

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

#### 1.1. Product identifier

Product form : Mixture  
Product name : Acetate Buffer for Chlorine, pH 4.0  
Product code : LC10030

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : For laboratory and manufacturing use only.

#### 1.3. Details of the supplier of the safety data sheet

LabChem Inc  
Jackson's Pointe Commerce Park Building 1000, 1010 Jackson's Pointe Court  
Zelienople, PA 16063 - USA  
T 412-826-5230 - F 724-473-0647  
[info@labchem.com](mailto:info@labchem.com) - [www.labchem.com](http://www.labchem.com)

#### 1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 or 011-703-527-3887

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Skin Irrit. 2 H315  
Eye Irrit. 2A H319

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) : Warning  
Hazard statements (GHS-US) : H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
Precautionary statements (GHS-US) : P264 - Wash exposed skin thoroughly after handling  
P280 - Wear protective gloves, eye protection  
P302+P352 - IF ON SKIN: Wash with plenty of soap and water  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P362+P364 - Take off contaminated clothing and wash it before reuse  
P332+P313 - If skin irritation occurs: Get medical advice/attention  
P337+P313 - If eye irritation persists: Get medical advice/attention

#### 2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

#### 2.4. Unknown acute toxicity (GHS-US)

No data available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

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Name	Product identifier	%	GHS-US classification
Acetic Acid	(CAS No) 64-19-7	45.5	Flam. Liq. 3, H226 Skin Corr. 1B, H314 Eye Dam. 1, H318
Water	(CAS No) 7732-18-5	32.5	Not classified
Sodium Acetate, Trihydrate	(CAS No) 6131-90-4	22	Not classified

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Assure fresh air breathing. Allow the victim to rest.
- First-aid measures after skin contact : Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

#### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after skin contact : Causes skin irritation.
- Symptoms/injuries after eye contact : Causes serious eye irritation.

#### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

No additional information available

#### 5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

- Protective equipment : Safety glasses. Gloves.
- Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.
- Hygiene measures : Wash exposed skin thoroughly after handling.

#### 7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep container closed when not in use.
- Incompatible products : Strong oxidizers. Strong bases. Strong acids.
- Incompatible materials : Sources of ignition. Direct sunlight.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Acetic Acid (64-19-7)		
USA ACGIH	ACGIH TWA (ppm)	10 ppm
USA ACGIH	ACGIH STEL (ppm)	10 ppm
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	25 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	10 ppm

#### 8.2. Exposure controls

- Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide adequate general and local exhaust ventilation.
- Personal protective equipment : Avoid all unnecessary exposure.
- Hand protection : Wear protective gloves.
- Eye protection : Chemical goggles or safety glasses.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : Wear appropriate mask.
- Other information : Do not eat, drink or smoke during use.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Colour : Colourless
- Odour : slight; Vinegar odour
- Odour threshold : No data available
- pH : 4
- Relative evaporation rate (butylacetate=1) : No data available
- Melting point : No data available
- Freezing point : No data available
- Boiling point : No data available
- Flash point : No data available
- Auto-ignition temperature : No data available
- Decomposition temperature : No data available
- Flammability (solid, gas) : No data available
- Vapour pressure : No data available
- Relative vapour density at 20 °C : No data available
- Relative density : No data available
- Solubility : Soluble in water.  
Water: Solubility in water of component(s) of the mixture :  
• Acetic Acid: Complete • Sodium Acetate, Trihydrate: 76.2 g/100ml
- Log Pow : No data available
- Log Kow : No data available

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Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

Strong oxidizers. Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

Water (7732-18-5)	
LD50 oral rat	≥ 90000 mg/kg
ATE US (oral)	90000 mg/kg bodyweight

Skin corrosion/irritation : Causes skin irritation.  
pH: 4

Serious eye damage/irritation : Causes serious eye irritation.  
pH: 4

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/injuries after skin contact : Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious eye irritation.

