Acetate Buffer pH 6.0, for Aluminum  
Safety Data Sheet  
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
Date of issue: 12/11/2013  Revision date: 09/06/2016  Supersedes: 09/06/2016  Version: 2.1  

SECTION 1: Identification  
1.1. Identification  
Product form : Mixture  
Product name : Acetate Buffer pH 6.0, for Aluminum  
Product code : LC10070  

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 - www.labchem.com  

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

SECTION 2: Hazard(s) identification  
2.1. Classification of the substance or mixture  
GHS-US classification: Not classified  

2.2. Label elements  
Not classified as a hazardous chemical.  

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

2.4. Unknown acute toxicity (GHS US)  
Not applicable  

SECTION 3: Composition/Information on ingredients  
3.1. Substance  
Not applicable  

3.2. Mixture  
<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>(CAS No) 7732-18-5</td>
<td>86.17</td>
<td>Not classified</td>
</tr>
<tr>
<td>Sodium Acetate, Trihydrate</td>
<td>(CAS No) 6131-90-4</td>
<td>13.6</td>
<td>Not classified</td>
</tr>
<tr>
<td>Acetic Acid</td>
<td>(CAS No) 64-19-7</td>
<td>0.23</td>
<td>Flam. Liq. 3, H226</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Skin Corr. 1B, H314</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Eye Dam. 1, H318</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aquatic Acute 3, H402</td>
</tr>
</tbody>
</table>

Full text of hazard classes and H-statements : see section 16  

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 : Allow victim to breathe fresh air. Allow the victim to rest.  
First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.  
First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.  
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 : Not expected to present a significant hazard under anticipated conditions of normal use.
4.3. Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

SECTION 5: Firefighting measures
5.1. Extinguishing media
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.
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.

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 vapor.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Keep container closed when not in use.
Incompatible products: Strong oxidizers.
Incompatible materials: Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection
8.1. Control parameters

<table>
<thead>
<tr>
<th>Substance</th>
<th>ACGIH</th>
<th>ACGIH TWA (ppm)</th>
<th>ACGIH STEL (ppm)</th>
<th>OSHA PEL (TWA) (mg/m³)</th>
<th>OSHA PEL (TWA) (ppm)</th>
<th>US IDLH (ppm)</th>
<th>NIOSH REL (TWA) (mg/m³)</th>
<th>NIOSH REL (TWA) (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic Acid (64-19-7)</td>
<td>ACGIH</td>
<td></td>
<td>10 ppm (Acetic acid; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)</td>
<td></td>
<td></td>
<td></td>
<td>25 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ACGIH</td>
<td></td>
<td>15 ppm (Acetic acid; USA; Short time value; TLV - Adopted Value)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA</td>
<td></td>
<td>25 mg/m³</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA</td>
<td></td>
<td>10 ppm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IDLH</td>
<td></td>
<td>50 ppm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NIOSH</td>
<td></td>
<td>25 mg/m³</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NIOSH</td>
<td></td>
<td>10 ppm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Acetate Buffer pH 6.0, for Aluminum
Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>Acetic Acid (64-19-7)</th>
<th>NIOSH NIOSH REL (STEL) (mg/m³)</th>
<th>37 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Acetate, Trihydrate (6131-90-4)</td>
<td>NIOSH NIOSH REL (STEL) (ppm)</td>
<td>15 ppm</td>
</tr>
<tr>
<td>Water (7732-18-5)</td>
<td>Not applicable</td>
<td></td>
</tr>
</tbody>
</table>

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: Safety glasses.

Hand protection: Wear protective gloves.
Eye protection: Chemical goggles or safety glasses.
Respiratory protection: Respiratory protection not required in normal conditions.
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
Color: Colorless
Odor: None.
Odor threshold: No data available
pH: 6
Melting point: No data available
Freezing point: No data available
Boiling point: No data available
Flash point: No data available
Relative evaporation rate (butyl acetate=1): No data available
Flammability (solid, gas): Non flammable.
Vapor pressure: No data available
Relative vapor density at 20 °C: No data available
Relative density: No data available
Solubility: Soluble in water.
Log Pow: No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: No data available
Explosion limits: No data available
Explosive properties: No data available
Oxidizing properties: No data available

9.2. Other information
No additional information available
Acetate Buffer pH 6.0, for Aluminum
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**SECTION 10: Stability and reactivity**

