2006, Artikkel 31

Trykkdato: 10.03.2022

revidert den: 10.03.2022

**Handelsnavn: ACETATE BUFFER, 0.2M, pH 3.6**

(fortsatt fra side 2)

- **Etter innånding:**  
Tilførsel av frisk luft eller surstoff; søk legehjelp.  
Ved bevisstløshet lagring og transport i stabil sidestilling.
- **Etter hudkontakt:** Vask straks med vann og sepe og skylle godt etterpå.
- **Etter øyekontakt:** Skylle øynene med åpne øyenlokk i flere minutter under rennende vann og tilkall lege.
- **Etter svelging:**  
Ikke få pasienten til å kaste opp. Tilkall lege straks.  
Drikk rikelig med vann og sørg for frisk luft. Tilkall lege omgående.
- **4.2 De viktigste symptomene og virkningene, både akutte og forsinkede**  
Ikke noe mer relevant informasjon tilgjengelig.
- **4.3 Angivelse av om umiddelbar legehjelp og spesialbehandling er nødvendig**  
Ikke noe mer relevant informasjon tilgjengelig.

### Avsnitt 5: Brannsløkkingstiltak

- **5.1 Slökkingsmidler**
- **Egnede slukningsmidler:**  
CO<sub>2</sub>, slukningspulver eller vann i spredt stråle. Større branner bekjempes med vann i spredt stråle eller med skum som er motstandsdyktig mot alkohol.
- **5.2 Særlige farer knyttet til stoffet eller stoffblandingen** Ikke noe mer relevant informasjon tilgjengelig.
- **5.3 Råd til brannmannskaper**
- **Spesielt verneutstyr:** Ta på egnet åndedrettsbeskyttelse.

### Avsnitt 6: Tiltak ved utilsiktede utslipp

- **6.1 Personlige forsiktighetsregler, personlig verneutstyr og nødrutiner**  
Ta på beskyttelsesdrakt. Hold ubeskyttede personer borte.
- **6.2 Forsiktighetsregler med hensyn til miljø**  
Fortynn med rikelig med vann.  
La ikke produktet komme ned i kloakk/overflatevann/grunnvann.
- **6.3 Metoder og materialer for oppsamling og rensing**  
Ta opp stoffet med væskebindende materiale (sand, kiselgur, syrebindemiddel, universalbindemiddel, sagflis).  
Bruk nøytraliseringsmiddel.  
Bortskaff kontaminert materiale som avfall i.h.t. punkt 13.  
Sørg for tilstrekkelig ventilasjon.
- **6.4 Henvisning til andre avsnitt**  
Informasjoner om sikker håndtering, se kapittel 7.  
Informasjoner om personlig beskyttelsesutstyr, se kapittel 8.  
Informasjoner om bortskaffelse/deponering, se kapittel 13.

### Avsnitt 7: Håndtering og lagring

- **7.1 Forsiktighetsregler for sikker håndtering**  
Sørg for god ventilasjon/avsugning på arbeidsplassen.  
Beholderne må åpnes og håndteres forsiktig.  
Unngå aerosoldannelse.
- **Henvisninger om brann- og eksplosjonsvern:**  
Bruk av åpen ild forbudt - røyking forbudt.  
Beskytt mot varme.  
Gjør tiltak mot elektrostatisk oppladning.  
Hold åndedrettsbeskyttelse i beredskap.

(fortsatt på side 4)

# Sikkerhetsdatablad

iflg. forordning (EF) nr. 1907/2006, Artikkel 31

Trykkdato: 10.03.2022

revidert den: 10.03.2022

**Handelsnavn: ACETATE BUFFER, 0.2M, pH 3.6**

(fortsatt fra side 3)

- **7.2 Vilkår for sikker lagring, herunder eventuelle uforenligheter**
- **Lagring:**
- **Krav til lagerrom og beholdere:** Ingen spesielle krav.
- **Informasjoner om felles lagring:** Ikke nødvendig.
- **Ytterligere informasjoner om lagervilkårene:**  
Hold beholderne tett lukket.  
Beskyttes mot varme og direkte solpåvirkning.
- **7.3 Særlig(e) sluttanvendelse(r)** Ikke noe mer relevant informasjon tilgjengelig.

## Avsnitt 8: Eksponeringskontroll / personlig verneutstyr

- **8.1 Kontrollparametere**
- **Ytterligere informasjoner om utforming av tekniske anlegg:** Ingen ytterligere informasjoner, se punkt 7.