## SECTION 12: Ecological information

### 12.1. Toxicity

Acetic Acid (64-19-7)	
LC50 fishes 1	75 mg/l (96 h; Lepomis macrochirus)
EC50 Daphnia 1	47 mg/l (24 h; Daphnia magna; Not neutralized)

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<b>Acetic Acid (64-19-7)</b>	
EC50 other aquatic organisms 1	> 5000 mg/l (5 h; Activated sludge)
LC50 fish 2	94 mg/l (96 h; <i>Oryzias latipes</i> )
EC50 Daphnia 2	95 mg/l (24 h; <i>Daphnia magna</i> ; Static system)
TLM fish 1	100 ppm (96 h; <i>Carassius auratus</i> )
Threshold limit algae 1	90 mg/l (192 h; <i>Microcystis aeruginosa</i> ; Neutralized)
Threshold limit algae 2	4000 mg/l (192 h; <i>Scenedesmus quadricauda</i> ; Neutralized)

### 12.2. Persistence and degradability

<b>Acetate Buffer for Chlorine, pH 4.0</b>	
Persistence and degradability	Not established.

<b>Acetic Acid (64-19-7)</b>	
Persistence and degradability	Readily biodegradable in water. Inherently biodegradable. Biodegradable in the soil.
Biochemical oxygen demand (BOD)	0.6 - 0.74 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.03 g O <sub>2</sub> /g substance
ThOD	1.07 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.56 - 0.69 % ThOD

<b>Sodium Acetate, Trihydrate (6131-90-4)</b>	
Persistence and degradability	Not established.

<b>Water (7732-18-5)</b>	
Persistence and degradability	Not established.

### 12.3. Bioaccumulative potential

<b>Acetate Buffer for Chlorine, pH 4.0</b>	
Bioaccumulative potential	Not established.

<b>Acetic Acid (64-19-7)</b>	
Log Pow	-0.31 (Experimental value)
Bioaccumulative potential	Bioaccumulation: not applicable.

<b>Sodium Acetate, Trihydrate (6131-90-4)</b>	
Bioaccumulative potential	Not established.

<b>Water (7732-18-5)</b>	
Bioaccumulative potential	Not established.

### 12.4. Mobility in soil

<b>Acetic Acid (64-19-7)</b>	
Surface tension	0.028 N/m (20 °C)

### 12.5. Other adverse effects

Effect on ozone layer	: No additional information available
Effect on the global warming	: No known ecological damage caused by this product.
Other information	: Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	: Avoid release to the environment.

## SECTION 14: Transport information

In accordance with DOT  
Not regulated for transport

### Additional information

Other information	: No supplementary information available.
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### ADR

Transport document description :

### Transport by sea

No additional information available

### Air transport

No additional information available

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### Acetic Acid (64-19-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Not listed on the United States SARA Section 313

RQ (Reportable quantity, section 304 of EPA's List of Lists) :	5000 lb
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#### Sodium Acetate, Trihydrate (6131-90-4)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2. International regulations

#### CANADA

#### Acetate Buffer for Chlorine, pH 4.0

WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects
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#### Acetic Acid (64-19-7)

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification	Class B Division 3 - Combustible Liquid Class E - Corrosive Material
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#### Sodium Acetate, Trihydrate (6131-90-4)

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
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#### Water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
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### EU-Regulations

No additional information available

### Classification according to Regulation (EC) No. 1272/2008 [CLP]

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

Not classified

### 15.2.2. National regulations

#### Acetic Acid (64-19-7)

Listed on the Canadian IDL (Ingredient Disclosure List)

#### Sodium Acetate, Trihydrate (6131-90-4)

Not listed on the Canadian IDL (Ingredient Disclosure List)

### 15.3. US State regulations

## SECTION 16: Other information

Other information :  
: None.

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Full text of H-phrases: see section 16:

Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Flam. Liq. 3	Flammable liquids, Category 3
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H226	Flammable liquid and vapour
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation

NFPA health hazard

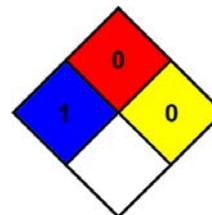
: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard

: 0 - Materials that will not burn.

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



### HMIS III Rating

Health : 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability : 0 Minimal Hazard

Physical : 0 Minimal Hazard

Personal Protection : A

SDS US (GHS HazCom 2012)

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