1. IDENTIFICATION

Product Name: N Buffer

Recommended use of the chemical and restrictions on use:

Identified Uses: For Research and Development Use Only

Company Identification: Covaris, Inc.

Customer Information Number: 14 Gill Street, Unit H
Woburn, MA 01801
(781) 932-3959

Emergency Telephone Number

Chemtrec Number: (800) 424-9300 (for emergencies only)

Issue Date: December 9, 2013

Supersedes Date:
Safety Data Sheet prepared in accordance with OSHA’s Hazard Communication Standard (29 CFR 1910.1200) and the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

2. HAZARD IDENTIFICATION

Hazard Classification
This product is classified as not hazardous in accordance with the Globally Harmonized System of Classification and Labelling (GHS).

Label Elements
Hazard Symbols: None

Signal Word: None

Hazard Statements: None

Precautionary Statements
Prevention: None
Response: None
Storage: None
Disposal: None

Other Hazards: None
2. HAZARD IDENTIFICATION

Specific Concentration Limits
The values listed below represent the percentages of ingredients of unknown toxicity.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Acute oral toxicity</td>
<td>1 - 10%</td>
</tr>
<tr>
<td></td>
<td>Acute dermal toxicity</td>
<td>1 - 10%</td>
</tr>
<tr>
<td></td>
<td>Acute inhalation toxicity</td>
<td>1 - 10%</td>
</tr>
<tr>
<td></td>
<td>Acute aquatic toxicity</td>
<td>1 - 10%</td>
</tr>
</tbody>
</table>

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Number</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non hazardous mixture</td>
<td>N.A.</td>
<td>100%</td>
</tr>
</tbody>
</table>

4. FIRST- AID MEASURES

Description of necessary first-aid measures

Eyes
Flush the eye with plenty of water. Obtain medical attention if symptoms persist.

Skin
Wash affected area with plenty of water. Seek medical attention if symptoms persist.

Ingestion
Rinse mouth with plenty of water.

Inhalation
Not an expected route of entry.

Most important symptoms/effects, acute and delayed
Aside from the information found under description of necessary first aid measures (above) and Indication of immediate medical attention and special treatment needed, no additional symptoms and effects are anticipated.

Indication of immediate medical attention and special treatment needed

Notes to Physicians
Treat symptomatically.

5. FIRE - FIGHTING MEASURES

Suitable (and unsuitable) Extinguishing Media
Use foam, dry chemical or carbon dioxide. Use water spray for surroundings and containers.

Specific hazards arising from the chemical
None known.

Special Protective Actions for Fire-Fighters
Wear full protective clothing and self-contained breathing apparatus.
6. **ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**
Wear appropriate protective clothing.

**Environmental Precautions**
Prevent the material from entering drains or watercourses.

**Methods and materials for containment and cleaning up**
Sweep up and transfer into suitable containers for recovery or disposal.

7. **HANDLING AND STORAGE**

**Precautions for safe handling**
Wear appropriate protective equipment when handling. Do not eat or drink while handling this material.

**Conditions for safe storage**
Store at room temperature away from heat and direct sunlight.

8. **EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**
Exposure limits are listed below, if they exist.

**Non Hazardous Ingredients**
None established.

**Appropriate engineering controls**
No specific measures necessary.

**Individual protection measures**

**Respiratory Protection**
Respiratory protection not normally required.

**Skin Protection**
Gloves

**Eye/face Protection**
Safety glasses

**Body Protection**
Normal work wear.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance**

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid</td>
<td>Colorless</td>
</tr>
</tbody>
</table>

**Odor**
None

**Odor Threshold**
No data available

**pH**
7.64

**Specific Gravity**
~1

**Boiling Range/Point (°C/F)**
No data available

**Melting Range/Point (°C/F)**
No data available

**Flash Point (PMCC) (°C/F)**
Not flammable
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapor Pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Evaporation Rate (BuAc=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Complete</td>
</tr>
<tr>
<td>Vapor Density (Air = 1)</td>
<td>No data available</td>
</tr>
<tr>
<td>VOC (g/l)</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</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>Upper explosive limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower explosive limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity
No known reactivity.