<table>
<thead>
<tr>
<th>10.1. Reactivity</th>
<th>No additional information available</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.2. Chemical stability</td>
<td>Stable under normal conditions.</td>
</tr>
<tr>
<td>10.3. Possibility of hazardous reactions</td>
<td>Not established.</td>
</tr>
<tr>
<td>10.4. Conditions to avoid</td>
<td>Direct sunlight. Extremely high or low temperatures.</td>
</tr>
<tr>
<td>10.5. Incompatible materials</td>
<td>Strong oxidizers.</td>
</tr>
</tbody>
</table>

**SECTION 11: Toxicological information**

<table>
<thead>
<tr>
<th>11.1. Information on toxicological effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likely routes of exposure</td>
</tr>
<tr>
<td>Acute toxicity</td>
</tr>
</tbody>
</table>

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

| LD50 oral rat | 3310 mg/kg body weight (Rat; Other; Read-across) |
| ATE US (oral) | 3310.000 mg/kg body weight |

**Water (7732-18-5)**

| LD50 oral rat | ≥ 90000 mg/kg |
| ATE US (oral) | 90000.000 mg/kg body weight |

- Skin corrosion/irritation | Not classified |
- pH: 6 |
- Serious eye damage/irritation | Not classified |
- pH: 6 |
- Respiratory or skin sensitization | 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. |

**SECTION 12: Ecological information**

| 12.1. Toxicity | No additional information available |

<table>
<thead>
<tr>
<th>12.2. Persistence and degradability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acetate Buffer pH 6.0, for Aluminum</strong></td>
</tr>
<tr>
<td>Persistence and degradability</td>
</tr>
<tr>
<td><strong>Acetic Acid (64-19-7)</strong></td>
</tr>
</tbody>
</table>
Acetate Buffer pH 6.0, for Aluminum

Biochemical oxygen demand (BOD) 0.6 - 0.74 g O₂/g substance
Chemical oxygen demand (COD) 1.03 g O₂/g substance
ThOD 1.07 g O₂/g substance

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

Water (7732-18-5)
Persistence and degradability Not established.

12.3. Bioaccumulative potential

Acetate Buffer pH 6.0, for Aluminum
Bioaccumulative potential Not established.

Acetic Acid (64-19-7)
BCF fish 1 3.16 (BCF; Pisces)
Log Pow -0.17 (Experimental value; 25 °C)
Bioaccumulative potential Low potential for bioaccumulation (Log Kow < 4).

Sodium Acetate, Trihydrate (6131-90-4)
Bioaccumulative potential Not established.

Water (7732-18-5)
Bioaccumulative potential Not established.

12.4. Mobility in soil

Acetic Acid (64-19-7)
Surface tension 0.028 N/m (20 °C)
Log Koc log Koc,0.06; QSAR
Ecology - soil May be harmful to plant growth, blooming and fruit formation.

12.5. Other adverse effects

Effect on the global warming : No known effects from this product.
GWPmix comment : No known effects from 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

Department of Transportation (DOT)
In accordance with DOT
Not regulated

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 subject to reporting requirements of the United States SARA Section 313
RQ (Reportable quantity; section 304 of EPA's List of Lists) 5000 lb

Sodium Acetate, Trihydrate (6131-90-4)
Not listed on the United States TSCA (Toxic Substances Control Act) inventory
Acetate Buffer pH 6.0, for Aluminum
Safety Data Sheet

15.2. International regulations

CANADA

Acetate Buffer pH 6.0, for Aluminum
WHMIS Classification Uncontrolled product according to WHMIS classification criteria

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

Sodium Acetate, Trihydrate (6131-90-4)
Not listed on the Canadian DSL (Domestic Substances List)
WHMIS Classification Uncontrolled product according to WHMIS classification criteria

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

EU-Regulations
No additional information available

National regulations

Acetic Acid (64-19-7)
Listed on the Canadian IDL (Ingredient Disclosure List)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Revision date : 09/06/2016
Other information : None.

Full text of H-phrases: see section 16:

- H226 Flammable liquid and vapor
- H314 Causes severe skin burns and eye damage
- H318 Causes serious eye damage
- H402 Harmful to aquatic life

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 - Materials that will not burn
Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
Personal protection : A
A - Safety glasses

SDS US LabChem

Information in this SDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and LabChem Inc assumes no liability resulting from the use of this SDS. The user must determine suitability of this information for his application.