
1. IDENTIFICATION

Product Name TP 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)

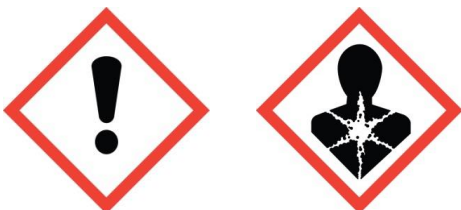
2. HAZARD IDENTIFICATION

Hazard Classification

Serious eye damage/eye irritation - Category 2A
Carcinogenicity - Category 2
Toxic to Reproduction - Category 2

Label Elements

Hazard Symbols



Signal Word: Warning

Hazard Statements

Causes serious eye irritation.
Suspected of causing cancer (route of exposure: oral).
Suspected of damaging fertility or the unborn child (route of exposure: oral).

Precautionary Statements**Prevention**

Wear protective gloves and eye/face protection.
Do not handle until all safety precautions have been read and understood.

Response

If in eyes: 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.
Wash hands after handling.
If exposed or concerned: Get medical attention/advice.

2. HAZARD IDENTIFICATION

Storage

Store locked up.

Disposal

Dispose of contents/container in accordance with local regulation.

Other Hazards

None

Specific Concentration Limits

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

Acute oral toxicity	0 - 10%
Acute dermal toxicity	70 - 80%
Acute inhalation toxicity	90 - 100%
Acute aquatic toxicity	70 - 80%

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture.

Component	CAS Number	Concentration
Thiourea	62-56-6	20 – 30%
Resins	NA	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.

4. FIRST- AID MEASURES

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. Notify authorities if spill has entered watercourse or sewer or has contaminated soil or vegetation.

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. Avoid contact with eyes, skin and clothing.

Conditions for safe storage

Store at 2 - 8°C (35.6 - 46.4°F). Keep container tightly closed when not in use. Storage area should be: cool - dry - well ventilated - out of direct sunlight - away from sources of ignition (heat, sparks, flames, pilot lights) - away from incompatible materials (see Section 10)

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits are listed below, if they exist.

Thiourea

None established

Resins

None established

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Appropriate engineering controls

Use engineering methods to prevent or control exposure. Methods include process or personnel enclosure, mechanical ventilation (dilution and local exhaust), and control of process conditions.

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	Solid (powder)
Color	Mixture of white, blue and light brown
Odor	Odorless
Odor Threshold	No data available
pH	No data available
Specific Gravity	No data available
Boiling Range/Point (°C/F)	No data available
Melting Point (°C/F)	No data available
Flash Point (PMCC) (°C)	No data available
Vapor Pressure	No data available
Evaporation Rate (BuAc=1)	No data available
Solubility in Water	No data available
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)	No data available

10. STABILITY AND REACTIVITY

Reactivity

No known reactivity.

Chemical Stability

Stable under normal conditions.

Possibility of hazardous reactions

Hazardous polymerization will not occur.

10. STABILITY AND REACTIVITY

Conditions to Avoid

Heat - high temperatures

Incompatible Materials

Strong oxidizing agents - acids - bases

Hazardous Decomposition Products

Oxides of carbon - nitrogen oxides - sulfur oxides

11. TOXICOLOGICAL INFORMATION

Acute ToxicityThiourea

Oral LD50 (rat) 2000 - 2500 mg/kg

Dermal LD50 (rabbit) >2800 mg/kg

Resins

Oral LD50 (rat) >2000 mg/kg

Specific Target Organ Toxicity (STOT) – single exposure

Thiourea: Available data indicates this component is not expected to cause target organ effects after a single exposure.

Resins: No data available

Specific Target Organ Toxicity (STOT) – repeat exposure

Thiourea: Available data indicates this component is not expected to cause target organ effects after repeated exposure.

Resins: No data available

Serious Eye damage/Irritation

Thiourea: Not irritating in rabbit study.

Resins: No data available

Skin Corrosion/Irritation

Thiourea: Not irritating in rabbit study.

Resins: No data available

Respiratory or Skin Sensitization

Thiourea: Not sensitizing in Guinea pig maximisation test for skin sensitization. No data available for respiratory sensitization.

Resins: No data available

Carcinogenicity

Thiourea: NTP- Reasonably anticipated to be human carcinogen

Resins: Not considered carcinogenic by IARC, NTP and OSHA

Germ Cell Mutagenicity

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

Reproductive Toxicity

Thiourea: Adverse reproductive effects were seen in animal studies.

Resins: No data available

11. TOXICOLOGICAL INFORMATION

Aspiration Hazard

No data available

12. ECOLOGICAL INFORMATION

EcotoxicityThiourea

Acute: LC50 (daphnia magna) 1.8 mg/l 48 hr

Long term toxicity to invertebrates (daphnia magna): The 21-d NOEC based on lethal effects, reproduction and further observed effects is reported to be in the range of 0.1 to 0.25 mg thiourea/L.

Classification of thiourea based on this weight of evidence study is Aquatic Chronic 2: Toxic to aquatic life with long lasting effects (European Chemicals Agency ECHA)

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

Contact supplier for transport information.

15. REGULATORY INFORMATION

United States TSCA Inventory

Components of this product have not been verified for the inventory listing requirements of the US Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

Canada DSL Inventory

Components of this product have not been verified for inclusion on the Domestic Substance List (DSL).

WHMIS Classification

D2A

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) Delayed (Chronic)

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

Information Source and References

This SDS is prepared by Hazard Communication Specialists based on information provided by internal company references.

Prepared By: EnviroNet LLC.

The information and recommendations presented in this SDS are based on sources believed to be accurate. Covaris assumes no liability for the accuracy or completeness of this information. It is the user's responsibility to determine the suitability of the **material** for their particular purposes. In particular, we make **NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED**, with respect to such information, and we assume no liability resulting from its use. Users should ensure that any use **or disposal** of the material is in accordance with applicable Federal, State, and local laws and regulations.