- **Komponenter med grenseverdier for arbeidsplass som må overholdes:**

### 64-19-7 eddiksyre

AG	Korttidsverdi: 50 mg/m <sup>3</sup> , 20 ppm
	Langtidsverdi: 25* mg/m <sup>3</sup> , 10* ppm
	*A E

- **Ytterligere informasjoner:** Basis: listene som var gyldige ved oppstillingen.
- **8.2 Eksponeringskontroll**
- **Personlig verneutstyr:**
- **Generelle verne- og hygienetiltak:**  
Holdes adskilt fra næringsmidler, drikkevarer og fôrstoffer.  
Fjern omgående forurensede, gjennomvætede klær.  
Vask hendene før arbeidspauser og ved arbeidets slutt.  
Beskyttelsesklær må oppbevares adskilt.  
Unngå berøring med øynene.  
Unngå berøring med øyne og hud.
- **Åndedrettsvern:**  
Ved korttidig eller liten belastning åndedrettsfilterapparat; ved intensiv eller lengre utsetting: bruk omluft-uavhengig åndedrettsbeskyttelsesapparat.
- **Håndvern:**



Beskyttelseshansker

- Hanskematerialet må være ugjennomtrengelig og bestandig overfor produktet /stoffet /blandingen.  
På grunn av manglende tester kan det ikke gis noen anbefaling om hanskemateriale for produktet / tilberedningsprosessen/kjemikalieblanding.
- Hanskematerialet velges under hensyntagen til holdbarhetstid, gjennomtrengelighet og degradering.
- **hanskemateriale**  
Valget av egnet hanske er ikke bare avhengig av materiale, men også av andre kvalitetskjenner og er forskjellig fra produsent til produsent. Da produktet representerer en sammensetning av flere stoffer, kan holdbarheten av hanskematerialet ikke forhåndsberegnes, og denne må testes før bruk.
  - **gjennomtrengingstid for hanskemateriale**  
Den nøyaktige holdbarhetstiden må bringes på det rene hos hanskeprodusenten og overholdes.

(fortsatt på side 5)

# Sikkerhetsdatablad

iflg. forordning (EF) nr. 1907/2006, Artikkel 31

Trykkdato: 10.03.2022

revidert den: 10.03.2022

Handelsnavn: ACETATE BUFFER, 0.2M, pH 3.6

(fortsatt fra side 4)

· Øyevern:



Tettsittende vernebrille

## Avsnitt 9: Fysiske og kjemiske egenskaper

### · 9.1 Opplysninger om grunnleggende fysiske og kjemiske egenskaper

#### · alminnelige opplysninger

#### · Utseende:

· Form:	Væske
· Farge:	Klar
· Lukt:	Stikkende
· Lukterskel:	Ikke bestemt.

· pH-verdi ved 20 °C: 5,2

#### · Tilstandsendring

· Smeltepunkt/frysepunkt:	Ikke bestemt.
· Startkokepunkt og kokeområde:	118 °C

· Flammepunkt: 43 °C

· Antennelighet (fast stoff, gass): Ikke brukbar.

· Antennelsestemperatur: 426 °C

· Nedbrytningstemperatur: Ikke bestemt.

· Selvantennelsestemperatur: Produktet er ikke selvantennelig.

· Eksplosive egenskaper: Produktet er ikke eksplosjonsfarlig. Dannelse av eksplosjonsfarlige damp-/luftblandinger er dog mulig.

#### · Eksplosjonsgrenser:

· Nedre:	4 Vol %
· Øvre:	19 Vol %

· Damptrykk ved 20 °C: 11,4 hPa

· Tetthet: Ikke bestemt.

· Relativ tetthet: Ikke bestemt.

· Damptetthet: Ikke bestemt.

· Fordampingshastighet: Ikke bestemt.

· Løslighet i / blandbarhet med vann:

Fullstendig blandbar.

· Fordelingskoeffisient; n-oktanol/vann: Ikke bestemt.

#### · Viskositet:

· Dynamisk:	Ikke bestemt.
· Kinematisk:	Ikke bestemt.

#### · Løsningsmiddelandel:

· Organiske løsningsmidler:	50,0 %
· Vann:	8,0 %
· VOC (EF)	50,00 %

(fortsatt på side 6)

# Sikkerhetsdatablad

## iflg. forordning (EF) nr. 1907/2006, Artikkel 31

Trykkdato: 10.03.2022

revidert den: 10.03.2022

**Handelsnavn: ACETATE BUFFER, 0.2M, pH 3.6**

(fortsatt fra side 5)

**Andel faste stoffer:** 42,0 %**· 9.2 Andre opplysninger** Ikke noe mer relevant informasjon tilgjengelig.**Avsnitt 10: Stabilitet og reaktivitet**

- **10.1 Reaktivitet** Ikke noe mer relevant informasjon tilgjengelig.
- **10.2 Kjemisk stabilitet**
- **Termisk spaltning / vilkår som må unngås:** Ingen spaltning ved formålsriktig bruk.
- **10.3 Risiko for farlige reaksjoner** Det kjennes ingen farlige reaksjoner.
- **10.4 Forhold som skal unngås** Ikke noe mer relevant informasjon tilgjengelig.
- **10.5 Uforenlige materialer** Ikke noe mer relevant informasjon tilgjengelig.
- **10.6 Farlige nedbrytingsprodukter** Ingen farlige spaltningsprodukter kjente.

