

SAFETY DATA SHEET

Acetate Buffer, 0.2M, pH5.6

Version 2 · issued 15 September 2026

1. IDENTIFICATION**Product Identifiers**

Product Name	Acetate Buffer, 0.2M, pH5.6
Other Names	Not available.
Product Number(s)	11482-56, EMS11482-56
CAS Number	Not available.

Recommended use of the chemical and restriction on use

Laboratory chemicals. Used in electron microscopy/sample preparation, particularly where maintaining a controlled acidic environment is important. It can be used during preparation steps involving fixation, washing, or processing of biological specimens, depending on the specific protocol.

Company Details

ProSciTech Pty Ltd
 11 Carlton Street
 KIRWAN QLD 4817
 Australia
 (07) 4773 9444
 pst@proscitech.com
 proscitech.com.au

Emergency Contact Details

ProSciTech Pty Ltd
 11 Carlton Street
 KIRWAN QLD 4817
 Australia
 (07) 4773 9444
 pst@proscitech.com
 proscitech.com.au

2. HAZARDS IDENTIFICATION**Classification of the substance or mixture**

GHS02 Flame
 Flammable liquids 3 H226 Flammable liquid and vapour.
 GHS06 Skull and crossbones.
 Acute Toxicity - Oral 2 H300 fatal if swallowed.
 Acute Toxicity - Dermal 2 H310 Fatal in contact with skin.
 Acute Toxicity - Inhalation 2 H330 Fatal if inhaled.

Label Elements**Flammable • Acute toxicity**

Signal Words	Danger
Hazard Statement(s)	Hazard-determining components of labelling: SODIUM ACATATE TRIHYDRATE Flammable liquid and vapour. Fatal if swallowed, in contact with skin or if inhaled.
Precautionary Statement(s)	Keep away from heat/sparks/open flame/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 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.

Primary route(s) of entry

Skin Fatal in contact with skin (H310): Avoid skin contact. Wear chemical-resistant gloves and protective clothing. Wash thoroughly after handling.

Respiratory Fatal if inhaled (H330): Do not breathe vapour/mist. Use only in a well-ventilated area/fume hood. Respiratory protection may be required where ventilation is inadequate.

Ingestion Fatal if swallowed (H300): Do not eat, drink or smoke while handling. Wash hands thoroughly after handling. Keep away from food/drink.

Eyes: Causes severe eye burns/serious eye damage (H314/H318 in the related EMS acetate-buffer SDS) Avoid eye contact. Wear chemical splash goggles and, where appropriate, face protection.

Human Health

Inhalation	Remove person to fresh air and keep comfortable for breathing.
Ingestion	If swallowed: Immediately call a poison center/doctor. Rinse mouth.
Eyes	Not available.
Skin	(or hair) Take off immediately all contaminated clothing. Rinse skin with water/shower. Take off immediately all contaminated clothing and wash it before reuse.

Environment

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.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Name	CAS No.	Content (w/w)	Classification
SODIUM ACETATE TRIHYDRATE	6131-90-4	1-5%	Mixtures

4. FIRST AID MEASURES

Ingestion	Do not induce vomiting; immediately call for medical help.
Inhalation	Supply fresh air or oxygen; call for a doctor. In case of unconsciousness place patient stably in side position for transportation.
Skin Contact	Immediately wash with water and soap and rinse thoroughly.
Eye Contact	Rinse opened eye for several minutes under running water. Then consult a doctor.
Other 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.

5. FIREFIGHTING MEASURES**Suitable extinguishing equipment**

Fire	CO ₂ , sand, extinguishing powder. Do not use water.
Large Fire	Fight larger fires with water spray or alcohol resistant foam.
HAZCHEM	For safety reasons unsuitable extinguishing agents: Water with full jet.

