

SAFETY DATA SHEET

Acetate Buffer, 0.2M, pH4.2

Version 3 · issued 11 September 2026

1. IDENTIFICATION**Product Identifiers****Product Name** Acetate Buffer, 0.2M, pH4.2**Other Names** Not available.**Product Number(s)** 11482-42, EMS11482-42**CAS Number** Not available.**Recommended use of the chemical and restriction on use**

Laboratory chemicals.

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**

HS02 Flame

Flammable liquids 3 H226 Flammable liquid and vapour.

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 1 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**Flammable • Corrosive • Acute toxicity****Signal Words** None

Hazard Statement(s) Hazard-determining components of labelling:
Acetic Acid Glacial
SODIUM ACETATE TRIHYDRATE
Flammable liquid and vapour.
Fatal if swallowed, in contact with skin or if inhaled.
Causes severe skin burns and eye damage.

Precautionary Statement(s)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 Ground / bond container and receiving equipment.
 Use explosion-proof [electrical/ventilating/lighting] equipment.
 Use non-sparking tools.
 Take action to prevent 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/hearing protection.
 [In case of inadequate ventilation] wear respiratory protection.

Primary route(s) of entry

inhalation, ingestion, and skin/eye contact.

Human Health**Inhalation**

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

Ingestion

Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting.

Eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

Skin

(or hair) Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. Take off contaminated clothing and wash it before reuse.

Environment

In case of fire: Use for extinction: CO₂, powder or water spray.

Store in a well-ventilated place. Keep cool.

Store locked up.

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

Hazards not otherwise classified

There are no adverse physical or health effects known that are not covered by the hazard classes of the Hazard Communications Standard.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Name	CAS No.	Content (w/w)	Classification
Acetic Acid Glacial	64-19-7	30-60%	Mixture
SODIUM ACETATE TRIHYDRATE	6131-90-4	30-60%	Mixture

4. FIRST AID MEASURES**Ingestion**

Drink plenty of water and provide fresh air. Call for a doctor immediately.

Inhalation

Supply fresh air or oxygen; call for 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**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

HAZCHEM

No further relevant information available.

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). Use neutralising agent. Dispose contaminated material as waste according to item 13. Ensure adequate ventilation. Do not flush with water or aqueous cleansing agents. Protective Action Criteria for Chemicals PAC-1: 64-19-7 Acetic Acid Glacial 5 ppm 6131-90-4 SODIUM ACETATE TRIHYDRATE 11 mg/m ³ PAC-2: 64-19-7 Acetic Acid Glacial 35 ppm 6131-90-4 SODIUM ACETATE TRIHYDRATE 120 mg/m ³ PAC-3: 64-19-7 Acetic Acid Glacial 250 ppm 6131-90-4 SODIUM ACETATE TRIHYDRATE 690 mg/m ³

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. 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	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

Material	TWA ppm	TWA mg/m ³	STEL ppm	STEL mg/m ³
Acetic Acid Glacial	10ppm	25mg/m ³	15ppm	37mg/m ³

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. Avoid contact with the eyes. Avoid contact with the eyes and skin.
-----------------------------	---

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

Not available.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES**General information****Appearance**

Clear liquid

Odour

Pungent

pH

4.2

Vapour Pressure

11.4hPa

Density

Not determined

Boiling Point

118°C

Melting Point

Undetermined

Solubility

Not miscible or difficult to mix.

Specific Gravity of Density

Not determined.

Flash Point

43°C

Flammable (Explosive) Limits

Lower: 4 Vol%

Upper: 19 Vol%

Ignition Temperature

426°C

Formula

Not available.

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**

64-19-7 Acetic Acid Glacial

Oral LD50 3310 mg/kg (rat)

Dermal LD50 1060 mg/kg (rabbit)

Eye contact

Strong caustic effect.

Strong irritant with the danger of severe eye injury.

Skin contact

Strong caustic effect on skin and mucous membranes.

Ingestion

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

Inhalation

No sensitising effects known.

Toxicity and irritation

Harmful
Corrosive
Irritant
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.
Interactive effects: No interactive effects between components are known.
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

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

13. DISPOSAL CONSIDERATIONS**General information**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

ADG label required
Class 8 Corrosive
HAZCHEM No further relevant information available.
UN Number UN2790
Proper shipping name 2790ACETIC ACID SOLUTION mixture
Transport hazard class Class 8 Corrosive substances.
Packing group II
Environmental hazard Not applicable.
Special precautions for users Warning: Corrosive substances.
Hazard identification number (Kemler code): 80
EMS number: F-A,S-B
Segregation groups: Acids
Stowage Category: A
Additional information Limited quantities (LQ) 1L
Excepted quantities (EQ) Code: E2
Maximum net quantity per inner packaging: 30mL
Maximum net quantity per outer packaging: 500mL
Transport category: 2
Tunnel restriction code: E

15. REGULATORY INFORMATION

Poisons Schedule Number 64-19-7 Acetic Acid Glacial S2, S5, S6
Other Information A Chemical Safety Assessment has not been carried out.

16. OTHER INFORMATION

SDS preparation date 11 September 2026

Comments

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.

- Interactive effects No interactive effects between components are known.

- 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

References

Electrom Microscopy Science SDS "ACETATE BUFFER, 0.2M, pH 4.2". 30.01.2025
<https://www.emsdiasum.com/docs/technical/msds/11482-42.pdf>

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 ...