**Avsnitt 11: Toksikologiske opplysninger**

- **11.1 Opplysninger om toksikologiske virkninger**
- **Akutt giftighet**  
Dødelig ved svelging, hudkontakt eller innånding.

· **Klassifiseringsrelevante LD/LC50-verdier:****64-19-7 eddiksyre**

Oral	LD50	3.310 mg/kg (rat)
Dermal	LD50	1.060 mg/kg (rabbit)

- **Primær irritasjonsvirkning:**
- **Hudetsing/hudirritasjon**  
Gir alvorlige etseskader på hud og øyne.
- **Alvorlig øyeskade/øyeirritasjon**  
Gir alvorlig øyeskade.
- **Sensibilisering ved innånding eller hudkontakt** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.
- **Informasjon om følgende grupper med potensielle virkninger:**
- **CMR-virkninger (kreftfremkallende virkninger, arvestoffskadelige og reproduksjonsskadelige virkninger)**
- **Arvestoffskadelig virkning på kjønnseller** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.
- **Kreftfremkallende egenskap** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.
- **Reproduksjonstoksisitet** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.
- **STOT – enkelteksponering** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.
- **STOT – gjentatt eksponering** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.
- **Aspirasjonsfare** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.

**Avsnitt 12: Økologiske opplysninger**

- **12.1 Giftighet**
- **Akvatisk toksisitet:** Ikke noe mer relevant informasjon tilgjengelig.
- **12.2 Persistens og nedbrytbarhet** Ikke noe mer relevant informasjon tilgjengelig.
- **12.3 Bioakkumuleringsevne** Ikke noe mer relevant informasjon tilgjengelig.
- **12.4 Mobilitet i jord** Ikke noe mer relevant informasjon tilgjengelig.
- **Ytterligere økologiske informasjon:**
- **Generelle informasjon:**  
Vannfareklasse 1 (D) (Selvklassifisering): lett farlig for vann  
Ikke la stoffet komme ufortynnet ned i grunnvannet, i vassdrag eller i klokker.

(fortsatt på side 7)

NO

# Sikkerhetsdatablad

iflg. forordning (EF) nr. 1907/2006, Artikkel 31

Trykddato: 10.03.2022

revidert den: 10.03.2022

**Handelsnavn: ACETATE BUFFER, 0.2M, pH 3.6**




(fortsatt fra side 6)

- Må ikke komme uforynnet eller unøytralisert ned i spillvann eller i avløpsgrøft.
- **12.5 Resultater av PBT- og vPvB-vurdering**
- **PBT:** Ikke brukbar.
- **vPvB:** Ikke brukbar.
- **12.6 Andre skadevirkninger** Ikke noe mer relevant informasjon tilgjengelig.

## Avsnitt 13: Sluttbehandling

- **13.1 Avfallsbehandlingsmetoder**
- **Anbefaling:** Må ikke bortskaffes sammen med husholdningsavfall. Må ikke komme ned i kloakk.
- **Ikke rengjort emballasje:**
- **Anbefaling:** Deponering i henhold til myndighetenes forskrifter.
- **Anbefalt rengjøringsmiddel:** Vann, eventuelt med tilsetning av rengjøringsmidler.

## Avsnitt 14: Transportopplysninger

- |                                                                                     |                                                                                                                                                                                |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| · <b>14.1 FN-nummer</b><br>· <b>ADR, IMDG, IATA</b>                                 | UN2927                                                                                                                                                                         |
| · <b>14.2 FN-forsendelsesnavn</b><br>· <b>ADR</b><br>· <b>IMDG, IATA</b>            | 2927 GIFTIG VÆSKE, ETSENDE, ORGANISK, N.O.S (SODIUM ACETATE TRIHYDRATE, ISEDIKK)<br>TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (SODIUM ACETATE TRIHYDRATE, ACETIC ACID, GLACIAL) |
| · <b>14.3 Transportfareklasse(r)</b><br>· <b>ADR</b>                                |                                                                                                                                                                                |
|  |                                                                                                                                                                                |
| · <b>klasse</b><br>· <b>Fareseddel</b>                                              | 6.1 Giftige stoffer<br>6.1+8+3                                                                                                                                                 |
| · <b>IMDG</b>                                                                       |                                                                                                                                                                                |
|  |                                                                                                                                                                                |
| · <b>Class</b><br>· <b>Label</b>                                                    | 6.1 Giftige stoffer<br>6.1/8/3                                                                                                                                                 |
| · <b>IATA</b>                                                                       |                                                                                                                                                                                |
|  |                                                                                                                                                                                |
| · <b>Class</b><br>· <b>Label</b>                                                    | 6.1 Giftige stoffer<br>6.1 (8, 3)                                                                                                                                              |

