

SAFETY DATA SHEET **Proteinase K**

1. **IDENTIFICATION**

Product Name Recommended use of the chemical and restrictions on use	Proteinase K
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	

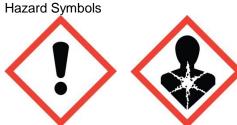
Safety Data Sheet prepared in accordance with OSHA's Hazard Communication Standard (29 CFR 1910.1200)and the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

2. HAZARD IDENTIFICATION

Hazard Classification

Skin corrosion/irritation - Category 2 Serious eye damage/eye irritation - Category 2A Skin sensitizer - Category 1 Respiratory Sensitizer - Category 1 Specific Target Organ Toxicity Single Exposure - Category 3

Label Elements



Signal Word: Danger

Hazard Statements

Causes serious eye irritation. Causes skin irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. May cause drowsiness and dizziness. May cause respiratory irritation. **Precautionary Statements** Prevention

Wear eye/face protection. Use only in well-ventilated areas. Wear protective gloves. In case of inadequate ventilation wear respiratory protection.



2. HAZARD IDENTIFICATION

Wash thoroughly after handling. Avoid breathing mists, vapor or dust. Contaminated work clothing must not be allowed out of the workplace. Response If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsina. If eye irritation persists, get medical advice/attention. If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. Wash hands after handling. Take off contaminated clothing and wash before re-use. If on skin: Wash with plenty of soap and water. Call a poison center or doctor/physician if you feel unwell. If experiencing respiratory symptoms call a poison centre or doctor/physician. If skin irritation or rash occurs, seek medical advice/attention. Storage Store locked up. Store container tightly closed in well-ventilated place. 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	100%
Acute dermal toxicity	100%
Acute inhalation toxicity	100%
Acute aquatic toxicity	100%

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a substance.

Component

Proteinase K

CAS Number 39450-01-6. Concentration 90 - 100%

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.



4. FIRST- AID MEASURES

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.

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

Contain and absorb using earth, sand or other insert 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. **Proteinase K** None established.



8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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	Solid
Color	Light grey
Odor	Odorless
Odor Threshold	No data available
рН	No data available
Density	No data available
Boiling Range/Point (°C/F)	No data available
Melting Point (°C/F)	No data available
Flash Point (PMCC) (°C/F)	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-	No data available
octanol/water)	
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.



10. STABILITY AND REACTIVITY

Conditions to Avoid

Heat – high temperatures

Incompatible Materials

Strong acids – alkalines – oxidizing agents

Hazardous Decomposition Products None known

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

No data available to indicate product is acutely toxic.

Specific Target Organ Toxicity (STOT) – single exposure

Available information indicates this product may cause respiratory irritation.

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

Available information indicates this product causes serious eye irritation.

Skin Corrosion/Irritation

Available information indicates this product causes skin irritation.

Respiratory or Skin Sensitization

Available information indicates this product can cause skin or respiratory sensitization.

Carcinogenicity

No data available to indicate product may present a carcinogenic hazard.

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

No relevant studies identified.

Mobility in soil

No relevant studies identified.



12. ECOLOGICAL INFORMATION

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

This product is exempt from listing on the US Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

Canada DSL Inventory

This product is not listed on the Domestic Substance List (DSL).

WHMIS Classification

D2A.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



16. OTHER INFORMATION

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.

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