Special protective equipment and precautions for fire fighters

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 materials for containment and clean up

Absorb with liquid-binding material (sand diatomite, acid binders, universal binders, sawdust).
 Dispose contaminated material as waste according to item 13.
 Ensure adequate ventilation.
 Do not flush with water or aqueous cleansing agents.
 · PAC-1:
 6131-90-4 SODIUM ACETATE TRIHYDRATE 11 mg/m³
 64-19-7 Acetic Acid Glacial 5 ppm
 · PAC-2:
 6131-90-4 SODIUM ACETATE TRIHYDRATE 120 mg/m³
 64-19-7 Acetic Acid Glacial 35 ppm
 · PAC-3:
 6131-90-4 SODIUM ACETATE TRIHYDRATE 690 mg/m³
 64-19-7 Acetic Acid Glacial 250 ppm

7. HANDLING AND STORAGE

Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.
 Open and handle receptacle with care.
 Prevent formation of aerosols.
 Keep ignition sources away - Do not smoke.
 Protect from heat.
 Protect against electrostatic charges.
 Keep respiratory protective device available.

Conditions for safe storage

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

Exposure Standards

Engineering controls

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

Personal protective equipment

Eye and face protection

Tightly sealed goggles.

Skin protection

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.

Body protection

Wear protective clothing.

Respiratory protection 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

General information

Appearance	Clear liquid
Odour	Pungent
pH	5.6
Vapour Pressure	23hPa (17.3 mm Hg)
Density	at 20 °C (68 °F): 1 g/cm ³ (8.345 lbs/gal)
Boiling Point	100 °C (212 °F)
Melting Point	0 °C (32 °F)
Solubility	Fully miscible
Specific Gravity of Density	Not available.
Flash Point	43 °C (109.4 °F)
Flammable (Explosive) Limits	Not determined.
Ignition Temperature	Product is not selfigniting.
Formula	CH ₃ COOH ? H ⁺ + CH ₃ COO ⁻

10. STABILITY AND REACTIVITY

Reactivity	No further relevant information available.
Chemical stability	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.

11. TOXICOLOGICAL INFORMATION

Acute effects	Not available.
Eye contact	No irritating effect.
Skin contact	No irritating effect.
Ingestion	Not available.
Inhalation	No sensitizing effects known.
Chronic effects	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
Toxicity and irritation	Very toxic Danger through skin absorption

12. ECOLOGICAL INFORMATION

Ecotoxicity	No further relevant information available.
Persistence and degradability	No further relevant information available.
Bioaccumulative potential	No further relevant information available.
Other adverse effects	Water hazard class 1: slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13. DISPOSAL CONSIDERATIONS

General information

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

ADG label required	
HAZCHEM	For safety reasons unsuitable extinguishing agents: Water with full jet.
UN Number	Void
Proper shipping name	Void
Transport hazard class	Void
Packing group	Void
Environmental hazard	Not applicable.
Special precautions for users	Not applicable.
Additional information	Not available.

15. REGULATORY INFORMATION

Poisons Schedule Number	Not available.
Other Information	Sara · Section 355 (extremely hazardous substances): None of the ingredients is listed. · Section 313 (Specific toxic chemical listings): None of the ingredients is listed. · TSCA (Toxic Substances Control Act): 7732-18-5 Deionized Water, Reagent Grade A.C.S. ACTIVE 64-19-7 Acetic Acid Glacial 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. A Chemical Safety Assessment has not been carried out.

16. OTHER INFORMATION

SDS preparation date	15 September 2026
Comments	Abbreviations and acronyms: ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit Flammable liquids 3: Flammable liquids – Category 3 Acute toxicity - oral 2: Acute toxicity – Category 2 Acute toxicity - inhalation 1: Acute toxicity – Category 1

References

Electrom Microscopy Science SDS "ACETATE BUFFER, 0.2M, pH 5.6." 30/01/2025
https://www.emsdiasum.com/docs/technical/msds/11482-56.pdf?utm_source=chatgpt.com

This Safety Data Sheet (SDS) has been prepared in compliance with the Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice February 2016. It is the user's responsibility to determine the suitability of this information for adoption of necessary safety precautions. The information published in this SDS has been compiled from the publications listed in Section 16: to the best of our ability and knowledge these publications are considered accurate. We reserve the right to revise Safety Data Sheets as new information becomes available. Copies may be made for non-profit use.

... End of SDS ...