(fortsatt på side 8)

NO



**Sikkerhetsdatablad**  
iflg. forordning (EF) nr. 1907/2006, Artikkel 31

Trykkdato: 10.03.2022

revidert den: 10.03.2022

**Handelsnavn: ACETATE BUFFER, 0.2M, pH 3.6**

(fortsatt fra side 7)

· <b>14.4 Emballasjegruppe</b> · <b>ADR, IMDG, IATA</b>	<b>I</b>
· <b>14.5 Miljøfarer</b>	<i>Ikke brukbar.</i>
· <b>14.6 Særlige forsiktighetsregler ved bruk</b> · <b>Farenummer (Kemler-tall):</b> · <b>EMS-nummer:</b> · <b>Segregation groups</b> · <b>Stowage Category</b> · <b>Stowage Code</b>	<i>Advarsel: Giftige stoffer</i> <b>668</b> <i>F-A,S-B</i> <i>Acids</i> <b>B</b> <i>SW2 Clear of living quarters.</i>
· <b>14.7 Bulktransport i henhold til vedlegg II til MARPOL 73/78 og IBC-regelverket</b>	<i>Ikke brukbar.</i>
· <b>Transport/ytterligere informasjoner:</b>	
· <b>ADR</b> · <b>Begrenset mengde (LQ)</b> · <b>Unntatte mengder (EQ)</b>  · <b>Transportkategori</b> · <b>Tunnel restriksjonskode</b>	<b>0</b> <i>Kode: E5</i> <i>Maksimal nettovekt per inneremballasje: 1 ml</i> <i>Maksimal nettovekt per ytteremballasje: 300 ml</i> <b>1</b> <i>C/E</i>
· <b>IMDG</b> · <b>Limited quantities (LQ)</b> · <b>Excepted quantities (EQ)</b>	<b>0</b> <i>Code: E5</i> <i>Maximum net quantity per inner packaging: 1 ml</i> <i>Maximum net quantity per outer packaging: 300 ml</i>
· <b>UN "Model Regulation":</b>	<i>UN 2927 GIFTIG VÆSKE, ETSENDE, ORGANISK, N.O.S (SODIUM ACETATE TRIHYDRATE, ISEDIKK), 6.1 (8+3), I</i>

### Avsnitt 15: Opplysninger om regelverk

· **15.1 Særlige bestemmelser / særskilt lovgivning om sikkerhet, helse og miljø for stoffet eller stoffblandingen**

· **Direktiv 2012/18/EU**· **Spesifiserte farlige stoffer - VEDLEGG I** ingen av innholdsstoffene er listet opp· **Seveso kategori***H1**P5c*· **Mengdegrense (i tonn) for anvendelsen av krav til virkksomheter på lavere nivå 5 t**· **Mengdegrense (i tonn) for anvendelsen av krav til virkksomheter på høyere nivå 20 t**· **Forordning (EF) nr. 1907/2006 VEDLEGG XVII Begrensninger: 3**· **Direktiv 2011/65/EF om begrensning av bruken av visse farlige stoffer i elektrisk og elektronisk utstyr - Vedlegg II***ingen av innholdsstoffene er listet opp*· **Forordning (EF) nr. 273/2004 om utgangsstoffer for narkotika***ingen av innholdsstoffene er listet opp*· **Forordning (EF) nr. 111/2005 om fastsettelse av regler for overvåking av handelen med utgangsstoffer for narkotika mel-lom Fellesskapet og tredjestater***ingen av innholdsstoffene er listet opp*

(fortsatt på side 9)

NO

# Sikkerhetsdatablad

## iflg. forordning (EF) nr. 1907/2006, Artikkel 31

Trykkdato: 10.03.2022

revidert den: 10.03.2022

**Handelsnavn: ACETATE BUFFER, 0.2M, pH 3.6**

(fortsatt fra side 8)

· **15.2 Vurdering av kjemikaliesikkerhet** En kjemisk sikkerhetsvurdering er ikke utført.

### Avsnitt 16: Andre opplysninger

Opplysningene er basert på vårt kjennskap i dag. De utgjør dog ingen forsikring om produkttegenskaper og er ikke grunnlag for noe kontraktmessig rettsforhold.

· **Relevante satser**

- H226 Brannfarlig væske og damp.
- H300 Dødelig ved svelging.
- H310 Dødelig ved hudkontakt.
- H312 Farlig ved hudkontakt.
- H314 Gir alvorlige etseskader på hud og øyne.
- H319 Gir alvorlig øyeirritasjon.
- H330 Dødelig ved innånding.

