
1. IDENTIFICATION

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)

2. HAZARD IDENTIFICATION

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.

2. HAZARD IDENTIFICATION

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%

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture.

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

4. FIRST- AID MEASURES

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.

5. FIRE - FIGHTING MEASURES

Suitable (and unsuitable) Extinguishing Media

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

5. FIRE - FIGHTING MEASURES

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.

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

Contain and absorb using earth, sand or other inert material. 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.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

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

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 - contact with incompatible materials

Incompatible Materials

Strong oxidizing agents - acids

Hazardous Decomposition Products

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

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Thiocyanate Compound:

Oral LD50 (rat) 593 mg/kg

11. TOXICOLOGICAL INFORMATION

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.

12. ECOLOGICAL INFORMATION

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.

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 Transportation (IATA)	Consult current IATA Regulations prior to shipping by air.
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

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)

16. OTHER INFORMATION

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

16. OTHER INFORMATION

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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