# M1 Buffer

## Safety Data Sheet


**Issue date:** 8/29/2022

<table>
<thead>
<tr>
<th><strong>SECTION 1: Identification</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.1. Identification</strong></td>
</tr>
<tr>
<td>Product form : Mixture</td>
</tr>
<tr>
<td>Trade name : M1 Buffer</td>
</tr>
<tr>
<td>Product code : 190580</td>
</tr>
</tbody>
</table>

### 1.2. Recommended use and restrictions on use

- **Recommended use**: Scientific research and development
- **Restrictions on use**: None known

### 1.3. Supplier

Covaris, LLC  
14 Gill St., Unit H  
Woburn, MA 01801  
USA  
T +1 (781) 932-3959

### 1.4. Emergency telephone number

- **Emergency number**: Chemtrec (800) 424-9300

## SECTION 2: Hazard(s) identification

### 2.1. Classification of the substance or mixture

**GHS US classification**

- **Eye irritation Category 2**  
  - **H319**: Causes serious eye irritation
  - **Full text of H statements**: see section 16

### 2.2. GHS Label elements, including precautionary statements

**GHS US labeling**

- **Hazard pictograms (GHS US)**: ![Diagram]
- **Signal word (GHS US)**: Warning
- **Hazard statements (GHS US)**:  
  - H319 - Causes serious eye irritation
- **Precautionary statements (GHS US)**:  
  - P264 - Wash hands thoroughly after handling.  
  - P280 - Wear eye protection.  
  - P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
  - P337+P313 - If eye irritation persists: Get medical advice/attention.

### 2.3. Other hazards which do not result in classification

No additional information available

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

Not applicable
SECTION 3: Composition/Information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Lauryl Sulfate</td>
<td>CAS-No.: 151-21-3</td>
<td>1 – 5</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 after inhalation:** Move the affected person to fresh air. Get medical attention if symptoms occur.
- **First-aid measures after skin contact:** Gently wash with plenty of soap and water. Get medical advice if skin irritation persists.
- **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:** Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

- **Symptoms/effects:** Causes eye irritation.
- **Inhalation:** May cause minor irritation to the respiratory tract and to other mucous membranes.
- **Skin:** May cause slight irritation to the skin.
- **Eyes:** Causes eye irritation.
- **Ingestion:** May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

4.3. Immediate medical attention and special treatment, if necessary

Not required.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- **Suitable extinguishing media:** Use extinguishing media appropriate for surrounding fire.
- **Unsuitable extinguishing media:** None.

5.2. Specific hazards arising from the chemical

- **Fire hazard:** This product is not classified as flammable or combustible.
- **Hazardous decomposition products in case of fire:** Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

- **Protection during firefighting:** Do not attempt to take action without suitable protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- **General measures:** Wear suitable protective clothing. Avoid contact with eyes, skin and clothing.
6.1.1. For non-emergency personnel
Emergency procedures: Avoid contact with skin and eyes.

6.1.2. For emergency responders
Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: “Exposure controls/personal protection”.

6.2. Environmental precautions
Avoid release to the environment.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up: Take up liquid spill into absorbent material.
Other information: Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).

6.4. Reference to other sections
No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Avoid contact with skin and eyes. Wear personal protective equipment. Avoid contact with eyes, skin and clothing. Wash hands with water and soap. Ensure adequate ventilation.
Hygiene measures: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: No special storage required.
Incompatible materials: None known.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
M1 Buffer
No additional information available
Sodium Lauryl Sulfate (151-21-3)
No additional information available

8.2. Appropriate engineering controls
Appropriate engineering controls: No particular/specific measures required.
Environmental exposure controls: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment
Hand protection:
Wear suitable gloves
Eye protection:
Chemical goggles. Use suitable eye protection

Skin and body protection:
None under normal conditions

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment. In operations where exposure limits are exceeded or exposure levels are excessive, an approved respirator should be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear, colorless liquid.</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>None</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>7.6</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>100 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition coefficient n-octanol/water (Log Pow)</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.
**M1 Buffer**

Safety Data Sheet


### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None known.

### 10.5. Incompatible materials

None known.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity (oral)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Acute toxicity (dermal)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Acute toxicity (inhalation)</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

**Sodium Lauryl Sulfate (151-21-3)**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>977 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rat</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>ATE US (oral)</td>
<td>977 mg/kg body weight</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation : Not classified

pH: 7.6

**Sodium Lauryl Sulfate (151-21-3)**

pH: 9.1 Concentration: 1 other:%

Serious eye damage/irritation : Causes serious eye irritation.

pH: 7.6

**Sodium Lauryl Sulfate (151-21-3)**

pH: 9.1 Concentration: 1 other:%

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

**Sodium Lauryl Sulfate (151-21-3)**

STOT-single exposure : May cause respiratory irritation.

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Viscosity, kinematic : No data available

**Sodium Lauryl Sulfate (151-21-3)**

Viscosity, kinematic : Not applicable

Symptoms/effects : Causes eye irritation.

Inhalation : May cause minor irritation to the respiratory tract and to other mucous membranes.

Skin : May cause slight irritation to the skin.
Eyes : Causes eye irritation.
Ingestion : May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Sodium Lauryl Sulfate (151-21-3)

<table>
<thead>
<tr>
<th>Test Type</th>
<th>Test Object</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 - Fish [1]</td>
<td></td>
<td>4.1 mg/l</td>
</tr>
<tr>
<td>EC50 - Crustacea [1]</td>
<td></td>
<td>3.15 mg/l</td>
</tr>
<tr>
<td>LC50 - Fish [2]</td>
<td></td>
<td>29 mg/l</td>
</tr>
<tr>
<td>EC50 72h - Algae [1]</td>
<td></td>
<td>120 mg/l</td>
</tr>
<tr>
<td>EC50 72h - Algae [2]</td>
<td></td>
<td>53 mg/l Desmodesmus subspicatus</td>
</tr>
<tr>
<td>NOEC chronic fish</td>
<td></td>
<td>≥ 1.357 mg/l Pimephales promelas (Fathead minnow)</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
No additional information available

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods
Regional legislation (waste) : Dispose of in accordance with applicable federal, state, and local regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector’s sorting instructions.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

<table>
<thead>
<tr>
<th>DOT</th>
<th>TDG</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1. UN number</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.2. Proper Shipping Name</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
### 14.3. Transport hazard class(es)

<table>
<thead>
<tr>
<th>DOT</th>
<th>TDG</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

### 14.4. Packing group

<table>
<thead>
<tr>
<th>DOT</th>
<th>TDG</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

### 14.5. Environmental hazards

<table>
<thead>
<tr>
<th>DOT</th>
<th>TDG</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

No supplementary information available

### 14.6. Special precautions for user

- **DOT**: No data available
- **TDG**: No data available
- **IMDG**: No data available
- **IATA**: No data available

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

#### 15.2. International regulations

**CANADA**

**Sodium Lauryl Sulfate (151-21-3)**

Listed on the Canadian DSL (Domestic Substances List)

**EU-Regulations**

No additional information available

**National regulations**

**M1 Buffer**

All chemical substances in this product are listed in the EPA (Environment Protection Agency) TSCA (Toxic Substances Control Act) Inventory

**Sodium Lauryl Sulfate (151-21-3)**

Listed on INSQ (Mexican National Inventory of Chemical Substances)
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


<table>
<thead>
<tr>
<th>Full text of H-phrases</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
</tbody>
</table>

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.