· **Forkortelser og akronymer:**

- ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- VOC: Volatile Organic Compounds (USA, EU)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Flam. Liq. 3: Brannfarlige væsker – Kategori 3
- Acute Tox. 2: Akutt giftighet – Kategori 2
- Acute Tox. 1: Akutt giftighet – Kategori 1
- Acute Tox. 4: Akutt giftighet – Kategori 4
- Skin Corr. 1A: Hudetsing/hudirritasjon – Kategori 1A
- Skin Corr. 1B: Hudetsing/hudirritasjon – Kategori 1B
- Eye Dam. 1: Alvorlig øyeskade/øyeirritasjon – Kategori 1
- Eye Irrit. 2: Alvorlig øyeskade/øyeirritasjon – Kategori 2

NO

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 10.03.2022

Revisión: 10.03.2022

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

#### · 1.1 Identificador del producto

· **Nombre comercial:** ACETATE BUFFER, 0.2M, pH 3.6

· **Número del artículo:** 11480, 11482

· **UFI:** ARY0-COV5-P00R-N87G

#### · 1.2 Usos pertinentes identificados de la sustancia o de la mezcla y usos desaconsejados

No existen más datos relevantes disponibles.

· **Utilización del producto / de la elaboración** Sustancias químicas de laboratorio

#### · 1.3 Datos del proveedor de la ficha de datos de seguridad

##### · **Fabricante/distribuidor:**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

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

email: [info@emsdiasum.com](mailto:info@emsdiasum.com)

[www.emsdiasum.com](http://www.emsdiasum.com)

##### Aname

C/ Perez Galdos no. 2

28693 Quijorna

Madrid, Spain

Tel: +34.91.816.89.50

Fax: +34.91.816.85.94

email: [ventas@aname.es](mailto:ventas@aname.es)

· **Área de información:** Product safety department

#### · 1.4 Teléfono de emergencia:

ChemTrec 1-800-424-9300 Contract CCN7661

1-703-527-3887

### SECCIÓN 2: Identificación de los peligros

#### · 2.1 Clasificación de la sustancia o de la mezcla

· **Clasificación con arreglo al Reglamento (CE) n° 1272/2008**



GHS02 llama

Flam. Liq. 3 H226 Líquidos y vapores inflamables.



GHS06 calavera y tibias cruzadas

Acute Tox. 2 H300 Mortal en caso de ingestión.

Acute Tox. 1 H310 Mortal en contacto con la piel.

Acute Tox. 2 H330 Mortal en caso de inhalación.



GHS05 corrosión

Skin Corr. 1B H314 Provoca quemaduras graves en la piel y lesiones oculares graves.

Eye Dam. 1 H318 Provoca lesiones oculares graves.

( se continua en página 2 )

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

fecha de impresión 10.03.2022

Revisión: 10.03.2022

**Nombre comercial: ACETATE BUFFER, 0.2M, pH 3.6**

( se continua en página 1 )

- **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**



GHS02 GHS05 GHS06

- **Palabra de advertencia Peligro**
- **Componentes peligrosos a indicar en el etiquetaje:**  
SODIUM ACETATE TRIHYDRATE  
ácido acético
- **Indicaciones de peligro**  
H226 Líquidos y vapores inflamables.  
H300+H310+H330 Mortal en caso de ingestión, contacto con la piel o inhalación.  
H314 Provoca quemaduras graves en la piel y lesiones oculares graves.
- **Consejos de prudencia**  
P301+P310 EN CASO DE INGESTIÓN: Llamar inmediatamente a un CENTRO DE TOXICOLOGÍA/ médico.  
P303+P361+P353 EN CASO DE CONTACTO CON LA PIEL (o el pelo): Quitar inmediatamente toda la ropa contaminada. Enjuagar la piel con agua [o ducharse].  
P305+P351+P338 EN CASO DE CONTACTO CON LOS OJOS: Enjuagar con agua cuidadosamente durante varios minutos. Quitar las lentes de contacto cuando estén presentes y pueda hacerse con facilidad. Proseguir con el lavado.  
P320 Se necesita urgentemente un tratamiento específico (ver en esta etiqueta).  
P361+P364 Quitar inmediatamente todas las prendas contaminadas y lavarlas antes de volver a usarlas.  
P405 Guardar bajo llave.  
P501 Eliminar el contenido o el recipiente conforme a la reglamentación local/regional/nacional/ internacional.
- **2.3 Otros peligros**
- **Resultados de la valoración PBT y mPmB**
- **PBT:** No aplicable.
- **mPmB:** No aplicable.