Chemical Stability
Stable under normal conditions.

Possibility of hazardous reactions
Hazardous polymerization will not occur.

Conditions to Avoid
Heat – high temperatures

Incompatible Materials
Strong oxidizing agents

Hazardous Decomposition Products
Oxides of carbon - nitrogen oxides - hydrogen chloride gas

11. TOXICOLOGICAL INFORMATION

Acute Toxicity
Available data indicates this product is not expected to be acutely toxic.

Specific Target Organ Toxicity (STOT) – single exposure
Available data indicates this product is not expected to cause target organ effects after a single exposure.

Specific Target Organ Toxicity (STOT) – repeat exposure
Available data indicates this product is not expected to cause target organ effects after repeated exposure.

Serious Eye damage/Irritation
Available data indicates this product is not expected to cause eye irritation.

Skin Corrosion/Irritation
Available data indicates this product is not expected to cause skin irritation.
11. TOXICOLOGICAL INFORMATION

Respiratory or Skin Sensitization
Available data indicates this product is not expected to cause skin or respiratory sensitization.

Carcinogenicity
Not considered carcinogenic by NTP, IARC, and OSHA.

Germ Cell Mutagenicity
Available data indicates this product is not expected to be mutagenic.

Reproductive Toxicity
Available data indicates this product is not expected to cause reproductive toxicity or birth defects.

Aspiration Hazard
Available data indicates this product is not expected to be an aspiration hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity
Available data indicates this product is not ecotoxic.

Mobility in soil
No relevant studies identified.

Persistence/Degradability
No relevant studies identified.

Bioaccumulative Potential
No relevant studies identified.

Other adverse effects
No relevant studies identified.

13. DISPOSAL CONSIDERATIONS

Disposal Methods
Dispose of in accordance with all applicable local and national regulations.

14. TRANSPORT INFORMATION

DOT CFR 172.101 Data  Not Regulated
UN Proper Shipping Name  Not Regulated
UN Class  None.
UN Number  None.
UN Packaging Group  None.
Classification for AIR  Consult current IATA Regulations prior to shipping by air.
Transportation (IATA)  
Environmental Hazards  Not a marine pollutant
15. **REGULATORY INFORMATION**

**United States TSCA Inventory**
All components of this product have been verified for the inventory listing requirements of the US Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

**Canada DSL Inventory**
All components of this product have been verified for inclusion on the Domestic Substance List (DSL).

**WHMIS Classification**
None
This product was classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations and the MSDS contains all the information required by these regulations.

**SARA Title III Sect. 311/312 Categorization**
None

16. **OTHER INFORMATION**

**NFPA Ratings**
- NFPA Code for Flammability - 0
- NFPA Code for Health - 0
- NFPA Code for Reactivity - 0
- NFPA Code for Special Hazards – None

**HMIS Ratings**
- HMIS Code for Flammability - 0
- HMIS Code for Health - 0
- HMIS Code for Physical Hazard - 0
- HMIS Code for Personal Protection - See Section 8
  *Chronic

**Legend**
- ACGIH: American Conference of Governmental Industrial Hygienists
- CAS: Chemical Abstracts Service
- IARC: International Agency for Research on Cancer
- N/A: Denotes no applicable information found or available
- NTP: National Toxicology Program
- OSHA: Occupational Safety and Health Administration
- PEL: Permissible Exposure Limit
- SDS: Safety Data Sheet
- STEL: Short Term Exposure Limit
- TLV: Threshold Limit Value

**Information Source and References**
This SDS is prepared by Hazard Communication Specialists based on information provided by internal company references.

**Prepared By:** EnviroNet LLC.

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