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**1. IDENTIFICATION**

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**Product Name** Buffer B1  
**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** (800) 424-9300 (for emergencies only)  
**Chemtrec Number** (800) 424-9300  
**Issue Date** September 25, 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)*

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**2. HAZARD IDENTIFICATION**

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**Hazard Classification**  
Acute toxicity (oral) - Category 4  
Acute hazards aquatic environment - Category 3

**Label Elements**  
Hazard Symbols



Signal Word: Warning

**Hazard Statements**  
Harmful if swallowed.  
Harmful to aquatic life.

**Precautionary Statements**

**Prevention**  
Do not eat, drink or smoke when using this product.  
Wash hands thoroughly after handling.  
Avoid release to the environment.

**Response**  
Rinse mouth.  
If swallowed: Call a poison center or doctor/physician if you feel unwell.

**Storage**  
None

**Disposal**  
Dispose of contents/container in accordance with local regulation.

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**2. HAZARD IDENTIFICATION**

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**Other Hazards**

Contact with acids may release toxic gas.

**Specific Concentration Limits**

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

Acute oral toxicity	0 - 10%
Acute dermal toxicity	60 - 70%
Acute inhalation toxicity	60 - 70%
Acute aquatic toxicity	60 - 70%

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

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This product is a mixture.

<b>Component</b>	<b>CAS Number</b>	<b>Concentration</b>
Thiocyanate compound	N/A	60 - 70%
Water	7732-18-5	30 - 40%
Buffer solution	N/A	1 - 10%%

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**4. FIRST- AID MEASURES**

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**Description of necessary first-aid measures****Eyes**

Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

**Skin**

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

**Ingestion**

Do not induce vomiting. Have victim drink 1-3 glasses of water to dilute stomach contents. Never administer anything by mouth if a victim is losing consciousness, is unconscious or is convulsing. Obtain medical attention immediately.

**Inhalation**

Remove from exposure. If there is difficulty in breathing, give oxygen. Obtain medical attention if symptoms persist.

**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.

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**5. FIRE - FIGHTING MEASURES**

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**Suitable (and unsuitable) Extinguishing Media**

Use foam, dry chemical or carbon dioxide. Use water spray for surroundings and containers.

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**5. FIRE - FIGHTING MEASURES**

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**Specific hazards arising from the chemical**

This product may give rise to toxic gases in a fire.

**Special Protective Actions for Fire-Fighters**

Wear full protective clothing and self-contained breathing apparatus.

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**6. ACCIDENTAL RELEASE MEASURES**

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**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**

Contain and absorb using earth, sand or other inert material. Transfer into suitable containers for recovery or disposal.

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**7. HANDLING AND STORAGE**

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**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.

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**Control parameters**

Exposure limits are listed below, if they exist.

**Thiocyanate Compound**

None established.

**Appropriate engineering controls**

No specific measures necessary.

**Individual protection measures**

**Respiratory Protection**

Respiratory protection not normally required.

**Skin Protection**

Chemical resistant gloves

**Eye/Face Protection**

Chemical goggles or safety glasses with side shields

**Body Protection**

Normal work wear.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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**Appearance**

<b>Physical State</b>	Liquid
<b>Color</b>	Colorless
<b>Odor</b>	None
<b>Odor Threshold</b>	No data available
<b>pH</b>	4.86
<b>Specific Gravity</b>	1.01
<b>Boiling Range/Point (°C/F)</b>	No data available
<b>Melting Point (°C/F)</b>	No data available
<b>Flash Point (PMCC) (°C/F)</b>	Not flammable
<b>Vapor Pressure</b>	No data available
<b>Evaporation Rate (BuAc=1)</b>	No data available
<b>Solubility in Water</b>	Complete
<b>Vapor Density (Air = 1)</b>	No data available
<b>VOC (g/l)</b>	No data available
<b>Partition coefficient (n-octanol/water)</b>	No data available
<b>Viscosity</b>	No data available
<b>Auto-ignition Temperature</b>	No data available
<b>Decomposition Temperature</b>	No data available
<b>Upper explosive limit</b>	No data available
<b>Lower explosive limit</b>	No data available
<b>Flammability (solid, gas)</b>	Not applicable

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**10. STABILITY AND REACTIVITY**

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**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 - contact with incompatible materials

**Incompatible Materials**

Strong oxidizing agents - acids

**Hazardous Decomposition Products**

Oxides of carbon - hydrogen cyanide - sulfur oxides - oxides of nitrogen - ammonia

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**11. TOXICOLOGICAL INFORMATION**

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**Acute Toxicity**

Thiocyanate Compound:

Oral LD50 (rat) 593 mg/kg

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**11. TOXICOLOGICAL INFORMATION**

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**Specific Target Organ Toxicity (STOT) – single exposure**

No data available to indicate product or components will cause target organ effects after a single exposure.

**Specific Target Organ Toxicity (STOT) – repeat exposure**

No data available to indicate product or components will cause target organ effects after repeated exposure.

**Serious Eye damage/Irritation**

No data available to indicate product may cause eye irritation.

**Skin Corrosion/Irritation**

No data available to indicate product may cause skin irritation.

**Respiratory or Skin Sensitization**

No data available to indicate product or components may cause skin or respiratory sensitization.

**Carcinogenicity**

Not considered carcinogenic by NTP, IARC, and OSHA.

**Germ Cell Mutagenicity**

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Reproductive Toxicity**

No data available to indicate either product or components present at greater than 0.1% may cause reproductive toxicity or birth defects.

**Aspiration Hazard**

Not an aspiration hazard.

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**12. ECOLOGICAL INFORMATION**

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**Ecotoxicity**

Thiocyanate Compound  
EC50 (daphnia magna) 42.4 mg/l 48 hr

**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.

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**13. DISPOSAL CONSIDERATIONS**

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**Disposal Methods**

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

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**14. TRANSPORT INFORMATION**

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

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**15. REGULATORY INFORMATION**

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**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**

D2B

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**

Immediate (Acute)

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**16. OTHER INFORMATION**

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**NFPA Ratings**

NFPA Code for Flammability - 0  
 NFPA Code for Health - 2  
 NFPA Code for Reactivity - 0  
 NFPA Code for Special Hazards – None

**HMIS Ratings**

HMIS Code for Flammability - 0  
 HMIS Code for Health - 2  
 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 ECHA: European Chemicals Agency  
 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

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**16. OTHER INFORMATION**

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**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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