## SECCIÓN 3: Composición/información sobre los componentes

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

· **Componentes peligrosos:**

CAS: 64-19-7 EINECS: 200-580-7	ácido acético ⚠ Flam. Liq. 3, H226; ⚠ Skin Corr. 1A, H314; ⚠ Acute Tox. 4, H312	>25-≤50%
CAS: 6131-90-4	SODIUM ACETATE TRIHYDRATE ⚠ Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 2, H330; ⚠ Eye Irrit. 2, H319	>25-≤50%

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

( se continua en página 3 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 10.03.2022

Revisión: 10.03.2022

Nombre comercial: ACETATE BUFFER, 0.2M, pH 3.6

( se continua en página 2 )

### SECCIÓN 4: Primeros auxilios

#### · 4.1 Descripción de los primeros auxilios

##### · Instrucciones generales:

Quitarse de inmediato toda prenda contaminada con el producto.

Antes de quitarse la protección respiratoria, quítese la ropa contaminada.

En caso de respiración irregular o apnea (paro respiratorio), hágase la respiración artificial.

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

Suministrar aire fresco u oxígeno; solicitar ayuda médica.

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

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

##### · En caso de con los ojos:

Limpia los ojos abiertos durante varios minutos con agua corriente y consultar un médico.

##### · En caso de ingestión:

No provocar el vómito y solicitar asistencia médica inmediata.

Beber mucha agua a respirar aire fresco. Solicitar asistencia médica inmediatamente.

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

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

### SECCIÓN 5: Medidas de lucha contra incendios

#### · 5.1 Medios de extinción

##### · Sustancias extintoras apropiadas:

CO<sub>2</sub>, polvo extintor o chorro de agua rociada. Combatir incendios mayores con chorro de agua rociada o espuma resistente al alcohol.

#### · 5.2 Peligros específicos derivados de la sustancia o la mezcla No existen más datos relevantes disponibles.

#### · 5.3 Recomendaciones para el personal de lucha contra incendios

##### · Equipo especial de protección: Colocarse la protección respiratoria.

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

#### · 6.1 Precauciones personales, equipo de protección y procedimientos de emergencia

Llevar puesto equipo de protección. Mantener alejadas las personas sin protección.

#### · 6.2 Precauciones relativas al medio ambiente:

Diluir con mucha agua.

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).

Utilizar un neutralizador.

Desechar el material contaminado como vertido según ítem 13.

Asegurar suficiente ventilación.

#### · 6.4 Referencia a otras secciones

Ver capítulo 7 para mayor información sobre una manipulación segura.

Ver capítulo 8 para mayor información sobre el equipo personal de protección.

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

### SECCIÓN 7: Manipulación y almacenamiento

#### · 7.1 Precauciones para una manipulación segura

Asegurar suficiente ventilación /aspiración en el puesto de trabajo.

( se continua en página 4 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 10.03.2022

Revisión: 10.03.2022

**Nombre comercial: ACETATE BUFFER, 0.2M, pH 3.6**

( se continua en página 3 )

*Abrir y manejar el recipiente con cuidado.*

*Evitar la formación de aerosoles.*

**· Prevención de incendios y explosiones:**

*Mantener alejadas las fuentes de encendido. No fumar.*

*Proteger del calor.*

*Tomar medidas contra las cargas electrostáticas.*

*Tener preparados los aparatos respiratorios.*

**· 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.*

*Proteger del calor y de la luz directa del sol.*

**· 7.3 Usos específicos finales** *No existen más datos relevantes disponibles.*

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

**· 8.1 Parámetros de control**

**· Instrucciones adicionales para el acondicionamiento de instalaciones técnicas:**

*Sin datos adicionales, ver punto 7.*

**· Componentes con valores límite admisibles que deben controlarse en el puesto de trabajo:**

**64-19-7 ácido acético**

LEP Valor de corta duración: 50 mg/m<sup>3</sup>, 20 ppm

Valor de larga duración: 25 mg/m<sup>3</sup>, 10 ppm

VLI

**· 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.*

*Guardar la ropa protectora por separado.*

*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:**



Guantes de protección

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

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

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

**· Material de los guantes**

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

( se continua en página 5 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 10.03.2022

Revisión: 10.03.2022

Nombre comercial: ACETATE BUFFER, 0.2M, pH 3.6

( se continua en página 4 )

controlados antes de su utilización.

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

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

- **Protección de ojos:**



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:** Claro

- **Olor:** Penetrante

- **Umbral olfativo:** No determinado.

- **valor pH a 20 °C:** 5,2

- **Cambio de estado**

**Punto de fusión/punto de congelación:** Indeterminado.

**Punto inicial de ebullición e intervalo de ebullición:** 118 °C

- **Punto de inflamación:** 43 °C

- **Inflamabilidad (sólido, gas):** No aplicable.

