

SAFETY DATA SHEET Proteinase K Solution

1. IDENTIFICATION

Product Name Recommended use of the chemical and restrictions on use Identified Uses Restrictions on use Product Numbers Company Identification

Customer Information Number Emergency Telephone Number Chemtrec Number Issue Date Supersedes Date Proteinase K Solution

For research and development For laboratory use 190338 Covaris, Inc. 14 Gill Street, Unit H Woburn, MA 01801 (781) 932-3959 (800) 424-9300 (for emergencies only) (800) 424-9300 December 1, 2016 This is the first issue.

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

Respiratory Sensitization - Category 1

Label Elements Hazard Symbols



Signal Word: Danger

Hazard Statements

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary Statements

Prevention

Avoid breathing gas, mist, vapors or spray.

In case of inadequate ventilation wear respiratory protection.

Response

If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or doctor.

Storage

None

Disposal

Dispose of contents/container in accordance with local regulation.

Other Hazards

None



2. HAZARD IDENTIFICATION

Specific Concentration Limits

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

Acute oral toxicity	55 - 65%
Acute dermal toxicity	55 - 65%
Acute inhalation toxicity	55 - 65%
Acute aquatic toxicity	55 - 65%

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture.

Component Glycerol Proteinase K

CAS Number 56-81-5 39450-01-6

Concentration 35 - 45% 1 - 5%

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

Never administer anything by mouth if a victim is losing consciousness, is unconscious or is convulsing. Rinse mouth with water. Obtain medical attention.

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

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 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 2 - 8°C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits are listed below, if they exist. **Glycerol as Glycerin (Mist)** ACGIH: TLV 10 mg/m³ 8h TWA. OSHA: PEL 5 mg/m³ 8h TWA respirable fraction 15mg/m³ 8h TWA total dust

Appropriate engineering controls

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

Individual protection measures Respiratory Protection

Wear respiratory protection if there is a risk of exposure to high vapor concentrations, mists, or aerosols. A NIOSH approved full face respirator may be worn. The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator.

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

Phy	sical State/ Color	Liquid Colorless
Odor Odor Threshold		None No data available



PHYSICAL AND CHEMICAL PROPERTIES 9.

pН

pH Specific Gravity Boiling Range/Point (°C/F) Melting Point (°C/F) Flash Point (PMCC) (°C/F) Vapor Pressure Evaporation Rate (BuAc=1) Solubility in Water Vapor Density (Air = 1) VOC (g/l) Partition coefficient (n- octanol/water)	No data available No data available No data available No data available No data available No data available Complete No data available No data available No data available 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

Hazardous Decomposition Products Oxides of carbon

11. **TOXICOLOGICAL INFORMATION**

Acute Toxicity No data available

Specific Target Organ Toxicity (STOT) - single exposure No data available

Specific Target Organ Toxicity (STOT) - repeat exposure No data available

Serious Eye damage/Irritation No data available



11. TOXICOLOGICAL INFORMATION

Skin Corrosion/Irritation No data available

No data avallable

Respiratory or Skin Sensitization

Available information indicates this product can cause respiratory sensitization.

Carcinogenicity

Not considered carcinogenic by NTP, IARC, and OSHA.

Germ Cell Mutagenicity

No data available

Reproductive Toxicity No data available

Aspiration Hazard

Not an aspiration hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity

No relevant studies identified.

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

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



15. **REGULATORY INFORMATION**

Canada DSL Inventory

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

SARA Title III Sect. 311/312 Categorization

Immediate (Acute) Delayed (Chronic)

16. OTHER INFORMATION

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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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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