- **Temperatura de ignición:** 426 °C

- **Temperatura de descomposición:** No determinado.

- **Temperatura de auto-inflamación:** El producto no es autoinflamable.

- **Propiedades explosivas:** El producto no es explosivo; sin embargo, pueden formarse mezclas explosivas de vapor / aire.

- **Límites de explosión:**

**Inferior:** 4 Vol %

**Superior:** 19 Vol %

- **Presión de vapor a 20 °C:** 11,4 hPa

- **Densidad:** Indeterminado.

- **Densidad relativa** No determinado.

- **Densidad de vapor** No determinado.

- **Tasa de evaporación:** No determinado.

- **Solubilidad en / miscibilidad con agua:** Completamente mezclable.

- **Coefficiente de reparto: n-octanol/agua:** No determinado.

- **Viscosidad:**

**Dinámica:** No determinado.

**Cinemática:** No determinado.

( se continua en página 6 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 10.03.2022

Revisión: 10.03.2022

Nombre comercial: ACETATE BUFFER, 0.2M, pH 3.6

( se continua en página 5 )

<b>· Concentración del disolvente:</b>	
<b>Disolventes orgánicos:</b>	50,0 %
<b>Agua:</b>	8,0 %
<b>VOC (CE)</b>	50,00 %

<b>Contenido de cuerpos sólidos:</b>	42,0 %
--------------------------------------	--------

<b>· 9.2 Otros datos</b>	No existen más datos relevantes disponibles.
--------------------------	----------------------------------------------

### SECCIÓN 10: Estabilidad y reactividad

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

### SECCIÓN 11: Información toxicológica

- **11.1 Información sobre los efectos toxicológicos**
- **Toxicidad aguda**  
Mortal en caso de ingestión, contacto con la piel o inhalación.

· **Valores LD/LC50 (dosis letal /dosis letal = 50%) relevantes para la clasificación:**

64-19-7 ácido acético

Oral	LD50	3.310 mg/kg (rat)
Dermal	LD50	1.060 mg/kg (rabbit)

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

ES

( se continua en página 7 )



# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 10.03.2022

Revisión: 10.03.2022

Nombre comercial: ACETATE BUFFER, 0.2M, pH 3.6

( se continua en página 6 )


### 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 (autoclasiicación): 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.  
 En estado no diluido o no neutralizado, no verter en el alcantarillado o en otros sistemas de desagüe.
- **12.5 Resultados de la valoración PBT y mPmB**
- **PBT:** No aplicable.
- **mPmB:** No aplicable.
- **12.6 Otros efectos adversos** No existen más datos relevantes disponibles.

### SECCIÓN 13: Consideraciones relativas a la eliminación

- **13.1 Métodos para el tratamiento de residuos**
- **Recomendación:** No debe desecharse con la basura doméstica. No debe llegar al alcantarillado.
- **Embalajes sin limpiar:**
- **Recomendación:** Eliminar conforme a las disposiciones oficiales.
- **Producto de limpieza recomendado:** Agua, eventualmente añadiendo productos de limpieza.

### SECCIÓN 14: Información relativa al transporte

- **14.1 Número ONU**
- **ADR, IMDG, IATA** UN2927
- **14.2 Designación oficial de transporte de las Naciones Unidas**
- **ADR** 2927 LÍQUIDO TÓXICO, CORROSIVO, ORGÁNICO, N.E.P. (SODIUM ACETATE TRIHYDRATE, ÁCIDO ACÉTICO GLACIAL)
- **IMDG, IATA** TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (SODIUM ACETATE TRIHYDRATE, ACETIC ACID, GLACIAL)
- **14.3 Clase(s) de peligro para el transporte**
- **ADR**
- 
- **Clase** 6.1 Materias tóxicas

( se continua en página 8 )

# Ficha de datos de seguridad



según 1907/2006/CE, Artículo 31

fecha de impresión 10.03.2022

Revisión: 10.03.2022

Nombre comercial: ACETATE BUFFER, 0.2M, pH 3.6

( se continua en página 7 )

· <b>Etiqueta</b>	6.1+8+3
· <b>IMDG</b>	
	
· <b>Class</b>	6.1 Materias tóxicas
· <b>Label</b>	6.1/8/3
· <b>IATA</b>	
	
· <b>Class</b>	6.1 Materias tóxicas
· <b>Label</b>	6.1 (8, 3)
· <b>14.4 Grupo de embalaje</b>	
· <b>ADR, IMDG, IATA</b>	I
· <b>14.5 Peligros para el medio ambiente:</b>	No aplicable.
· <b>14.6 Precauciones particulares para los usuarios</b>	Atención: Materias tóxicas
· <b>Número de identificación de peligro (Número Kemler):</b>	668
· <b>Número EMS:</b>	F-A,S-B
· <b>Segregation groups</b>	Acids
· <b>Stowage Category</b>	B
· <b>Stowage Code</b>	SW2 Clear of living quarters.
· <b>14.7 Transporte a granel con arreglo al anexo II del Convenio MARPOL y el Código IBC</b>	No aplicable.
· <b>Transporte/datos adicionales:</b>	
· <b>ADR</b>	
· <b>Cantidades limitadas (LQ)</b>	0
· <b>Cantidades exceptuadas (EQ)</b>	Código: E5 Cantidad neta máxima por envase interior: 1 ml Cantidad neta máxima por embalaje exterior: 300 ml
· <b>Categoría de transporte</b>	1
· <b>Código de restricción del túnel</b>	C/E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	0
· <b>Excepted quantities (EQ)</b>	Code: E5 Maximum net quantity per inner packaging: 1 ml Maximum net quantity per outer packaging: 300 ml
· <b>"Reglamentación Modelo" de la UNECE:</b>	UN 2927 LÍQUIDO TÓXICO, CORROSIVO, ORGÁNICO, N.E.P. (SODIUM ACETATE TRIHYDRATE, ÁCIDO ACÉTICO GLACIAL), 6.1 (8+3), I

ES

( se continua en página 9 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 10.03.2022

Revisión: 10.03.2022

Nombre comercial: ACETATE BUFFER, 0.2M, pH 3.6

( se continua en página 8 )

### SECCIÓN 15: Información reglamentaria

- **15.1 Reglamentación y legislación en materia de seguridad, salud y medio ambiente específicas para la sustancia o la mezcla**
- **Directiva 2012/18/UE**
- **Sustancias peligrosas nominadas - ANEXO I** ninguno de los componentes está incluido en una lista
- **Categoría Seveso**  
H1 TOXICIDAD AGUDA  
P5c LÍQUIDOS INFLAMABLES
- **Cantidad umbral (toneladas) a efectos de aplicación de los requisitos de nivel inferior 5 t**
- **Cantidad umbral (toneladas) a efectos de aplicación de los requisitos de nivel superior 20 t**
- **REGLAMENTO (CE) n° 1907/2006 ANEXO XVII Restricciones: 3**
- **Directiva 2011/65/UE sobre restricciones a la utilización de determinadas sustancias peligrosas en aparatos eléctricos y electrónicos - Anexo II**  
ninguno de los componentes está incluido en una lista
- **REGLAMENTO (UE) 2019/1148**
- **Anexo I - PRECURSORES DE EXPLOSIVOS RESTRINGIDOS (Valor límite superior a efectos de la concesión de licencias con arreglo al artículo 5, apartado 3)**  
ninguno de los componentes está incluido en una lista
- **Anexo II - PRECURSORES DE EXPLOSIVOS NOTIFICABLES**  
ninguno de los componentes está incluido en una lista
- **Reglamento (CE) no 273/2004 sobre precursores de drogas**  
ninguno de los componentes está incluido en una lista
- **Reglamento (CE) N o 111/2005 por el que establecen normas para la vigilancia del comercio de precursores de drogas entre la Comunidad y terceros países**  
ninguno de los componentes está incluido en una lista
- **15.2 Evaluación de la seguridad química: Una evaluación de la seguridad química no se ha llevado a cabo.**

### SECCIÓN 16: Otra información

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

#### · Frases relevantes

- H226 Líquidos y vapores inflamables.
- H300 Mortal en caso de ingestión.
- H310 Mortal en contacto con la piel.
- H312 Nocivo en contacto con la piel.
- H314 Provoca quemaduras graves en la piel y lesiones oculares graves.
- H319 Provoca irritación ocular grave.
- H330 Mortal en caso de inhalación.

#### · Abreviaturas y acrónimos:

- ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- VOC: Volatile Organic Compounds (USA, EU)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent

( se continua en página 10 )

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

fecha de impresión 10.03.2022

Revisión: 10.03.2022

**Nombre comercial: ACETATE BUFFER, 0.2M, pH 3.6**

( se continua en página 9 )

*PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Flam. Liq. 3: Líquidos inflamables – Categoría 3**Acute Tox. 2: Toxicidad aguda – Categoría 2**Acute Tox. 1: Toxicidad aguda – Categoría 1**Acute Tox. 4: Toxicidad aguda – Categoría 4**Skin Corr. 1A: Corrosión o irritación cutáneas – Categoría 1A**Skin Corr. 1B: Corrosión o irritación cutáneas – Categoría 1B**Eye Dam. 1: Lesiones oculares graves o irritación ocular – Categoría 1**Eye Irrit. 2: Lesiones oculares graves o irritación ocular – Categoría 2*

ES